



# University of Bahrain Sustainability Report 2024



[www.uob.edu.bh/sustainability](http://www.uob.edu.bh/sustainability)

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# 1 NO POVERTY





# NO POVERTY

End poverty in all its forms everywhere

As Bahrain's national university, the University of Bahrain (UoB) is committed to perhaps eradicating by ensuring that financial, health and opportunity barriers do not prevent individuals from pursuing higher education or improving their livelihoods. In 2024, the university expanded its efforts with initiatives that directly support low-income students, foster entrepreneurship and engage the community in sustainable development.

## 1. Financial Support and Scholarships

UoB recognises that high tuition fees and living costs can exclude capable students from higher education. To ensure affordability and equitable access, the university offers a multi-layered package of financial support:

**Tuition subsidies:** As the Kingdom's national university, UoB keeps tuition low by providing a generous government-funded subsidy: Bahraini nationals pay only about 10% of the actual cost of their studies, and international students receive an 84%. This across-the-board reduction makes higher education attainable for all segments of society.

**Scholarships and bursaries:** In partnership with public and private sponsors, the university awards merit-based and need-based scholarships and bursaries. These awards supplement the standard tuition subsidy and are aimed at high-achieving or financially vulnerable students.

**Need-based fee exemptions:** Students from low-income households can apply for full or partial tuition fee waivers. The Exemptions & Part-Time Employment Division of the Deanship of Student Affairs oversees these applications, evaluates cases, and finalises exemptions at the start of each semester Regulations for tuition fees exemptions.

By integrating universal subsidies, targeted scholarships, need-based fee waivers and paid employment opportunities, UoB's financial aid strategy ensures that cost is not a barrier to higher education. This comprehensive approach directly supports SDG 1 by enabling students from all backgrounds to pursue degrees and improve their socio economic prospects.



**20,989** Students obtained partial scholarships in 2024.



**546** Students received full or partial fee exemptions in 2024.



**15** Exemption Program Contributors

## 2. Transportation and Healthcare

Recognizing that access to education depends on more than just tuition, UoB operates free inter college shuttle services that connect the main campus with all academic facilities, eliminating commuting costs for students from low income backgrounds. The on-campus clinic, located in Building S21, provides preventive care, general consultations, emergency services and health education to roughly 30,000 students, employees and visitors free of charge..



**17** Buses carried out **25-30** students

- Mentorship and consultation by faculty and industry mentors.
- Access to co-working spaces with high-speed internet and specialized labs at minimal cost.
- Training boot camps and certification programmes.
- Assistance in obtaining grants and investor funding.

These resources empower students and community members to create their own employment opportunities, supporting both SDG 1 and SDG 8 (Decent Work and Economic Growth).

## 3. Entrepreneurship and Economic Empowerment

[The Business Incubator Centre \(BIC\)](#) nurtures early-stage ventures and helps young and low-income entrepreneurs overcome financial and operational barriers. Its services include:



**20** enterprise workshops organized in 2024.

**45** supported individuals startup



## 4. Community Outreach and Engagement (2024)

### 4.1 GenO Programme – Health Awareness and Screening

As part of SDG 3 (Good Health and Well Being), the College of Health and Sport Sciences partnered with the national GenO Programme to raise awareness about genomics, preventive health and lifestyle-related diseases. Students helped organize community workshops, free health screening events, and awareness campaigns across Bahrain. These activities improve public health literacy and early disease detection, reducing the burden of health-related poverty.

### 4.2 Social Development Programme – “Inspiring Leadership in Cultural Volunteerism”

On 31 October 2024, the Deanship of Student Affairs hosted a lecture titled “Inspiring Leadership in Cultural Volunteerism” as part of its Social Development Programme. Presented by Dr Dheya Al Kaabi, the session encouraged students to develop leadership skills and engage in volunteerism. Fostering a culture of service and social solidarity contributes indirectly to poverty reduction.

### 4.3 MicroShabab Youth Entrepreneurship Forum (1–3 October 2024)

UoB and the Future Youth Association hosted the sixth MicroShabab Youth Entrepreneurship Forum from 1–3 October 2024. Under the patronage of HH Shaikh Khalid bin Hamad Al Khalifa, the forum provided training, mentorship and networking opportunities for young entrepreneurs ([startupbahrain.com](http://startupbahrain.com)).

Participants pitched ideas, connected with investors and learned to launch or scale micro enterprises.

### 4.4 UNDP–UOB SDG Academic Programme (2 December 2024)

On 2 December 2024, UoB and the United Nations Development Programme launched an academic programme that integrates the Sustainable Development Goals into university curricula. The initiative embeds SDG focused content into first year English courses and specialised science and law courses, awarding dual certification from UNDP and UoB ([bahrain.un.org](http://bahrain.un.org)). This programme cultivates a generation of graduates who understand global sustainability challenges—including poverty eradication—and equips them to address them through research, policy or community action.

Throughout 2024 the University of Bahrain demonstrated a multifaceted commitment to SDG 1 – No Poverty. By subsidising tuition, providing scholarships and fee exemptions, offering on campus employment, ensuring affordable transport and healthcare, nurturing entrepreneurial ventures and engaging with the community through health, volunteerism and educational initiatives, UoB addresses poverty from multiple angles.



**2070** participants attended the 2024 forum.

# 2 ZERO HUNGER





## ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

The University of Bahrain is committed to addressing the complex challenges of food security, sustainable agriculture, and hunger, in alignment with Sustainable Development Goal 2. Through targeted research, support for agricultural innovation, community engagement, and direct support for its students, the university contributes to building a resilient and sustainable food system for the Kingdom of Bahrain.

### 1. Research in Sustainable Agriculture and Food Technology

The university's researchers are actively engaged in studies to enhance food security and modernize the agricultural sector.

- **ICT in Agriculture:**

Researchers from the University of Bahrain investigated the adoption of Information and Communication Technology (ICT) in agriculture, a key factor in enhancing food security. The study evaluated the readiness of farmers in Bahrain to use technologies such as AI, IoT, and soil sensors, which have the potential to significantly increase crop output and quality while optimizing resource use. The findings revealed that despite a strong acceptance of new ideas, there is insufficient awareness and readiness to adopt complex ICT applications. This highlights a crucial gap that must be addressed to modernize the agricultural sector and move towards sustainable food production.

- **Farm-Level Sustainability Assessment:**

In a study assessing farm-level sustainability, University of Bahrain researchers evaluated 29 farms in the Kingdom using the Response-Inducing Sustainability Evaluation (RISE) tool. The findings identified significant challenges to sustainable agriculture, revealing low performance in biodiversity

and economic viability. This research is crucial for addressing performance gaps and developing good agricultural practices, which are essential for improving food security and making progress toward the goal of zero hunger in light of Bahrain's environmental challenges.

- **Precision Agriculture Framework:**

Contributing to precision agriculture, a University of Bahrain researcher developed "Agri-DSSA," an advanced deep-learning framework for analyzing crop health. This system uses hyperspectral and image-based data to provide accurate, real-time monitoring of crop conditions. Such technology is foundational to precision agriculture, enabling the optimization of resources like water and fertilizer. By enhancing agricultural productivity and sustainability, this research directly supports the goal of achieving food security and ending hunger.

## 2. Promoting Agricultural Excellence and Innovation

The university supports national initiatives that foster innovation and excellence in the local food sector.

- **King Hamad Prize for Agricultural Development:**

The King Hamad Prize for Agricultural Development is highly relevant to SDG 2 as it aims to strengthen the entire agricultural ecosystem. By creating a competitive environment that rewards the best farmers, innovative agricultural projects, and impactful research, the prize directly supports the goal of ending hunger. It promotes sustainable agricultural practices, enhances productivity, and fosters innovation in the food sector. These efforts are crucial for building a resilient and sustainable food production system capable of ensuring long-term food security for the population.

## 3. Community Engagement and Sustainable Consumption

UoB promotes community-level initiatives and cultural principles that encourage sustainable food consumption and social responsibility.

- **The “Futaat Campaign”:**

The “Futaat Campaign” directly addresses SDG 2 by focusing on the reduction of food waste, a key target in achieving food security. By teaching individuals to

prepare meals from leftover food and encouraging the sharing of excess meals, the campaign promotes sustainable food consumption habits. This initiative directly contributes to ensuring that available food resources are utilized efficiently, reducing the overall demand on the food system and making more food available for those in need, thereby tackling hunger at the community and household levels.

- **“Landmarks in Islamic Culture”:**

The book “Landmarks in Islamic Culture” contributes indirectly to SDG 2 by promoting foundational principles that support food security. Although its primary focus is on Islamic culture, it covers topics such as Islamic economics, social justice, community responsibility, and environmental stewardship. These principles encourage ethical practices like charitable giving (which can alleviate hunger), fair distribution of resources, and sustainable resource management, all of which are essential for creating a society where everyone has access to sufficient and nutritious food.

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#### 4. Addressing Food Insecurity on Campus

The university provides direct support to ensure that its own community members have access to food.

- **Student Food Support Programme:**

The University of Bahrain addresses food insecurity on campus by providing direct support to students facing financial hardship. This initiative, in partnership

with companies like UNIPAL, offers a program of free food vouchers and significant discounts at numerous campus and local restaurants. This collaboration ensures that food insecurity does not become a barrier to education, alleviating the burden on students and helping to ensure

Through its focus on advanced agricultural research, promotion of national innovation, community campaigns on food waste, and direct support for students, the University of Bahrain demonstrates a comprehensive approach to achieving SDG 2. These efforts collectively contribute to enhancing sustainable food production, reducing waste, and ensuring that the community has access to the resources needed for a healthy life.

# **3 GOOD HEALTH AND WELL-BEING**





## GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

At the University of Bahrain, the pursuit of health and well-being is united into the fabric of our educational mission. Our commitment to good health transcends traditional boundaries. The essence of our strategy lies in proactive wellness programs and engaging campaigns that inspire our students and staff to prioritize their physical and mental health. From fitness workshops and nutritional seminars to mental health awareness initiatives, we cultivate an environment where well-being is celebrated and supported.

Innovative research initiatives focused on the pressing health issues, seeking solutions that resonate both locally and globally. Our interdisciplinary approach fosters collaboration among diverse fields, enabling us to tackle health challenges with creativity and compassion.

Through partnerships with local health organizations, we extend our impact beyond the campus, actively contributing to community health initiatives. Together, we are catalysts for change, championing a healthier, more vibrant future for all.

At the University of Bahrain, we believe that when we invest in health, we invest in a brighter tomorrow.

## 1. University of Bahrain Healthcare Clinic

The University of Bahrain (UoB) operates a fully equipped on-campus licensed healthcare clinic Health Care Center that provides free, high-quality medical services to all students, faculty, and staff. The center's professional medical team examines, diagnoses, and treats patients directly on campus, ensuring convenient access to essential healthcare without financial or logistical barriers.

### Services include:

- Medical consultations and treatment for acute and chronic conditions.
- Preventive care and health screening campaigns.
- First-aid and emergency support during campus hours.
- Health education workshops on mental health, nutrition, and lifestyle.
- Referrals to specialized medical facilities when needed.
- The center clinic offers a broad range of medical, preventive, and wellness services, including:
- General medical consultations and routine health assessments.
- Emergency and first-aid response available during working hours.
- Disease prevention programs and campaigns.
- Health awareness campaigns focusing on physical and mental well-being, nutrition, and fitness.

- Referral and support systems for students requiring specialized care.

In the academic year 2023-2024, the clinic received 2,300 cases, with 514 ambulance calls initiated, demonstrating their crucial role in ensuring community health. These cases were referred across different healthcare institutions.

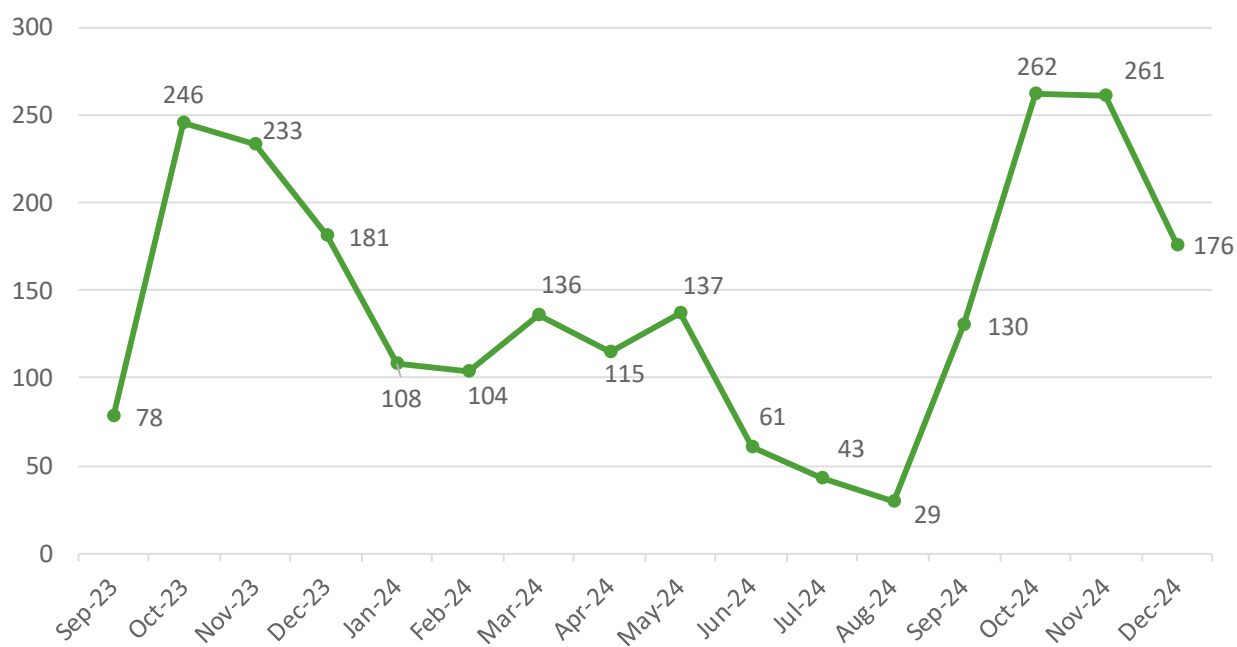
The clinic's ultimate goal is to ensure that healthcare services are easily accessible and affordable for people who belong to the university. and financially barrier-free, UoB. The university clinic promotes equitable health access for its entire community, enhancing student concentration, attendance, and overall academic success.

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The clinic's ultimate goal is to ensure that healthcare services are accessible and affordable for people who belong to the university. The university clinic promotes equitable access to health for its entire community, thereby enhancing student concentration, attendance, and overall academic success.



**UoB Healthcare Clinic at UoB**



**Number of Patients Visited the Healthcare Clinic at UoB**

## 2. Health Promotion and Disease Prevention

### 2.1 Health Promotion Initiatives

At the University of Bahrain, a robust commitment to health and well-being is evident through various innovative healthcare initiatives designed to empower individuals and strengthen communities. These programs not only address emerging health issues but also foster a culture of awareness, education, and solidarity among students, staff, and the broader community. Through prioritizing health promotion and disease prevention, the university plays a vital role in shaping a healthier future for all.

These initiatives collectively reached more than more than 3000 participants annually and contributed to increased screening rates, improved awareness, and adoption of healthy practices among students and staff.

- **Breast Cancer Awareness Campaigns: A Step towards Life**

In the pink October, the UoB provides breast cancer awareness campaigns for the university students, staff, and the community and secondary schools across various governorates in the Kingdom through organizing educational awareness activities, lectures, and workshops at the UoB campus, shopping malls, schools, and different primary and tertiary healthcare institutions. This initiative aimed to educate the community on the importance of early detection and

prevention of breast cancer and empower women to take charge of their health through knowledge about risk factors, screening methods, and healthy lifestyle choices



<https://www.instagram.com/uobedubh/p/Cy0oK-0FMi6r/?hl=en>

[Breast Cancer Awareness Campaigns: A Step towards Life](#)

### • “Gulf Nutrition Week”: How to Prepare Healthy Meals for Work?

This event launched at the UoB showcased health awareness and education efforts organized by the College of Health Sciences and Sports (CHSS). This initiative attracted a large number of students and academics eager to learn about healthy nutrition and its impact on overall well-being. Students from CHSS, alongside specialists from the Ministry of Health, provided insights into various food types, emphasizing the importance of distinguishing between beneficial and harmful fats. The activities aimed to cultivate a culture of healthy eating and physical activity at the university, aligning with the Health Promoting Universities program.

The nutrition week held from February 26 to March 2 2024, featured a diverse range of educational activities, including lectures on “How to Prepare Healthy Meals for Work?” and workshops like “How to Become a Conscious Consumer?” Participants learned

to read food labels effectively. Additionally, a walking activity promoted physical fitness, complemented by discussions on common nutritional mistakes.

Engaging competitions enhanced the experience, including daily quizzes for students, a step-counting challenge, a healthy recipe contest for staff, and a treasure hunt for students. Organized by the Department of Integrated Sciences at CHSS, in collaboration with various university departments and the Ministry of Health, this initiative celebrated Gulf Nutrition Week, fostering healthier lifestyles within the university community and contributing to Sustainable Development.



## 2.2 Lifestyle and Wellness

### • Bahrain Sports Day

The Bahrain Sports Day held on February 2024, is a vibrant national celebration of physical fitness and community well-being, organized by the Department of Physical Education at the University of Bahrain. The annual event brings together students, faculty, and staff to participate in a diverse range of sports and physical activities, promoting an active lifestyle and fostering a strong culture of health across the university community.

The event features team sports, fitness challenges, recreational games, and wellness workshops, ensuring inclusive participation across all age groups and fitness levels. This comprehensive approach encourages engagement, teamwork, and social interaction while emphasizing the importance of

regular physical activity in maintaining overall health and preventing lifestyle-related conditions such as obesity, diabetes, and cardiovascular diseases.

Beyond its physical benefits, Bahrain Sports Day reinforces values of collaboration, discipline, and community spirit, inspiring participants to integrate fitness and well-being into their daily lives. The initiative stands as a testament to the University of Bahrain's commitment to promoting Sustainable Development Goal 3 (SDG 3): Good Health and Well-being, by encouraging health-conscious behaviors and nurturing a physically active, resilient university community.



[Bahrain Sports Day](#)

### • Together Against Smoking

The “Together Against Smoking” initiative was a comprehensive campaign aimed at raising awareness about the dangers of smoking and promoting healthier lifestyles among students and the wider community. This initiative focused on education, prevention, and support, targeting both current smokers and those at risk of starting. Through interactive sessions, participants were educated about the harmful effects of smoking on health, including its links to chronic diseases and the impact on mental well-being. The initiative also highlighted the importance of making informed choices and encouraged students to adopt smoke-free lifestyles.

In collaboration with health professionals and organizations, the campaign provided resources and support for those looking to quit smoking, including

access to counseling, cessation programs, and informational materials that empowered individuals to take control of their health. Additionally, the initiative fostered a supportive community environment where students could share their experiences and challenges related to smoking. Overall, the initiative aimed to reduce smoking rates and encourage a healthier, smoke-free generation. It served as a proactive approach to combat smoking and its associated health risks, contributing to the well-being of society.



[Together Against Smoking](#)

### • Weight Loss Awareness

Addressing the urgent issue of obesity among youth, the Weight Loss Awareness campaign combined education with practical support. Organized in collaboration with the Arabian Gulf University, the initiative aimed to promote balanced lifestyles and prevent obesity-related health risks through early education and intervention. During the campaign, a team of enthusiastic students actively engaged with participants by providing free medical screenings, including blood sugar and blood pressure checks, to help identify potential health concerns at an early stage. These screenings not only raised awareness but also encouraged students to take responsibility for their own health. Personalized counseling sessions offered tailored guidance on weight management

strategies, nutrition planning, and the importance of regular physical activity. The campaign successfully highlighted the urgent need to combat obesity and inspired participants to adopt sustainable practices for a healthier future. Success stories from peers who had made lifestyle changes were shared to motivate others. The event combined educational outreach with practical support, emphasizing the role of healthy habits in maintaining long-term well-being.



*Weight Loss Awareness*

### • “Movember” Men’s Health Awareness Month: Men’s Health, A Healthy World

This initiative, held in November 29, 2023, is an annual event organized by the College of Health and Sport Sciences, aimed to promote the importance of health and well-being among men, focusing on health issues that disproportionately affect them, such as heart disease, prostate cancer, and mental health problems. The activities encouraged men to engage in preventive care, adopt healthier lifestyle choices, and seek regular medical check-ups, serving as a reminder of the collective responsibility in advocating for better health outcomes for men. The initiative emphasized that mental health is just as crucial as physical health, aiming to create a culture where men feel comfortable discussing their health concerns. It included expert-led discussions on topics like stress management and nutrition, facilitating a comprehensive understanding of health that extended beyond physical conditions. Ultimately, by prioritizing men’s health, the initiative

sought to remind society of its collective responsibility in advocating for improved health outcomes for men.



### Men’s Health Awareness Month



### • UoB Participation in the Capital Friendly to the Elderly Campaign

The University of Bahrain participated in the “Capital Friendly to the Elderly” day, organized by the Capital Governorate at Sitra Mall, in celebration of the International Day for Older Persons in October 11, 2024. College students conducted health screenings for the elderly, measuring blood pressure and blood sugar levels. They also offered a variety of physical and therapeutic exercises designed to address common health issues faced by seniors, such as joint pain and mobility difficulties. Additionally, specialized consultations were provided to support the mental health of older adults, helping them adapt to the

changes associated with aging and enhancing their self-confidence. This initiative aimed to recognize the role of older people in the community, highlight the challenges they face in healthcare and social integration, combat age discrimination, and promote awareness of their rights while providing the necessary support for them to continue their active role in society.



*UoB Participation in the Capital Friendly to the Elderly Campaign*

### 3. Campus Safety and First Aid

#### • Safe University Life – First Aid Training

The Safe University Life initiative reflected the university's commitment to creating a safe learning environment. Organized by the International Training Center at the Department of Nursing within the College of Health and Sports Sciences, the initiative aimed to enhance safety awareness and first aid competencies among university staff and students. A series of workshops and training sessions was launched to train participants on how to respond effectively to various emergencies, providing immediate care to injured individuals and managing emergency situations until professional medical assistance arrived.

The sessions, delivered by specialized nursing faculty members, included interactive lectures, practical demonstrations, and simulations using manikins. These activities enabled participants to apply correct procedures in realistic scenarios, gaining confidence in handling injuries or sudden health crises on campus. The overall aim of the initiative was to equip UoB

staff and students with essential first aid knowledge and practical skills, contributing to a safer university environment and ensuring that students and staff were prepared to respond effectively in emergencies.



*Safe University Life – First Aid Training*



*Safe University Life – First Aid Training*

## 4. Mental Health Support Services

### • Mental Health and Counseling Services at University of Bahrain

The Department of Guidance and Counseling at the University of Bahrain is dedicated to supporting students' mental health and well-being through comprehensive social, behavioral, and psychological counseling services. Staffed by experienced specialists, the department focuses on preventing and managing psychological issues that may impact students' academic success. To further enhance support, the university organizes informative seminars led by guidance and counseling professionals, covering various aspects of social and educational care, as well as university systems and regulations. Additionally, counseling programs in social, psychological, health, and nutrition fields are available, aimed at helping students manage stress, develop effective study skills,

and prepare for exams. The department also plays a vital role in orienting new students, introducing them to university bylaws and regulations through an induction day program, ensuring they understand their rights and responsibilities while fostering a smooth transition to university life.

In the academic Year 2023/2024, 135 psychological consultations and 6 skill-development workshops were conducted, reaching over 400 students. These efforts contributed to a comprehensive approach to mental health and wellness on campus.



## • Mental Health Workshops

### - Communication Skills

The Communication Skills workshop aimed to educate students on social communication concepts, helping them organize their lives and develop positive skills for navigating life events. Held in the Electronic Learning Center, the session covered techniques for effectively using social media, highlighting its positive aspects, such as connectivity and access to information, while also discussing potential drawbacks like misinformation and mental health impacts.

### - Personal Development and Resilience:

This workshop focused on enhancing students' life skills by addressing personality differences and their influence on success. Also conducted in the Electronic Learning Center, key topics included understanding different personality types and interaction strategies, refining character, building resilience, and addressing bullying. Participants learned techniques to strengthen personal identity and enhance self-confidence.

### - Psychological Calmness and Positive Thinking:

Focusing on psychological calmness, this workshop emphasized its positive impact on individual and community well-being. Held in the Peace Hall at the College of Business Administration, the session covered positive thinking patterns and the importance of emotional management, providing techniques for enhancing mental health and achieving psychological balance.

The workshops on mental health and well-being at the University of Bahrain align with Sustainable Development Goal 3 (SDG 3), specifically targeting Indicator 3.4: "Reduce by one third premature mortality from non-communicable diseases through prevention, treatment, and promotion of mental health and well-being."

### - Time Management Skills Event:

The Time Management Skills workshop engaged students in discussions about their experiences with time management. Conducted at the Zain Electronic Learning Center, it included essential skills for organizing and prioritizing tasks, the impact of effective time management on academic performance, and methods to alleviate anxiety and stress associated with poor time management practices.

### - Understanding Stress and Panic Attacks:

Organized by the Deanship of Student Affairs and the College of Health and Sport Sciences, this series of workshops aimed to help students manage stress and reduce panic attacks on the Salmaniya and Sakheer campuses. The sessions introduced evidence-based techniques such as mindfulness and breathing exercises, fostering awareness and resilience while emphasizing the importance of self-care and seeking support from counseling services.



### • Mental Health Day: Hand in Hand Towards Safe Mental Health

On October 17, 2024, the Deanship of Student Affairs at the University of Bahrain organized the event “Hand in Hand Towards Safe Mental Health” to celebrate World Mental Health Day. Held in the Peace Hall and atrium of the College of Business Administration, the event featured several activities aimed at raising mental health awareness. Dr. Fatima Al-Maliki, Dean of Student Affairs, and Dr. Sameera Al-Bastaki, Director of the Guidance and Counseling Department, highlighted the importance of mental well-being and available services for students. Presentations included Dr. Khalid Al-Shanou’s segment

on achieving psychological balance, Dr. Jassim Al-Muhandi’s discussion on mental health disorders, and Mr. Mohammed Al-Sharqawi’s insights on sports psychology. The event also featured a diverse exhibition, including a psychological counseling corner and discussions on the impact of healthy eating on mental health. This initiative aligns with Sustainable Development Goal 3 (SDG 3), promoting mental health and well-being among students.



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- **Mentorship: Support students' academic performance**

The academic advisor at the University of Bahrain plays a crucial role in enhancing students' academic performance and guiding them throughout their academic journey. Advisors assist in course selection based on students' interests and abilities, ensuring they set and achieve educational goals. They are well-versed in university regulations and available during office hours to address student queries. By monitoring academic progress and helping navigate graduation requirements, advisors foster a supportive learning environment.

In clinical training, students are supported through a structured framework involving preceptors/mentors and faculty. Preceptors guide students during clinical postings, bridging the gap between theory and practice by familiarizing them with clinical objectives and procedures. They develop personalized learning objectives and use diverse teaching strategies to accommodate different learning styles. Students are encouraged to engage actively by formulating daily clinical objectives and applying critical thinking in real-world situations. Ongoing constructive feedback from preceptors, along with collaborative evaluations

by faculty, further supports student growth. This comprehensive support system cultivates a professional relationship among students, preceptors, and faculty, ensuring that students receive the necessary guidance and resources to achieve their clinical competencies successfully.

In addition, the mentorship framework fosters mental resilience, reduces academic stress, and promotes a sense of belonging and psychological balance. These elements directly support the goals of SDG3 (Good Health and Well-being), particularly Target 3.4, which emphasizes the promotion of mental health and well-being through prevention, support, and positive learning environments.

## 5. Healthy University Initiative

The Healthy University Initiative represents a national model for implementing the WHO's Health Promoting Universities framework, integrating policies across physical, mental, and environmental dimensions. UOB participates in the "Healthy University" project, which represents a transformative effort by the University of Bahrain to enhance health and well-being on campus sustainably. This initiative aims to position the university as a leading model for sustainable health promotion in the Eastern Mediterranean Region. Central to the initiative is the establishment of a Health Promoting University Executive Committee, comprising academic, clinical, and administrative members. This committee is tasked with integrating sustainable health promotion strategies into university policies and practices, fostering intersectoral collaboration, and mobilizing resources from local and international health organizations sustainably.

The initiative, suggested by the College of Health and Sport Sciences (CHSS), focuses on promoting healthy lifestyles among students and staff through educational programs addressing nutrition, physical activity, and mental health. Workshops, seminars, and health fairs will provide essential knowledge and skills, while mental health promotion will be embedded in health services and curricula. Additionally, the initiative prioritizes environmental health by improving water and sanitation facilities, implementing waste management systems, and creating green spaces that encourage physical activity. This holistic approach aims to cultivate a safe and health-promoting environment. Community participation is also a key component, involving parents, local organizations, and health authorities in health assessments and collaborative activities.

Regular monitoring and evaluation will assess the effectiveness of implemented strategies, allowing for ongoing improvements.

This initiative aligns closely with Sustainable Development Goal 3 (SDG 3), which aims to ensure healthy lives and promote well-being for all at all ages. Specifically, it addresses Indicator 3.4, which focuses on reducing mortality from non-communicable diseases through prevention, treatment, and promotion of mental health and well-being.



## 6. Promoting Women's Health

### • Reproductive and Sexual Health Education

The College of Health and Sport Sciences (CHSS) at the University of Bahrain is making significant strides in improving reproductive health. As part of the university's initiatives towards Women's Health, nursing students are equipped with essential knowledge and skills, focusing on critical topics such as sexually transmitted diseases (STDs) and family planning methods. Students exploring various STDs like chlamydia, gonorrhea, syphilis, HIV, and HPV thereby students gain a nuanced understanding of sexual health, emphasizing the importance of early detection, prevention strategies, and destigmatizing discussions around these issues. Furthermore, the course highlights diverse family planning methods, enabling students to provide accurate information and support to women and families in making informed reproductive choices. Beyond classroom learning,

College of Health & Sport Sciences (CHSS) fosters community engagement by encouraging students to conduct health education sessions and family visits, where they share vital information on reproductive health with women across various community levels. This hands-on approach not only enhances students' understanding but also allows them to make a tangible impact in their communities. Ultimately, by empowering future midwives and healthcare advocates, CHSS at the University of Bahrain is playing a pivotal role in promoting women's health, fostering open dialogue, and breaking down barriers.



### • Pink University Campaign

The Pink University Campaign aimed to enhance breast health awareness among young female university students. Launched by the College of Health and Sport Sciences in collaboration with the Equal Opportunities Committee, this initiative emphasized the importance of self-examination as a proactive measure for early detection of potential health issues.

The campaign featured various educational stations strategically located across the university's colleges, providing essential information on the correct techniques for performing breast self-examinations. Interactive demonstration sessions allowed students to practice these techniques in a supportive environment, reinforcing the importance of regular health checks and self-awareness.

To complement the hands-on learning experience, the campaign distributed informational materials such as pamphlets and flyers that reinforced key messages about breast health. Additionally, health professionals were invited to deliver expert health education and clinical examinations, offering valuable insights into the significance of breast health and addressing students' questions during Q&A sessions. The College of Health and Sport Sciences [assessed Students' Knowledge, Attitude and Practice \(KAP\) Regarding Breast Self-Examination prior to commence conducting such campaign](#). The results of this study indicate a significant gap in KAP related to BSE among university female students. Knowledge deficiency reflects finite awareness and understanding of the importance of BSE and using proper techniques. At the same time, the limited attitude might hinder students' engagement and motivation in practicing BSE. Therefore, the CHSS targeted educational initiatives campaigns are essential to improve

female students' awareness regarding Breast Self-Examination and enhance personal motivation toward the proper practice of BSE. Disseminating the appropriate practice of BSE in the community is also recommended.



بالتعاون مع كلية العلوم الصحية والرياضية	
كلية الآداب	الثلاثاء 2023 - 10 - 17
كلية إدارة الأعمال	الثلاثاء 2023 - 10 - 17
كلية المعلمين	الخميس 2023 - 10 - 19
كلية التعليم التطبيقي	الخميس 2023 - 10 - 19
كلية تقنية المعلومات	الثلاثاء 2023 - 10 - 24
كلية الحقوق	الثلاثاء 2023 - 10 - 24
كلية العلوم	الخميس 2023 - 10 - 26
كلية العلوم الصحية والرياضية	الخميس 2023 - 10 - 26
كلية الهندسة	الخميس 2023 - 10 - 26

### • Breast Cancer-Awareness Campaign for High School Students: “Together for Support and Hope”

The College of Health and Sports Sciences at the University of Bahrain has launched the “Together for Support and Hope” initiative, from October 21 – 31 2024, to raise awareness about breast cancer among high school female students. This campaign specifically targets both public and private secondary schools across various governorates in the kingdom. The initiative emphasizes the significance of early detection and prevention of breast cancer, equipping students with essential knowledge about risk factors, screening methods, and healthy lifestyle choices. Through engaging presentations and interactive discussions, the campaign aims to empower young women to take charge of their health and recognize the importance of regular screenings. In addition to education, the initiative promotes a culture of solidarity, encouraging students to support those affected by breast cancer. By fostering an environment

of compassion and understanding, the campaign highlights the crucial role of emotional support in the healing process. Overall, “Together for Support and Hope” not only seeks to enhance awareness and knowledge about breast cancer but also strives to build a supportive community that empowers young women to unite in the fight against this disease.



**Breast Cancer-Awareness Campaign for High School Students: “Together for Support and Hope”**

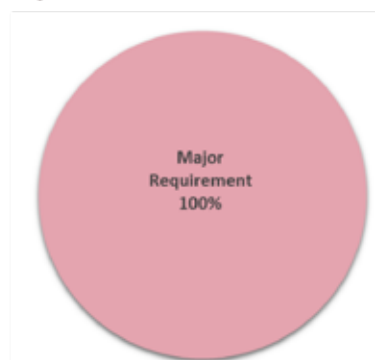
### • Specialized Midwifery Education.

The University of Bahrain is dedicated to promoting women's health by offering a specialized postgraduate degree in midwifery designed to equip practitioners with essential skills and knowledge. This initiative focuses on enhancing maternal and neonatal care, addressing the specific health needs of women in Bahrain. The specialized program aims to train midwives in evidence-based practices, enabling them to provide comprehensive support throughout pregnancy, childbirth, and the postpartum period. By focusing on areas such as prenatal care, labor management, and postpartum support, the program directly contributes to improving health outcomes for women and infants.

Additionally, the University of Bahrain offers sponsorship for female faculty members to pursue a postgraduate diploma in midwifery. This investment not only strengthens the academic foundation of the program but also empowers women to take leadership roles in healthcare. By cultivating a skilled workforce of female midwives, the university enhances the quality of care available to women in Bahrain, ultimately promoting healthier families and communities. All of the above initiatives address SDG 3 targets 3.1 and 3.7 by strengthening maternal health, promoting reproductive rights, and enhancing gender equity in health education.

### Postgraduate Diploma in Midwifery Program Components

Course Type	CRD
University Requirement (UR)	-
College Requirement (CR)	-
General Studies Compulsory (GSCC)	-
Major Requirement (MR)	23
Major Elective (ME)	-
General Studies Elective (GSE)	-
Training (Internship) (TR)	Yes
Total Credit (CRD)	23



### Detailed Study Plan

#### Year 1 - Semester 1

Course Code	Course Title	Course Hours				Course Type	Pre requisite	Co-Requisite	Major GPA
		LEC	LAB	CLN	CRD				
MWF501	Antenatal Care	3	0	0	3	MR	-	-	Yes
MWF502	Antenatal Care Practicum	0	0	6	2	MR	-	MWF501	Yes
MWF508	Women's Health Issues	2	0	0	2	MR	-	-	Yes
MWF511	Leadership and Management in Midwifery	2	0	0	2	MR	-	-	Yes

## 7. Public Health Education and Media Outreach

CHSS faculty experts regularly lead public lectures, community forums, and online discussions that address major health and wellness topics, focusing on preventive care, chronic disease management, mental health, and nutrition. These lecture series are inspired by global models of health communication and are offered freely to the Bahraini public both in-person and online. The College also collaborates with national newspapers, radio, and television outlets to publish evidence-based health articles and expert columns that make scientific research accessible to the general community. These partnerships ensure accurate, relevant, and trustworthy information reaches citizens across the Kingdom. By 2030, the University aims to reach 100,000 citizens through public lectures, campaigns, and media outreach—promoting informed health choices and societal resilience.

<https://dailypr-me.com/index.php/ar/medar119/237-news-49/2340-1>  
<https://www.instagram.com/reels/DB8aXhjs0fn/>  
<https://online.fliphtml5.com/gullb/mese/#p=38>

### •Community Services

The faculty and staff at the University of Bahrain are actively engaged in a variety of non-profit health-related societies that directly serve the Bahraini community. This initiative highlights their volunteer work and commitment to enhancing public health through collaboration with organizations such as the Bahrain Red Crescent Society, the Anti-Smoking Society, the Sickle Cell Disease Association, the Bahrain Diabetes Society, and the Bahrain Cancer

Society. Through this volunteer work, faculty and staff contribute to vital health initiatives, raising awareness and providing education on pressing health issues. For example, their involvement in the Anti-Smoking Society promotes tobacco cessation programs, while the Sickle Cell Disease Association focuses on improving care and support for affected individuals. These efforts are essential in addressing community health challenges and fostering a healthier population.

The initiative aligns primarily with SDG 3.3, which aims to end the epidemics of communicable diseases, including tuberculosis, hepatitis, and water-borne diseases, and to address mental health and substance abuse. Additionally, it supports SDG 3.4, which focuses on reducing mortality from non-communicable diseases and promoting mental health and well-being.



## 8. Empowering Community and Public Health through Curriculum

### • Public Health

The Public Health program courses are intrinsically aligned with promoting SDG 3: Good Health and Well-being by directly addressing its core targets. Through a curriculum covering areas like disease prevention and reducing the burden of non-communicable diseases, directly supporting targets 3.3 and 3.4.

Furthermore, coursework in health policy and management contributes to achieving universal health coverage (Target 3.8) by training graduates to develop and implement equitable health-care strategies and increase health financing and support for the health workforce.

The program's focus on environmental health prepares professionals to substantially reduce deaths and illnesses from hazardous chemicals and pollution, a key aspect of Target 3.9. Training in data analysis and epidemiology supports the development and strengthening of early warning systems for global health risks, aligning with Target 3.d. Courses related to maternal and child health prepare graduates to address the reduction of maternal mortality and preventable deaths under five (Targets 3.1 and 3.2), while those focused on mental health and substance abuse directly target the corresponding SDG goals (Targets 3.4 and 3.5).

### • Family and Community Health Nursing

As part of the university's commitment towards the family and community, nursing students in the Family and Community Health Nursing Care course at the University of Bahrain actively engage in various community service activities that promote health awareness and education. During their clinical training in primary health care centers, students

participate in a wide range of community outreach events. These include Pink October, which focuses on raising awareness about breast cancer prevention and early detection. World Mental Health Day emphasizes the importance of mental well-being and reducing stigma toward mental illness. World Patient Safety Day highlights the significance of safety in healthcare delivery. Movember addresses men's health issues such as prostate cancer and mental health. World Food Day promotes healthy nutrition and food security. World Antibiotic Awareness Week educates the public about responsible antibiotic use and antimicrobial resistance. The International Day of Persons with Disabilities advocates for inclusion and accessibility. Students also take part in health education campaigns on the importance of breastfeeding, early screening and detection, awareness of behavioral disorders in children, and the significance of vaccinations. They engage in activities that support antenatal follow-up, maternal and child nutrition, and the prevention and management of chronic diseases. Additionally, they contribute to awareness initiatives during World Diabetes Day, which focuses on the prevention, early detection, and control of diabetes. Through these diverse activities, students explore community health needs and social challenges. They propose evidence-based improvement plans and contribute to enhancing public health outcomes while strengthening their professional, leadership, and communication competencies.



*Where learning meets impact—advancing SDG 3 through community health initiatives.*

### • Care of Older Adults

As part of the university's commitment to older adult care, nursing students at UoB have taken significant strides to enhance the well-being of older adults within the community. They conducted an engaging session at the Social Welfare Center, focusing on age-related changes and preventive measures to promote healthier aging. This initiative not only educated older adults but also provided healthcare professionals with valuable insights into the unique needs of this demographic, fostering a collaborative approach to elder care.

In addition to the session at the welfare center, the nursing students organized a vibrant healthcare event at a day care center dedicated to older adults. This event featured interactive workshops on health education, first aid, and healthy nutrition, equipping participants with practical skills and knowledge to manage their well-being effectively. The nursing students created a supportive environment for older adults, and students helped empower them to take charge of their health, emphasizing the importance of preventive measures and lifestyle choices that can significantly enhance their quality of life.



*UOB nursing students supporting older adults with care, knowledge, and compassion.*

### • Creative Activities Empowering Older Adults at Day Care Centers

In an innovative initiative, nursing students at local day care centers are enhancing the cognitive and psychomotor abilities of older adults through creative activities. These hands-on projects, designed and executed by students, aim to boost the seniors' sense of well-being. Each creative endeavor is meticulously planned, requiring faculty approval

and strict adherence to safety measures. After a brief five-minute session, the participants showcase their artistic expressions, fostering engagement and reflection. This initiative not only empowers the elderly but also enriches students' learning experiences in health promotion.



### • Antenatal Care

As part of the university's initiatives to support women's health, , students in the Midwifery courses are required to provide antenatal care, which is crucial for their clinical learning experiences. These sessions aim to promote maternal health and empower women to make informed decisions during pregnancy. Students assess the learning needs of antenatal mothers and plan individualized or group teaching sessions covering essential topics such as the significance of regular antenatal visits, balanced nutrition, personal hygiene, rest and exercise, danger signs during pregnancy, birth preparedness, immunization, and emotional well-being. To facilitate effective communication, students utilize appropriate audio-visual aids. They employ printed materials like flip charts and posters, models for demonstrating procedures, and digital presentations using PowerPoint, videos, or animations illustrating fetal development. Additionally, interactive tools such as flashcards and case scenarios encourage discussions, ensuring understanding among mothers with varying literacy levels. This approach simplifies complex concepts, piques interest, and fosters participation among mothers from diverse educational backgrounds.



### • Mother's Health Classes

Simultaneously, during the Pediatric Nursing course, students embraced their role as educators by organizing a series of Mother Classes for mothers in pediatric wards. These sessions provided essential health education on topics such as breastfeeding, weaning, accident prevention, and the management of common childhood illnesses, including diarrhea, chest infections, and bronchial asthma. The interactive nature of these classes encouraged mothers to engage actively, ask questions, and share experiences, fostering a sense of community and support among participants.



### • Cultural Care Awareness

Bahrain is a multicultural society with diverse traditions, beliefs, and practices, making it essential for healthcare providers to understand and respect these differences. Each year, nursing students conduct awareness sessions on cultural care for health professionals at the College of Health and Sport Sciences through a dedicated Transcultural Care Exhibition. This event showcases various health-related beliefs surrounding childbirth, labor

and delivery, chronic illness, and death. Students emphasize the significance of traditional practices, including the use of herbs, specific maneuvers, reflexology, and acupoints, etc. The overarching goal is to equip healthcare professionals with the knowledge to integrate cultural concepts, theories, and beliefs into their practice, ultimately providing culturally congruent care that respects and honors diverse patient backgrounds.



## 9. Partnership and Collaboration

### 9.1 Collaboration with World Health Organization

#### • Developing and Implementing a Capacity Building Educational Package for Midwives in Regional Community/ Primary Health Care Settings

The Department of Nursing at the College of Health and Sport Sciences (CHSS), as a WHO Collaborating Center for Nursing Development, has spearheaded a vital initiative aimed at strengthening midwifery practices in primary healthcare settings across countries with high maternal mortality rates in the Eastern Mediterranean Region (EMRO). This initiative aligns with the global goal of reducing the maternal mortality ratio to less than 70 per 100,000 live births, as outlined in Sustainable Development Goal (SDG) 3, particularly indicator 3.1.

#### - Assessment of the Midwives' Learning Needs in Primary Health Care Settings in Eastern Mediterranean Region

The development of the educational package began with a comprehensive literature review to identify learning needs related to practice, education, and research. A needs assessment tool was designed and piloted in selected countries to ensure its validity and reliability before distribution to WHO collaborating centers (WHOCCs) in the Eastern Mediterranean region.

A survey was sent to midwives from Eastern Mediterranean countries revealed significant learning needs, particularly among those from Gulf Cooperation Council (GCC) countries. The analysis identified a strong demand for updated knowledge on WHO guidelines for safe motherhood, as well as enhanced understanding of evidence-based

practices related to healthy family life and nutritional counseling. Practical skills, especially in applying WHO recommendations for antenatal and intrapartum care, were also highlighted, along with the necessity for skills in history taking and assessing fetal well-being. Additionally, midwives expressed a need to implement and integrate evidence-based research into their practice.

#### - Developing the Capacity Building Educational Package for Midwives

The development of an educational package for midwives began with a thorough literature review. The educational package encompassed various learning sessions, including health promotion for pregnant women, updated evidence-based practices, and the integration of research findings into midwifery practice. Additionally, it addressed critical issues such as nutritional counseling and positive parenting, equipping midwives with the knowledge and skills necessary to support families effectively.

#### *The educational package was structured into three sections:*

**Section 1:** Midwives' Learning Needs in Practice covers advanced health assessment techniques, fetal well-being evaluations for low and high-risk mothers, and WHO recommendations for antenatal and intrapartum care, promoting positive pregnancy and childbirth experiences. Neonatal assessment skills are also emphasized.

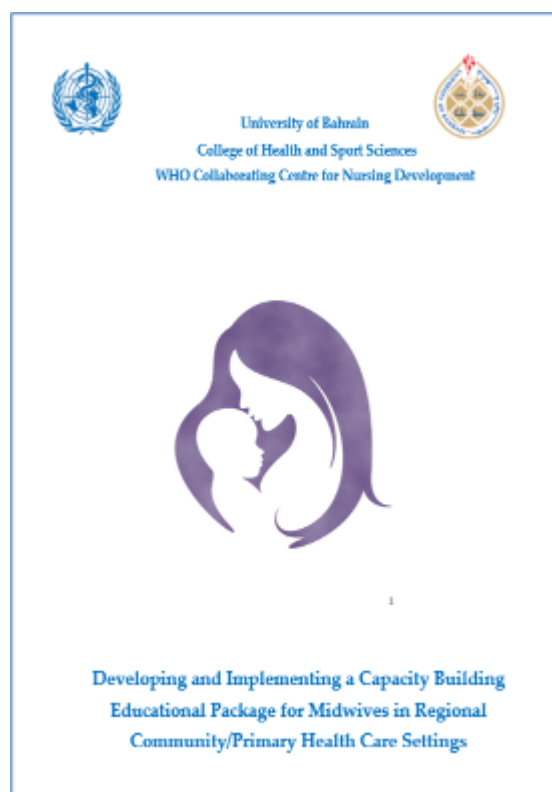
**Section 2:** Midwives' Learning Needs in Education includes sessions on health promotion for pregnant women and newborns, focusing on nutritional counseling, and updated evidence-based practices related to healthy family life and positive parenting.

**Section 3:** Midwives' Learning Needs in Research addresses evidence-based practice in primary healthcare, integrating standardized guidelines into midwifery, and the importance of publishing and disseminating research findings.

The educational package included PowerPoint presentations, class activities, case studies, assessment tools, and WHO guidelines for Positive Pregnancy Experience.

#### - Implementation of the Capacity Building Educational Package for Midwives

The Department of Nursing developed an action plan and is currently implementing an educational training program for midwives in primary healthcare settings in the EMRO region. Key actions include collaborating with the WHO Regional Office to identify the target group of midwives. Following this, an educational training program will be conducted, tailored to the specific needs of these midwives.



### • Participation in the WHO Baby-Friendly Hospital Initiative in Bahrain

Representatives of nursing faculty members have been selected to be among the assessors for the WHO's Baby-Friendly Hospital Initiative for promoting optimal infant feeding practices and maternal care, held during November 24-28 2024. This initiative aims to ensure that hospitals create a supportive environment for breastfeeding and mother-baby bonding. They play a crucial role in developing and delivering training programs for healthcare professionals, educating them on the Ten Steps to Successful Breastfeeding. Through their expertise in evidence-based practice, nursing faculty conduct research that informs hospital policies and enhances care quality for mothers and infants. Additionally, they

engage in community outreach to raise awareness about the benefits of breastfeeding, dispelling myths, and fostering supportive environments. As mentors, they instil values of compassionate care in nursing students, ensuring future leaders uphold BFHI principles. By collaborating with multidisciplinary healthcare teams, nursing faculty integrate BFHI practices into hospital protocols, and their commitment to continuous improvement ensures adherence to high standards of care. Ultimately, their efforts significantly contribute to the health and well-being of families and communities, making breastfeeding a priority in maternal and infant health.



[Participation in the WHO Baby-Friendly Hospital Initiative in Bahrain](#)

### •Public Breast Cancer Awareness Campaign

One of the standout initiatives is the Public Breast Cancer Awareness Campaign at one of the shopping malls in Bahrain, which exemplifies the university's collaborative spirit. In partnership with the World Health Organization (WHO), this campaign raises vital awareness about the importance of early screening and diagnosis. The event, held on October 31, 2024, featured nine interactive stations, allowing community members to engage with information directly. The campaign attracted more than 300 participants from various segments of the community. Participants were encouraged to add pink ribbons and motivational

messages to a solidarity board, symbolizing collective support and unity in the fight against breast cancer. This interactive approach not only educates but also creates a nurturing environment where individuals feel empowered to prioritize their health. Health educational materials were distributed to ensure that attendees left with a better understanding of breast health, risk factors, and the importance of regular screenings.



[Public Breast Cancer Awareness Campaign](https://www.instagram.com/uobedubh/p/DB8m2wSskV8/?hl=en)

<https://www.instagram.com/uobedubh/p/DB8m2wSskV8/?hl=en>

## • UoB Contribution to Global Network and LINKS Magazine: Nursing and Midwifery Links

The Department of Nursing at the College of Health and Sport Sciences, University of Bahrain, has partnered with the “Nursing and Midwifery Links” (LINKS) Global Network as a WHO Collaborating Centre for Nursing Development. This collaboration includes contributing regular news updates to LINKS Magazine, which highlights advancements and developments in nursing and midwifery. These updates are published on the CORE repository, an initiative aimed at enhancing global member engagement among WHO

Collaborating Centers for Nursing and Midwifery. The partnership also leverages resources like the Nurses.com directory, providing valuable information and connections for nursing professionals. This initiative fosters collaboration, knowledge sharing, and awareness of best practices in nursing and midwifery on a global scale, ultimately contributing to the improvement of healthcare standards worldwide.



<https://indd.adobe.com/view/df6f3001-1fde-4494-a9b9-7cee730a6ca8>

### • WHO AWaRe Antibiotic Resistance (for prescribers)

The WHO Aware Antibiotics Workshop was conducted on November 22, 2023, to raise awareness among doctors about the growing threat of Antimicrobial Resistance (AMR) and the critical role of appropriate antibiotic use in preventing it. The workshop aimed to enhance participants' understanding of the WHO AWaRe classification, Access, Watch, and Reserve, which guides rational antibiotic prescribing based on their effectiveness, resistance potential, and public health importance. During the session, healthcare professionals were introduced to global and local data highlighting the consequences of AMR, including increased treatment failures, prolonged hospital stays, and higher healthcare costs. The workshop emphasized the importance of evidence-based prescribing, infection prevention and control measures, and patient education to curb the misuse and overuse of antibiotics. Interactive discussions and case-based activities allowed doctors to apply the AWaRe framework to real clinical scenarios, promoting responsible antibiotic stewardship in daily practice. The event also encouraged collaboration between healthcare providers to establish consistent prescribing practices and monitoring systems. Overall,

the workshop successfully strengthened awareness and commitment among medical professionals to support WHO's global strategy against AMR, ensuring that antibiotics remain effective for current and future generations.



[WHO AWaRe Antibiotic Resistance \(for prescribers\)](#)



### • 1st Gulf Healthcare and Sports Congress

Promoting Innovation and Collaboration in Health and Sports

The University of Bahrain hosted the 1st Gulf Healthcare and Sports Congress, a pioneering regional platform that brought together experts, researchers, and practitioners to discuss transformation in healthcare, sports science, and leadership within the Gulf region's health ecosystem.

The Congress addressed emerging topics such as artificial intelligence in healthcare, sports medicine, nursing leadership, and well-being innovation, fostering interdisciplinary dialogue and collaborative research across health and sports domains. Participants included representatives from government entities, universities, and private healthcare institutions, emphasizing the integration of science, policy, and practice for improved community health outcomes.



### • Establishing Multidisciplinary Research Collaboration in Nursing

Establishing and facilitating multidisciplinary research collaboration in nursing practice and education within the Eastern Mediterranean Region (EMRO) is essential for health development. Recognizing research as a vital investment, the WHO Collaborating Centre, in partnership with the World Health Organization, aims to enhance nursing practices, address regional challenges, and promote the Sustainable Development Goals.

Key actions include conducting a needs assessment to identify regional research priorities in nursing practice and education. This assessment informed us about the development of a comprehensive research agenda. Additionally, research capacity-building training workshops were conducted to enhance skills across the region. An electronic survey distributed across twenty-two EMRO countries identified research priorities and gaps in nursing and midwifery practice. This effort led to the establishment of a research network. Key areas of interest among respondents included digital health, maternal and child health, and mental health. This collaborative initiative seeks to foster innovation and improve health outcomes, ensuring that nursing education and practice are informed by robust research evidence.

### • World No Tobacco Day: Call to action poster campaign to compact smoking

On World No Tobacco Day, the WHO Country Office in Bahrain launched a poster campaign to raise awareness about the dangers of the tobacco industry, coinciding with the WHO's 75th anniversary. The 2023 theme, "Grow Food, Not Tobacco," encourages

countries to discontinue subsidies for tobacco farming and promote sustainable agricultural practices.

Nursing students from the College of Health and Sport Sciences (CHSS) at the University of Bahrain (UoB) actively participated in this initiative, showcasing their commitment to health promotion. They submitted impressive concepts aligned with the campaign's theme, highlighting the importance of addressing tobacco-related health issues. Five exemplary students received certificates from WHO Bahrain for their contributions, emphasizing the role of UoB's nursing students in advocating for public health. This initiative links directly to Sustainable Development Goal 3, specifically targeting indicators such as:

- Reducing non-communicable diseases and promoting mental health and well-being.
- Strengthening the implementation of the World Health Organization Framework Convention on Tobacco Control.

Through education, research, innovation, and strategic partnerships, the University of Bahrain continues to advance SDG 3 by ensuring healthy lives and promoting well-being for all ages. These collective efforts contribute to national health priorities and position the University as a regional model for sustainable health promotion.



*The winning students and the delegation from the University of Bahrain visit the WHO Country Office*

[World No Tobacco Day: Call to action poster campaign](#)

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## 9.2 Collaboration With Healthcare and Sports Institutions

### • Strategic Partnerships with Healthcare Institutions in Bahrain

To secure students' practicum experiences, the University of Bahrain (UoB) has established written agreements, or Memorandum of Understanding (MoUs), with various healthcare agencies, including the Ministry of Health, Primary Health Care Centers, and Governmental Hospitals. These agreements outline the roles and responsibilities of each party, allowing nursing students to utilize clinical settings for training and research under faculty supervision. The MoU mandates that clinical coordinators communicate the list of students and their placements, ensuring compliance with the healthcare institutions' rules and policies. It emphasizes students' adherence to professional conduct, ethics, and any additional training requirements, such as vaccinations. Additionally, the MoU clarifies the process for securing preceptors or clinical instructors from the healthcare settings, highlighting their essential role in providing clinical learning experiences in the BSN program. This initiative supports Sustainable Development Goal 3 by enhancing the quality of healthcare education and ensuring that future professionals are well-prepared to meet community health needs.

### • Memorandum of Understanding with the General Sports Authority

MoU between the University of Bahrain and the General Sports Authority established a strategic partnership aimed at enhancing cooperation in sports education, training, and youth development in Bahrain. This collaboration aligned with both institutions' vision to advance the national sports sector through education, innovation, and community engagement.

Under the MoU, the University of Bahrain provided academic expertise and training to support the development of sports programs, while the General Sports Authority created an enabling environment and implemented national sports policies to strengthen Bahrain's sports ecosystem. The agreement emphasized joint efforts to develop the competencies of Bahraini youth, foster research in sports sciences, and prepare qualified professionals for the evolving sports industry. Additionally, it highlighted the importance of collaboration between academia and government in achieving Bahrain's broader sports advancement goals. Overall, this MoU served as a framework for long-term cooperation, establishing a foundation for shared initiatives and capacity-building opportunities that contributed to the sustainable growth and excellence of the sports sector in the Kingdom of Bahrain.

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- **Collaboration / partnership with Bahrain Pharmacists Society**

The pharmacy program at CHSS collaborated with the Bahrain Pharmacists Society, emphasizing the importance of partnerships in enhancing public health initiatives and highlighting the critical role of pharmacists in promoting safe medication practices. This joint initiative engaged pharmacy students in the community on various health topics, including the rational use of antibiotics, medication safety, chronic disease management, and healthy lifestyle practices.

Faculty members, graduates, and students actively participated by setting up educational booths, distributing informational materials, and conducting interactive sessions. They addressed common misconceptions, provided practical guidance on medication use, and encouraged informed health decisions. The collaboration offered professional mentorship to students, strengthening the credibility of the awareness activities and creating a meaningful connection between the pharmacy profession and the community. The initiative not only educated the public but also enhanced students' communication, leadership, and counseling skills. It reinforced the importance of pharmacists as accessible healthcare providers and advocates for safe medication use while promoting social responsibility and community engagement.

- **Occupational Health, Safety, and Environment (HSE): AI Innovation in Workplace Safety**

Students from the Department of Nursing at the CHSS demonstrated exceptional innovation by winning the Best University-Level Presentation Award during the Health, Safety, and Environment (HSE) Week organized by Bapco Gas Company at its Sakhir headquarters from November 24 to 28, 2024. The students presented an innovative proposal for an electronic application titled "SANAD", designed to promote health and safety among workers across various occupational settings through the integration of artificial intelligence (AI) technologies. The application aims to monitor workers' physical well-being, detect potential health risks, and provide early alerts and safety recommendations, contributing to safer and healthier workplaces. This initiative reflects the University's commitment to encouraging students to apply scientific knowledge and technological innovation to real-world challenges. The students' project showcased the integration of nursing expertise with digital health innovation, highlighting the vital role of nurses in advancing occupational health and safety through technology. The recognition by Bapco Gas Company underscores the University of Bahrain's dedication to fostering creativity, interdisciplinary learning, and community collaboration. It also emphasizes the importance of empowering future nurses to contribute to sustainable development goals related to health, safety, and technological advancement in the workforce.



*Occupational Health, Safety, and Environment (HSE): AI Innovation in Workplace Safety*

### • Multiple Sclerosis Awareness Event

The Multiple Sclerosis (MS) Awareness Event reflects the University of Bahrain's enduring commitment to promoting chronic disease awareness and community health education. Organized in collaboration with the Department of Neurosciences, the event features a comprehensive program that includes scientific lectures on the causes, symptoms, and treatment of MS, interactive activities to engage participants, and personal testimonials from students living with the condition.

This initiative enhances students' understanding of neurological disorders and highlights the importance of early diagnosis, adherence to treatment, and psychosocial support in managing MS. By combining education with lived experiences, the event fosters empathy, inclusion, and compassion, creating a

supportive campus environment for individuals affected by chronic illnesses. In addition, informational booths and resource stations provide attendees with evidence-based materials, contact information for local support networks, and guidance on maintaining neurological health.

Through this initiative, the University of Bahrain not only raises awareness about multiple sclerosis but also reinforces its commitment to Sustainable Development Goal 3 (SDG 3): Good Health and Well-being, particularly in advancing Target 3.4, which focuses on reducing premature mortality from non-communicable diseases through prevention, treatment, and health promotion.



***Multiple Sclerosis Awareness Event***

### • Participation in the Advancing Preventive Health and Genomic Awareness

The College of Health and Sport Sciences at the University of Bahrain actively participates in the national Genome program, a national initiative that promotes public awareness of genomics, preventive health, and lifestyle-related diseases. The program aims to help individuals understand the interaction between genetic and environmental factors influencing their well-being, while encouraging the adoption of healthier lifestyles to reduce the risk of chronic illnesses.

As part of the University's contribution to this transformative initiative, Medical Laboratory Sciences (MLS) students played a pivotal role in supporting the Ministry of Health during the COVID-19 pandemic. Their engagement coincided with the early launch of the Bahrain Genome Program in 2019, where MLS students made significant contributions by conducting educational sessions across various community institutions and assisting in blood sample collection for genomic testing.

In recognition of their exceptional dedication and valuable service, several of these students were subsequently offered full-time positions within the Ministry of Health's Public Health Department. From there, they continued to play an active role in advancing the Bahrain Genome Program through ongoing collaboration with national institutions, reinforcing the University's mission to build a sustainable, knowledge-driven health workforce.

This participation underscores the University of Bahrain's commitment to Sustainable Development Goal 3 (SDG 3) by enhancing public understanding of genomics, promoting preventive healthcare, and

strengthening national capacity in health innovation and research.

### 9.3 Collaboration with the American Heart Association

#### • International Training Center for American Heart Association for Life Support Courses: College of Health and Sport Sciences

The center is vital for advancing health education through life support courses. The center is designated as an American Heart Association, it offers evidence-based courses like Basic Life Support (BLS) that equip healthcare professionals and the community with essential emergency response skills. This training contributes to improved health outcomes, reduces preventable deaths, and strengthens health systems. By empowering individuals with life-saving techniques, the center plays a crucial role in enhancing community resilience and preparedness for health emergencies.

<https://chss.uob.edu.bh/short-courses/short-courses-in-international-training-center/>



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## 10. Sustainability in Healthcare Education at the University of Bahrain

The University of Bahrain is at the national forefront of advancing sustainability in healthcare education, integrating innovation and technology to strengthen the quality and resilience of health systems. Central to this commitment is the establishment of the State-of-the-art Clinical Simulation Laboratory for Nursing skills and the Diagnostic Radiologic Technology Laboratory, both designed to enhance experiential learning and bridge the gap between theory and practice.

The Clinical Simulation Laboratory serves as an innovation hub, providing a safe, immersive, and student-centered environment that replicates real-world healthcare scenarios. Through high-fidelity simulations, nursing students develop critical competencies in clinical reasoning, decision-making, communication, and patient-centered care, ensuring their readiness to deliver safe and effective healthcare services.

Likewise, the Diagnostic Radiologic Technology Laboratory offers hands-on training using state-of-the-art imaging and diagnostic equipment. This facility enables students to master essential technical skills in patient positioning, radiation safety, exposure techniques, and quality assurance components of

modern diagnostic practice. Together, these initiatives exemplify the University's dedication to sustainable capacity-building in the health workforce, fostering professionals who are technologically adept, ethically grounded, and responsive to Bahrain's national health priorities.

By integrating advanced simulation-based education and digital technologies, the University of Bahrain ensures a future-ready healthcare workforce capable of addressing emerging health challenges. These efforts contribute directly to Sustainable Development Goal 3 (SDG 3): Good Health and Well-being, particularly Indicator 3.8.1, which emphasizes achieving universal health coverage and access to quality essential health services.

## 11. Research and Innovation

### • Fifth International Nursing Forum “Our nurses... Our Future.. The Economic Power of Healthcare”,

The Department of Nursing at the College of Health and Sports Sciences, in cooperation with the World Health Organization for the Development of the Nursing Profession in the Middle East, organized the Fifth International Nursing Forum under the slogan “Our Nurses... Our Future... The Economic Power of Healthcare” on Monday, May 12, 2024, in celebration of International Nurses Day. The forum brought together a diverse group of local speakers and international experts in nursing.

Discussions focused on critical issues such as investment in the nursing workforce and the impact of nurse shortages on quality of life and the global health system. Participants explored local, regional, and global efforts to attract a diverse workforce to nursing, strategies for retention, and opportunities for advancing nursing education and practice. Attended by nurse leaders from Bahrain and guest

speakers from the United Kingdom, Oman, and Saudi Arabia, the forum included scientific presentations and student poster sessions that encouraged vibrant exchanges of ideas.

A key highlight was a discussion among keynote speakers on the future of nursing as a significant economic force in healthcare. Additionally, postgraduate students engaged in a lively debate on the advantages and challenges of integrating artificial intelligence into nursing and midwifery education, practice, and research. The forum concluded by reinforcing the critical role of a robust nursing profession in building resilient health systems, promoting preventative care, and ensuring equitable access to quality services for all, thereby securing a healthier future for global populations.



*Department of Nursing at the College of Health and Sports Sciences organizes the 5t International Nursing Forum*

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- **Advancing Healthcare Research at the University of Bahrain**

The University of Bahrain is dedicated to enhancing health and well-being, aligning its efforts with Sustainable Development Goal 3—Good Health and Well-Being. This commitment is evident in its dynamic research initiatives addressing critical healthcare challenges.

A primary focus is on maternal and child health. Faculty and students conduct research to identify effective interventions aimed at reducing maternal and neonatal mortality rates, empowering women, and improving family health outcomes. The university also tackles the rising prevalence of non-communicable diseases, such as diabetes and cardiovascular issues. Research teams explore innovative prevention and management strategies, promoting healthy lifestyles through community health initiatives that benefit the wider population.

In the realm of digital health, the university investigates telemedicine and mobile health applications to enhance care access, particularly for underserved communities. These technological solutions aim to create a more responsive healthcare system.

Mental health is another vital area of focus. Research initiatives seek to understand the challenges individuals face and develop programs that promote mental well-being, combat stigma, and foster open discussions.

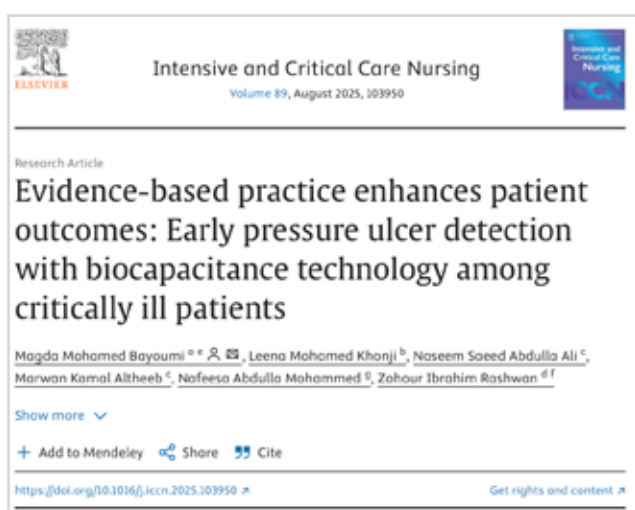
Through these diverse research efforts, the University of Bahrain is committed to building a healthier, more resilient community, ensuring that every individual has the opportunity to lead a healthy life.

- **Advancing Nanotechnology Research for Breast Cancer Treatment**

The University of Bahrain is at the forefront of innovative breast cancer treatments through collaborative research in nanotechnology. As the most common cancer among women worldwide, addressing breast cancer effectively is crucial. The research team focuses on developing nanoparticles and nanomicelles that enhance the efficacy of anti-cancer agents while reducing toxicity. Collaboration plays a vital role, with partnerships established both locally and internationally to access advanced tools and methodologies. The research has yielded promising results, including successful designs that significantly reduce tumor volume in animal trials. Looking ahead, the team aims to improve breast cancer care by engaging with researchers, healthcare providers, and regulatory bodies to pave the way for clinical trials. Their vision is to build a strong local team in Bahrain to further advance this essential research, ultimately contributing to better health outcomes for breast cancer patients globally.

### • Evidence-based Practice Enhances Patient Outcomes: Early Pressure Ulcer Detection with Biocapacitance Technology Among Critically Ill Patients.

This research article explores the innovative use of biocapacitance technology, specifically the Subepidermal Moisture (SEM) scanner, for early detection of pressure ulcers (PUs) among critically ill patients. Traditional assessment methods often fail to identify tissue damage until visible symptoms appear, leading to preventable complications. This study compares the effectiveness of the SEM scanner with the Modified Cubbin and Jackson (MCJ) Scale in predicting PU development. Conducted in the ICU of Government Hospitals in Bahrain, the study involved immobile patients. The findings demonstrate that the SEM scanner significantly outperforms the MCJ Scale in predicting PU risk. Notably, the SEM scanner identifies PU risk earlier than the MCJ Scale. The results highlight the SEM scanner's potential as a reliable, non-invasive tool for enhancing patient outcomes in critical care settings.



<https://doi.org/10.1016/j.iccn.2025.103950>

### • Empowerment-Based Interventions for Sickle Cell Disease

This study investigates the effect of empowerment-based interventions on self-efficacy and self-care capacity among adults with sickle cell disease (SCD) through a randomized controlled trial involving patients in Bahrain. Participants were divided into an intervention group, which received structured small-group discussions and individualized consultations based on the 5A model (assess, advise, agree, assist, and arrange), and a control group that received routine health education. The results indicate significant improvements in self-efficacy and self-care capacity for the intervention group compared to the control group. The intervention effectively enhanced participants' abilities to manage their condition and adopt self-care strategies. These findings underscore the importance of empowerment-based interventions in chronic illness management, highlighting the need for such programs to improve patient outcomes and support self-management.



<https://doi.org/10.1016/j.ijnss.2024.12.011>

### • Adaptation of a specialized cardiac centre to patient management and health care services during a crisis

The study published in June 2024 explores how a specialized cardiac center in Bahrain adapted its patient management and healthcare services during the COVID-19 pandemic. Utilizing a cross-sectional design, researchers surveyed nurses to assess the changes in service delivery and patient care. Findings indicate a significant reduction in hospitalized patients and cardiac procedures due to the pandemic. To mitigate challenges, telehealth solutions such as phone consultations and smartphone applications were implemented, allowing for continued patient monitoring and communication. While essential services like emergency care remained operational, outpatient and diagnostic services faced considerable disruptions. The study highlights the need for developing protocols to enhance cardiac care during

future health crises and emphasizes the importance of adapting healthcare practices to ensure patient safety and service continuity.



<https://doi.org/10.1016/j.sciaf.2024.e02163>

# **4 QUALITY EDUCATION**





## QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

The University of Bahrain (UOB) is deeply committed to providing inclusive and high-quality education that empowers students and contributes to the Kingdom's sustainable development goals. Through academic partnerships, innovative programs, and community-focused learning, UOB ensures that education remains a cornerstone of Bahrain's growth and progress.

### 1. Lifelong Learning

#### 1.1 Open University Facilities

The University of Bahrain provides free library and laboratory access to visitors and community members upon obtaining institutional authorization, thereby supporting open knowledge-sharing and contributing to SDG 4 (Quality Education). Through this initiative, the University offers access to a wide range of academic resources and services, including:

- Books, Journals, and Research Materials
- Library Electronic Resources

- Open Access Databases
- "Find Your: Books, Journals, and Resources" search tools

These services ensure that learners, researchers, and innovators from the wider community can benefit from the University's academic infrastructure and contribute to advancing knowledge and lifelong learning in Bahrain.



## 1.2 Entrepreneurship

The Learning Corner at the [Business Incubator Centre](#) serves as a vital public resource for lifelong learning, directly contributing to national goals of human capital development and economic diversification. Through its free online platform, the Centre delivers high-quality non-formal education in entrepreneurship, innovation, and vocational skills.

The training portfolio is strategically designed to foster self-employment and entrepreneurship. It provides

comprehensive support across key areas, including foundational entrepreneurship (business models, lean startup), innovation and ideation, technical and digital skills (e.g., Canva), and sector-specific training aligned with emerging local industries. This initiative advances the national economic vision by equipping participants to launch and grow sustainable ventures.



2. Public Events and Workshops

The University of Bahrain actively promotes lifelong learning and open knowledge exchange through a wide range of public workshops, lectures, and academic events held throughout the 2023/2024 academic year. Organized in collaboration with national and international partners, these activities reflect the University’s strong commitment to Sustainable Development Goal 4 (Quality Education), particularly Indicator 4.3.2, which emphasizes equitable access to quality education and learning opportunities for all.

Over 140 public events were conducted across disciplines such as science, engineering, business, education, health, law, and the arts. Open to students, faculty, professionals, and community members, these initiatives fostered inclusive participation and community engagement. Workshop topics included academic writing, research ethics, artificial intelligence, entrepreneurship, sustainable development, environmental innovation, and cultural preservation.

The events featured contributions from local experts, international scholars, and industry professionals, ensuring a dynamic exchange of knowledge and practical insights aligned with national and global priorities. Notable highlights included the 6th Sustainability and Resilience Conference, the International Conference on Sustaining Heritage (ICSH 2024), the Future Leaders Workshop, and several professional development seminars aimed at enhancing students’ employability.

Through these ongoing initiatives, the University of Bahrain continues to strengthen its role as a national hub for lifelong learning and professional development, empowering individuals to contribute to Bahrain’s knowledge economy and sustainable future.

The table below lists the public events and activities implemented in Academic Year 2023/2024

#	Event Title	Accessibility	Date
1	6th Sustainability and Resilience Conference	Free	December 2024
2	Arabic Language Day Celebration	Free	December 2024
3	Bahraini Women’s Role in Fine Arts in the Kingdom	Free	December 2024
4	Quantum Computing for Sustainable Development	Free	December 2024
5	Introduction to “Riyadat” Portfolio Program	Free	December 2024
6	Celebration of International Day of Persons with Disabilities	Free	December 2024
7	BTC Celebrates World Arabic Language Day	Free	December 2024

#	Event Title	Accessibility	Date
8	Seminar On Establishing Bahraini Identity and Citizenship in Curricula	Free	November 2024
9	Islamic Architecture and Arts Forum	Free	November 2024
10	Induction Lecture on Safety in Emergency Evacuations	Free	November 2024
11	Confucius Institute’s Open Day Event	Free	November 2024
12	Conference “Education based on the Foundations of Prophetic Teachings”	Free	November 2024
13	Travelling Exhibition “Bahrain Heritage Tour”	Free	November 2024
14	Song Performance	Free	October 2024
15	Micro Water Desalination Forum: Modern Trends and Practices	Free	October 2024
16	The NSSA Space Apps Challenge 2024	Free	October 2024
17	The 6th edition of “Micro Shabab” Forum	Free	October 2024
18	Psychological Awareness Day	Free	October 2024
19	Future Leaders Workshop	Free	October 2024
20	Celebrating National Tree Week	Free	October 2024
21	2nd International Conference on Sustaining Heritage (ICSH 2024)	Free	September 2024
22	Huawei ICT Competition	Free	September 2024
23	“She Leads” Program	Free	August 2024
24	A professional workshop for practical training students at the College of Business Administration	Free	June 2024
25	A lecture titled “Global Perspectives on Supply Chain Related to Energy Transition”	Free	June 2024

#	Event Title	Accessibility	Date
26	A painting initiative to plant the “Golden Shower Tree”	Free	June 2024
27	A professional workshop the practical training program students from the Colleges of Engineering and Science	Free	June 2024
28	Professional workshop for students of the practical training from the Colleges of Law and Information Technology	Free	June 2024
29	Exhibition of undergraduate projects in art and design titled “ TASAMI 6”	Free	June 2024
30	12th Graduation Ceremony	Free	May 2024
31	Music Concert “Melody and Joy”	Free	May 2024
32	Workshop “Fact-Checking”	Free	May 2024
33	Cultural Carnival (College of Arts & Language Centers)	Free	May 2024
34	Seminar “Translation, Cultural Sustainability, and Promoting Cultural Diversity”	Free	May 2024
35	Workshop “Data Science: From Data to Action – The Power of Data Science in E-Government”	Free	May 2024
36	Workshop “Empowering Young Entrepreneurs”	Free	May 2024
37	Symposium “Documentary Filmmaking and Cultural Innovation”	Free	May 2024
38	Seminar “A Step Towards Graduation... Are You Ready?”	Free	May 2024
39	Fifth International Nursing Forum “Our Nurses... Our Future... The Economic Power of Healthcare”	Free	May 2024
40	University of Bahrain Postgraduate Studies Forum	Free	May 2024
41	Interactive Seminar	Free	May 2024

#	Event Title	Accessibility	Date
42	Symposium “The Biography of Bahraini Pearls: Cultural History and Sustainability Pathways”	Free	May 2024
43	Panel Discussion	Free	May 2024
44	Second UOB Arbitration Day	Free	April 2024
45	Lecture titled “Stay Reassured”	Free	April 2024
46	A Specialized Workshop in the Field of Unconventional Gas Exploration	Free	April 2024
47	Exhibition “Food Kiosk Design”	Free	April 2024
48	“Culture and Environmental Design” Exhibition	Free	April 2024
49	Exhibition On Celebrating the International Chinese Language Day	Free	April 2024
50	6th edition of the Innovation and Entrepreneurship Forum	Free	April 2024
51	Exhibition “Woven Nostalgia”	Free	April 2024
52	Entrepreneurship and Innovation Program	Free	April 2024
53	“IRCICA Generation Exhibition” for Arabic Calligraphy	Free	April 2024
54	Interactive lecture on “Internal Control from an Auditor’s Perspective”	Free	March 2024
55	Workshop under the theme “Applications of Electrochemical Technologies for Sustainable Development”	Free	March 2024
56	“Mathematics Games”	Free	March 2024
57	Seminar titled: “Preparing Students for the Labor Market”	Free	March 2024
58	Lecture titled: “Bahraini Success Stories	Free	March 2024

#	Event Title	Accessibility	Date
59	A workshop entitled “An Overview of the Insurance Industry and Insights into the Requirements of the Actuarial Profession”	Free	December 2023
60	A lecture entitled “Raising awareness of Enterprise Resource Planning (ERP) systems	Free	December 2023
61	“Freejna Games 2”.	Free	December 2023
62	A presentation entitled “Islamic Finance: Current Issues, Global Practices and Future Trends”	Free	December 2023
63	seminar titled ” Budget Practice: Empirical Insights	Free	December 2023
64	lecture titled “Artificial Intelligence in the Development of Applied Studies”	Free	December 2023
65	celebrated the Kingdom of Bahrain’s National Day	Free	December 2023
66	Social Marketing Exhibition	Free	December 2023
67	Celebration of the International Day of People with Determination	Free	December 2023
68	Mastering Stress Management: Personal and Professional Well-Being Strategies	Free	December 2023
69	Fourth edition of the virtual global conference “Data Analytics for Economy and Industry	Free	December 2023
70	“Gender and Economic Policy Management Initiative (GEPMI) launched by the United Nations Development Program (UNDP)	Free	November 2023
71	The twentieth edition of the Career Fair	Free	November 2023
72	A lecture entitled “Green Banking”	Free	November 2023
73	Intensive training workshops for the university’s academic professional development programs	Free	November 2023

### 3. Vocational and Lifelong Learning

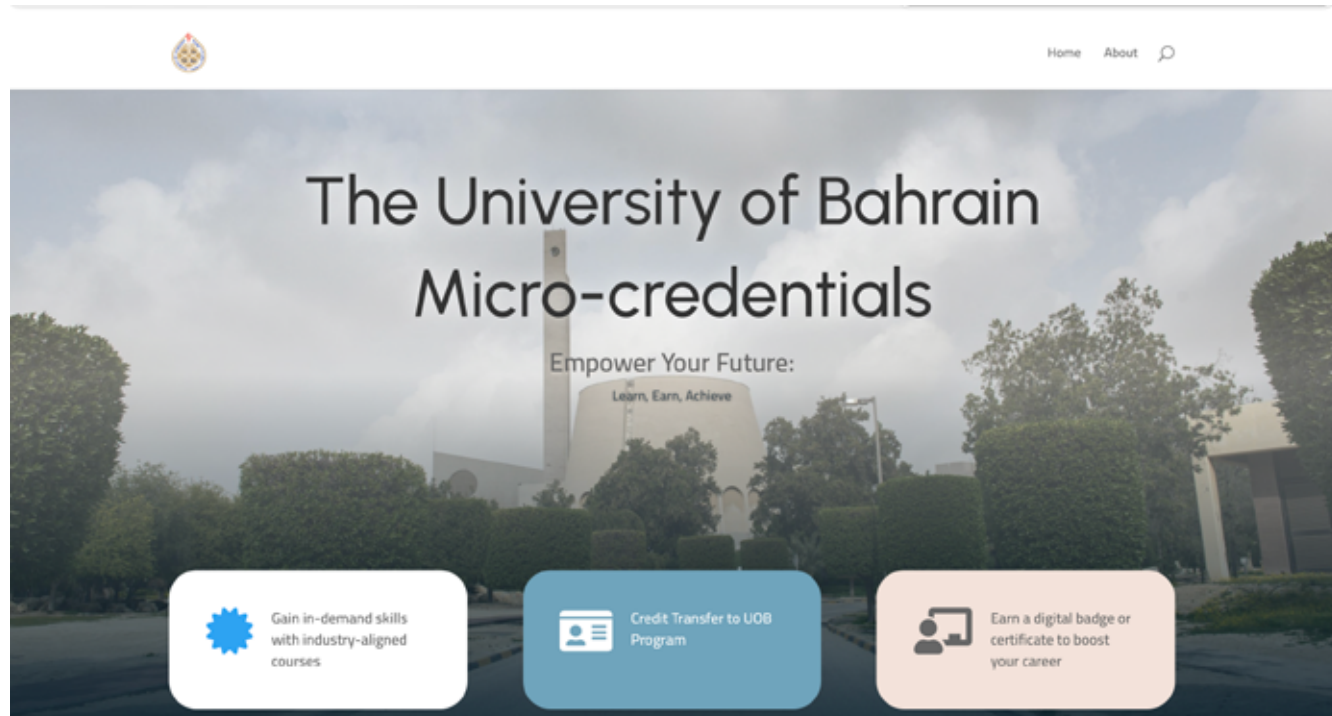
#### 3.1 Micro-Credentials Initiative

In 2024, the University launched a comprehensive Micro-Credentials Policy developed by the eLearning Centre to advance participation in technical and vocational education, directly supporting Indicator 4.3.3. This initiative promotes flexible, skills-based learning pathways that respond to evolving labour market and community needs.

The policy establishes a structured framework for designing, delivering, and accrediting both credit-bearing and non-credit-bearing micro-credentials. These programs serve students, professionals, and community members seeking to upskill or

reskill, thereby enhancing employability and career progression.

In addition, this initiative was created in collaboration with industry partners and academic departments; the micro-credentials focus on practical competencies aligned with national workforce priorities and global standards. Learners can stack individual credentials toward higher qualifications, strengthening lifelong access to vocational and professional education.



### 3.2 University-Led Vocational and Professional Development Programs

Through its Community Service and Continuing Education Centre, the university delivers a robust and diverse portfolio of vocational training programs. This initiative directly fulfils its mission in lifelong learning and community service by bridging the gap between academia and the workforce. The programs provide essential upskilling and professional development, effectively supporting individual career growth while simultaneously addressing the broader economic and social needs of the community.

The table below presents the Vocational and Professional Development Programs conducted by the University of Bahrain in the academic year 2023/2024.

#### *List of Vocational and Professional Development Programs*

#	Course Name	Start Date	End Date
1	Principles of Distillation for GPIC	04-Sep-24	05-Sep-24
2	Process Measurement and Control for Non-Instrument Engineers	01-Jul-24	04-Jul-24
3	Chemical Reactor Analysis	08-May-24	09-May-24
4	The Educational Professional Development Program for Teachers in Private Schools (Fourth Cohort / in Arabic)	29-Apr-24	05-Jun-24
5	The Educational Professional Development Program for Teachers in Private Schools (Third Cohort / in English)	29-Apr-24	05-Jun-24
6	The Educational Professional Development Program for Teachers in Private Schools (Second Cohort / in English)	29-Apr-24	05-Jun-24
7	The Educational Professional Development Program for Teachers in Private Schools (First Cohort / in English)	29-Apr-24	05-Jun-24
8	Advanced Excel	24-Apr-24	24-Apr-24
9	The Training Program for Childcare Center Educators (Batch 28)	21-Apr-24	29-May-24
10	Basic Life Support	18-Mar-24	24-Jun-24

#	Course Name	Start Date	End Date
11	Optimization for Practitioners	20-Feb-24	22-Feb-24
12	Qarar Program	11-Feb-24	05-Mar-24
13	Chemical Engineering for Non-Chemical Engineers	05-Feb-24	08-Feb-24
14	The Educational Professional Development Program for Teachers in Private Schools (Sixth Cohort / in Arabic)	04-Feb-24	12-Mar-24
15	The Educational Professional Development Program for Teachers in Private Schools (Fifth Cohort / in Arabic)	04-Feb-24	12-Mar-24
16	The Educational Professional Development Program for Teachers in Private Schools (Fourth Cohort / in English)	04-Feb-24	12-Mar-24
17	The Educational Professional Development Program for Teachers in Private Schools (Third Cohort / in English)	04-Feb-24	12-Mar-24
18	The Educational Professional Development Program for Teachers in Private Schools (Second Cohort / in English)	04-Feb-24	12-Mar-24
19	The Educational Professional Development Program for Teachers in Private Schools (First Cohort / in English)	04-Feb-24	12-Mar-24
20	The Training Program for Childcare Center Educators (Batch 27)	04-Feb-24	06-Mar-24
21	Statistical Analysis SPSS (Level 1)	26-Dec-23	28-Dec-23
22	Excellent Service Delivery (Group 2)	25-Dec-23	31-Dec-23
23	Excellent Service Delivery (Group 1)	19-Dec-23	20-Dec-23
24	Project Management	12-Dec-23	14-Dec-23
25	The Training Program for Childcare Center Educators (Batch 26)	19-Nov-23	25-Dec-23
26	Environmental Engineering for Non-Environmental Engineers	07-Nov-23	09-Nov-23

#	Course Name	Start Date	End Date
27	The Educational Professional Development Program for Teachers in Private Schools (Fifth Cohort / in Arabic)	06-Nov-23	12-Dec-23
28	The Educational Professional Development Program for Teachers in Private Schools (Fourth Cohort / in Arabic)	06-Nov-23	12-Dec-23
29	The Educational Professional Development Program for Teachers in Private Schools (Third Cohort / in English)	06-Nov-23	12-Dec-23
30	The Educational Professional Development Program for Teachers in Private Schools (Second Cohort / in English)	06-Nov-23	12-Dec-23
31	The Educational Professional Development Program for Teachers in Private Schools (First Cohort / in English)	06-Nov-23	12-Dec-23
32	The Training Program for Childcare Center Educators (Batch 25)	15-Oct-23	15-Nov-23
33	Tuning of PID Controllers for Technicians and Engineers	10-Oct-23	12-Oct-23
34	The Educational Professional Development Program for Teachers in Private Schools (Fifth Batch / in Arabic)	01-Oct-23	09-Nov-23
35	The Educational Professional Development Program for Teachers in Private Schools (Fourth Batch / in Arabic)	01-Oct-23	09-Nov-23
36	The Educational Professional Development Program for Teachers in Private Schools (Third Batch / in English)	01-Oct-23	09-Nov-23
37	The Educational Professional Development Program for Teachers in Private Schools (Second Batch / in English)	01-Oct-23	09-Nov-23
38	The Educational Professional Development Program for Teachers in Private Schools (First Batch / in English)	01-Oct-23	09-Nov-23
39	Rating, Operation, Troubleshooting and Maintenance of Heat Exchangers Workshop	24-Sep-23	25-Sep-23
40	Training Needs Analysis and Training Program Design	12-Sep-23	14-Sep-23
41	Chemical Engineering for Non-Chemical Engineers	11-Sep-23	14-Sep-23

## 4. Educational Outreach Activities Beyond Campus

### 4.1 Students' Digital Community Engagement Portal

For many years, University of Bahrain (UoB) students have been deeply involved in educational and community outreach activities beyond the campus, supporting health campaigns, school programs, and social initiatives that promote learning, wellness, and community development across the Kingdom.

Building on this strong legacy, the University launched the Student Digital Community Engagement Portal, the first initiative of its kind in the world, to modernise, systematise, and recognise student engagement through a secure digital platform.

The portal connects students, alumni, and external partners, including NGOs, schools, ministries, hospitals, and private enterprises, within an integrated digital ecosystem. Through it, partners post outreach and learning opportunities, students apply and participate, and each completed activity is digitally verified by both the partner and the University. Participants receive digital certificates and achievement badges, stored in their individual UoB Engagement Portfolio, evidencing their service, leadership, and applied learning. This innovation transforms student service beyond campus into a structured lifelong learning and educational outreach model, enabling verifiable measurement of participation, skills gained, and social outcomes. It supports THE Impact Ranking SDG 4.3.4- Education outreach activities beyond campus, by providing inclusive, flexible, and skill-based learning experiences accessible to all students and community members.

Since its introduction, the portal has engaged hundreds of students and dozens of partner

organizations, producing an expanding portfolio of educational outreach projects that enhance employability, strengthen citizenship, and amplify the University's contribution to Bahrain's Vision 2030 and the UN SDGs.

### 4.2 Environmental Engineering for Non-Environmental Engineers

A three-day capacity-building course was developed with Gulf Petrochemical Industries Company (GPIC) to educate professionals without environmental backgrounds on pollution control, waste management, and sustainable development.

An educational outreach program providing lifelong learning to professionals' external to the University exemplifies SDG 4's lifelong and continuing education for industry practitioners.

### 4.3 Legal Insights Series and Public Seminars

The College of Law at the University of Bahrain delivers the Legal Insights Series, an ongoing community education program featuring faculty lectures, live webinars, and in-person sessions addressing relevant legal and civic topics. Sessions focus on human rights, women's empowerment, business and labour law, environmental legislation, and public interest advocacy.

The events are publicly accessible, frequently co-organised with national ministries, NGOs, professional associations, and media outlets to expand reach. These sessions engage audiences from the public, students from other institutions, and practitioners seeking continuing education in legal awareness.

Workshops and panel discussions encourage participants to ask questions, analyse real-life case studies, and discuss Bahrain's legal frameworks in an open setting that promotes transparency and civic understanding. This initiative provides education outreach beyond campus that enhances public legal literacy and civic responsibility. It represents lifelong, inclusive learning opportunities supporting justice and equality in society.

#### **4.4 Gharsa Educational Game for Environmental Awareness**

The "Gharsa" initiative is an innovative, interactive card based educational game designed by UOB faculty and students to teach sustainability, agricultural awareness, and resource management to young people aged 12-30 across Bahrain. Players adopt the role of farmers managing limited resources like water and fertilizer while facing environmental challenges such as droughts and market fluctuations. Workshops and public events are held in schools, universities, and youth centres where participants learn strategic planning, creative problem solving, and sustainability principles through play. "Gharsa" serves as an open, public educational outreach tool that transforms sustainability education into a tangible, experiential learning process for community youth. It promotes lifelong awareness and environmental stewardship beyond the University.

#### **4.5 BTC Sustainability Day and Car-Free Lifestyle Campaign**

Organised annually by the Bahrain Teachers College (BTC), these public events raise awareness of sustainability and environmentally responsible behaviour. Students, faculty, and members of the local community participate in interactive booths, workshops, games, poster displays, and competitions that explore sustainable living at home, at work, and in social life.

The Car Free Lifestyle Campaign further engages students and the public through interactive social media activities on Padlet, inviting participants to share how they reduce car use, by walking, cycling, or using public transport. Certificates are issued to students and participants emphasising behavioural change and environmental responsibility. This event is open to the university and broader community, functioning as a public educational outreach activity. It teaches practical aspects of sustainable lifestyle choices, reduces environmental impact, and aligns with lifelong learning on climate-conscious living.

## 4.6 UOB Supports Schools in Bahrain

Bahrain Teachers College works closely with the Ministry of Education to support the improvement of teaching and leadership within all schools in Bahrain. For government schools, BTC provides Continuing Professional Development courses as well as leadership training through its Teacher Leadership Programme and School Leadership Programme. There is specialised professional development for teachers working with children with special educational needs available through the BTC's Special Educational Programme. In addition to these programme offerings, BTC develops bespoke training to government schools. The BTC Leadership Centre offers bespoke training to school leaders at the behest of the Ministry of Education – for example, in 2024, the Ministry identified a need for principals of technical and vocational schools to receive additional training, and the Leadership Centre conducted a training needs analysis and developed an intensive workshop series. Additionally, bespoke workshops for individual schools are regularly delivered.

The BTC further supports the continued improvement of education in government schools through its Model Teaching Schools initiative. This initiative, launched jointly with the Ministry of Education in 2024, uses BTC's researchers to identify best teaching practices in outstanding schools, and to disseminate these findings across the sector.

For the private sector, BTC supports quality schooling through the Private Schools Programme, which is delivered in both Arabic and English to cohorts of private school teachers which are nominated by the Ministry of Education as requiring training. Bespoke workshops are also delivered to individual private schools on request. BTC faculty are also encouraged to serve on private school boards, to provide expert input into the continual improvement of their education.



#### 4.7 UOB experts advise on quality education reviews

Experts from the Bahrain Teachers College have supported the Education and Training Quality Authority (BQA), the authority responsible for reviewing all educational institutions in Bahrain. Our experts have advised the BQA on revising its schools review framework, as well as on the introduction of review frameworks for special education institutions and the kindergarten sector. BTC experts have

additional provided training to BQA reviewers as they start reviewing special education institutions. The BQA also provided a briefing to BTC's partners from Boston University in the US, to ensure that the Masters programmes they offer to Bahraini teachers are aligned with the BQA's frameworks.



#### 4.8 Sadaf Initiative: From the Sea to Creative Hands

On October 29, 2023, the Sadaf Initiative integrated environmental education with social responsibility through interactive workshops that transformed recycled seashells into jewelry, décor, and artistic crafts. Conducted in partnership with orphan-support NGOs, youth groups, and environmental organizations, these hands-on sessions introduced participants to marine conservation, recycling methods, sustainable art, and empathy through collaborative creativity.

Participants enhanced both their artistic and environmental skills, while proceeds from the sale of the recycled creations supported community programs for orphaned children—bringing together education, social inclusion, and sustainable practice in one initiative.

#### 4.9 Department of Architecture, Interior Design and Landscape Annual Exhibition

Each year, the Department of Architecture and Interior Design hosts a series of open cultural and educational programs in collaboration with the Bahrain Authority for Culture and Antiquities (BACA) and other stakeholders. These events feature public lectures, exhibitions, and design showcases demonstrating student and faculty work in art, architecture, cultural preservation, and urban sustainability.

#### 4.10 International Day for Islamic Art Event and Muharraq Night Heritage Framework

The International Day for Islamic Art highlights Islamic aesthetics through contemporary design perspectives, while Muharraq Night introduces the public to a new heritage evaluation framework that strengthens awareness of architectural conservation. The Annual Exhibition enables direct engagement

between students, professionals, and visitors, fostering knowledge exchange and enhancing public appreciation of sustainable design. These activities form part of the University of Bahrain's Department of Architecture, Interior Design, and Landscape's broader commitment to delivering inclusive public education outreach beyond campus on a regular annual basis, ensuring that knowledge, culture, and lifelong learning opportunities reach all segments of the community.

#### 4.11 Environmental and Civic Engagement Public Workshops

The University organized multiple public workshops and civic engagement events during the 2023/2024 academic year, as follows:

1. World Pharmacy Day Campaign: Engaged over 200 participants in awareness sessions on safe medication use, antibiotic resistance, and chronic disease prevention.
2. Stress Management and Panic Attack Workshops: Delivered by the College of Health and Sport Sciences to enhance mental health literacy among students and the public.
3. Public Speaking, Drawing, and Sustainability Competitions: Promoted creativity, environmental awareness, and effective communication for social impact.

These initiatives highlight the University's commitment to lifelong learning, health promotion, and civic engagement, reinforcing its role as a national hub for community-based education and public outreach.

#### 4.12 Arab IoT & AI Challenge – Regional Capacity Building Program

The Arab IoT & AI Challenge, hosted by the University of Bahrain, is a regional educational initiative engaging high school and university students, startups, and young innovators from 1 Arab countries. The program provides training workshops, mentorship, and technical support in Internet of Things (IoT) and Artificial Intelligence (AI).

Participants receive expert guidance on transforming ideas into projects that solve real world sustainability and digital innovation challenges, culminating

in regional finals held during GITEX Technology Week in Dubai. This initiative delivers cross border educational outreach beyond campus, empowering thousands of youths with technological knowledge, entrepreneurship skills, and sustainable innovation capacity, an outstanding example of open, skill oriented lifelong learning.



### 4.13 Promoting Social Awareness through Academic and Community Engagement

Dr. Ahlam Rashid Al-Qasimi, Head of the Department of Social Sciences at the University, has demonstrated the influential role of the social sciences in addressing contemporary national and community issues. Through a series of lectures, workshops, and seminars, she has contributed to advancing public understanding of topics such as education, women's empowerment, family welfare, and national security.

In addition, in collaboration with the Ministry of Education, Dr. Al Qasimi delivered a lecture on "The Sociological Imagination in Sociology", inspiring educators and students to connect theory with social realities. Her outreach extended to community forums, where she led discussions on digital media and its impact on women's initiatives and the

problem of drug addiction, highlighting pathways for prevention and rehabilitation.

Furthermore, she participated in the national seminar "The Efforts of the Kingdom of Bahrain in Protecting the Family Unit", contributing expert insights on strengthening social cohesion and family values. Through these engagements, Dr. Al Qasimi exemplifies how academic expertise can enrich public dialogue, support evidence-based policymaking, and enhance social awareness, reinforcing the University of Bahrain's commitment to education that connects scholarship with community well-being.



*The table below lists the educational outreach activities implemented in the academic year 2023/2024.*

**List of Educational Outreach Activities**

#	Activity Title	Host
1	Challenge your limits and reach new levels	Al Sanabis Primary Girls School
2	Teach, inspire, and change	Al Sanabis Primary Girls School
3	Educate, motivate, and innovate	Al Daih Primary Intermediate Girls
4	ESG Summit Saudi Arabia “Powering the Future Responsibly - Embrace ESG in the Energy Sector for Sustainable Growth and a Greener Tomorrow”	GCC Commercial Arbitration Centre
5	Training Programs for New Lawyers and Legal Practitioners	Judicial and Legal Studies Institute
6	Quality of Life and Women	Friendship Society for the Blind
7	Identifying and Responding to Cases of Human Trafficking	The Labour Market Regulatory Authority
8	Approaches to the Effective Renewal of Penal Thought	Cadi Ayyad University, Marrakech, Kingdom of Morocco
9	Women's Health Summit Program	Royal Medical Service & Supreme Council for Women
10	SMART Education Conference	International Business and Economic Forum
11	29th Cultural Season Activities	AbdulRahman Kanoo Culture Centre
12	Global Digital Transformation Pathways	Bahrain Centre for Strategic, International and Energy Studies
13	Advanced Course in Drug Control	Ministry of Interior

#	Activity Title	Host
14	Challenges Facing Women's Empowerment for Sustainable Development	National Association for Combating Community Violence, Kuwait
15	Youth Leaders and Sustainable Development	Regional Network for Social Responsibility
16	Leadership and Sustainability	International Women's Empowerment and Capacity Building Organisation
17	Interactive Seminar: Embracing Life in Later Years	Inspiration Economy Society
18	The 45th Conference titled "A New Perspective on the Challenges Facing Women's Empowerment for Sustainable Development"	International Women's Empowerment and Capacity Building Organisation
19	The 48th Conference for the International Women's Empowerment and Capacity Building Organisation	International Women's Empowerment and Capacity Building Organisation
20	Making Assessment in ELT More Valid and Reliable	Arab Open University
21	A Journey Through Heritage	Bahrain Authority for Culture and Antiquities and the French Embassy
22	Bahrain Business Forum	Lexis Nexis
23	Arbitration Law in the Sultanate of Oman and Foreign Investments	University of Sohar, Oman
24	Lawyers Conference	World Airport Lawyers Association (WALA)
25	Arab ICT Conference	Federation of Arab Engineers
26	The Arab International Cybersecurity Conference and Exhibition	National Cybersecurity Centre (NCSC)
27	NetACad Instructor	Cisco Networking Academy Program
28	Innovation Camp-Uni	Injaz
29	Workshops Provider for the secret shoppers and evaluators	The H.H. Prime Minister's Committee for evaluating Government Service Centres

#	Activity Title	Host
30	International Lecture Series 2023	Philippine Teachers Association-Bahrain
31	Artificial Intelligence and Education	Multinational School
32	Workshop for Sacred Heart Students	Sacred Heart School
33	The Civilizational Gap Between Europe and the Arab World	The Bahrain Foundation for Dialogue
34	The Cultural Season Events	Bahrain Historical and the Archaeological Society
35	Discussing Milan Kundera's novel "The Joke"	Bahrain Social and Cultural Association
36	Understanding the Prophetic Hadith	Bahrain Writers Association
37	Member of the Validation Panels	The Education and Training Quality Authority (BQA)
38	Company Program	Injaz
39	5th Sustainability and Resilience Conference: Energy and Industry 4.0 - Technologies and Applications (SRC)	EDAS Conference Services
40	Embracing Artificial Intelligence in the Classroom	Al Raja School
41	Conflict Resolution in the Workplace	The Mohamed bin Mubarak Al Khalifa Academy for Diplomatic Studies
42	Professional Learning Communities for Educators	Beacon Private School
43	The Role of Educational Leadership in Developing Teamwork through Professional Learning Communities	Ministry of Education
44	Judge at the Junior Researcher	Youth city
45	Difference Builds Friendship	The French Embassy, the French Alliance Française
46	European Day of Languages	European Union to Saudi Arabia, Bahrain, and Oman

#	Activity Title	Host
47	Pink Day at Secondary Schools	Ministry of Education
48	Elderly Day	Capital Governate
49	Breast Cancer Examination	WHO (Seef Mall)
50	School Campaign on Breast Cancer Awareness Day	Al Hekma International School
51	External Examiner for Law Master Students	Ministry of Interior, Royal Academy
52	Educational lecture for the students	Sitra Primary School
53	Carbohydrates and Blood Sugar Control	Tolaytalal Primary School
54	The MENA spectrum management conference in Bahrain	TRA
55	Project Fair	Nasser Centre for Science and Technology
56	8th IET GCC Robotics Challenge – GCC Final Round	The Institute of Engineering and Technology
57	Governor at Christophers School	St Christopher's School
58	Board Member	Supreme Council for Youth and Sport
59	Consultant	Al Mustaqbal Primary School
60	The Use of Artificial Intelligence in Municipal and Urban Work	Ministry of Municipalities and Agriculture Affairs
61	Water Use Audit	Supreme Council for the Environment

# 5 GENDER EQUALITY





# GENDER EQUALITY

Achieve gender equality and empower all women and girls.

## 1. Proportion of first-generation female students



**4958** Number of women starting a degree



**3513** Number of first-generation women starting a degree

## 2. Women's access schemes:

### 2.1 Female Student Mentorship Program

The University of Bahrain's Female Student Mentorship Program empowers women across all disciplines, with emphasis on STEM. The program pairs female students with experienced academic and industry mentors who provide personalised guidance, networking opportunities, and leadership development. The scheme eliminates traditional access barriers (e.g., GPA thresholds) to ensure inclusive opportunities for motivated students. **This initiative directly advances SDG 5: Gender Equality, supporting Women's Access Schemes by:**

- Expanding equitable access to professional mentorship and career development.
- Increasing female participation and leadership in STEM.
- Providing same-gender role models that foster confidence and career readiness.
- Challenging stereotypes and promoting gender-inclusive leadership in academia and industry.

The program's structured mentoring, evaluation, and recognition strengthen UOB's institutional support for women's empowerment and contribute to national gender equity objectives. [Female Student Mentorship Program Guidelines](#)

### 2.2 Financial Support and Scholarships

The university recognises that high tuition fees and living costs can exclude capable students from higher education. To ensure affordability and equitable access, the university offers a multi-layered package of financial support:

- **Tuition subsidies:** As the Kingdom's national university, the University maintains low tuition fees through substantial government-funded support. The cost per credit hour for Bahraini students is 8 BD and 80 BD for non-Bahraini students, whereas the actual cost exceeds 130 BD per credit. This subsidy ensures that higher education remains accessible and affordable for all.
- **Scholarships:** In partnership with public and private sponsors, the university awards merit-based and need-based scholarships and bursaries. These awards supplement the standard tuition subsidy and are aimed at high-achieving or financially vulnerable students.



**20,989** Students obtained full or partial financial support in 2024

- **Fee exemptions:** Students from low-income households can apply for full or partial tuition fee waivers. The Exemptions & Part-Time Employment Division of the Deanship of Student Affairs oversees these applications, evaluates cases, and finalizes exemptions at the start of each semester. [Regulations for tuition fee exemptions.](#)



**546** Students obtained partial financial support in 2024



**15** Contributors for the exemption program

Furthermore, the University of Bahrain promotes equal access to higher education through a structured scholarship scheme aligned with [CSB Instruction 2019-05](#). Under this policy, Teaching and Research Assistants are eligible for fully funded scholarships to pursue postgraduate degrees (Master's or Doctoral), allowing them to develop academically and professionally. The scheme uses clear, merit-based criteria and offers equal opportunities for both male and female staff. This initiative supports career development and enhances women's access to postgraduate education.

### 3. Women's application in underrepresented subjects

The Alumni Affairs Directorate, operating under the supervision of the Vice President for Partnerships and Development, works to empower students and expand their career opportunities through a range of targeted programs and initiatives. A key priority is to promote female participation in underrepresented fields. The following programs and activities conducted during the 2023/2024 academic year highlight female

participation rates and provide supporting evidence for each initiative.

**a. Inspiring Success Stories:** Highlights achievements of UOB graduates through official media channels, emphasizing female role models and leadership pathways.

Participants		Speakers	
Male	Female	Male	Female
115	246	4	2

**b. We Are Proud of You** The University honors its graduates serving in leadership and administrative positions through social media recognition initiatives. Female graduates constitute 54.9% of all leadership roles during the 2023/2024 academic year, reflecting the University's continued progress in promoting gender representation in leadership.

Job Title	Female	Male
Deputy Minister	1	1
Chief Executive Officer	1	1
Acting CEO	2	
Director	7	11

### c. Employment and Job Placement Program

Facilitates the matching of qualified graduates with employment opportunities across the public and private sectors, thereby enhancing overall employability and advancing gender balance within the national workforce.

Indicator	Female	Male	Total
Nominations	3274	2952	6226
Graduates Hired	42	33	75

4. Proportion of senior female academics

<div> 194  </div> <div> Number of senior academic staff (Professor, Associate Professor, VP, Dean, Director and Head of Department) </div>	<div> 57  </div> <div> Number of female senior academic staff (Professor, Associate Professor, VP, Dean, Director and Head of Department) </div>
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5. Proportion of women receiving degrees

<div> 5754  </div> <div> Total number of graduates </div>	
<div> 4315  </div> <div> Total number of graduates by subject area (STEM, Medicine, Arts &amp; Humanities / Social Sciences) </div>	<div> 66%  </div> <div> Percentage of female graduates by subject area (STEM, Medicine, Arts &amp; Humanities / Social Sciences) </div>
<div>  994 </div> <div> Total number of graduates (STEM) </div>	<div>  49% </div> <div> Percentage of female graduates (STEM) </div>
<div>  327 </div> <div> Total number of graduates (Medicine) </div>	<div>  92% </div> <div> Percentage of female graduates (Medicine) </div>
<div>  2994 </div> <div> Total number of graduates (Arts &amp; Humanities / Social Sciences) </div>	<div>  70% </div> <div> Percentage of female graduates (Arts &amp; Humanities / Social Sciences) </div>

## 6. Women's progress measures

### 6.1 Policy of non-discrimination against women:

The Equality, Diversity, and Inclusion Policy at the University of Bahrain is committed to fostering a respectful, inclusive, and equitable academic and working environment. It applies to all members of the university community, including academics, administrative staff, students, and affiliates, and covers recruitment, admissions, education, training, campus interactions, facilities, and support services.

#### Key Highlights:

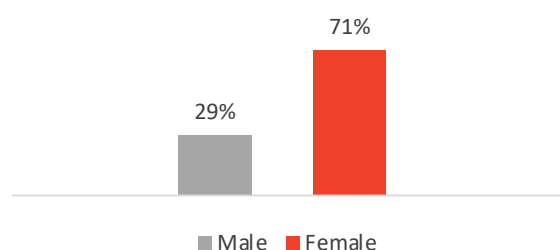
- Ensures equal, non-discriminatory access to employment, education, and training.
- Promotes an inclusive and respectful environment for all individuals.
- Provides clear mechanisms to report and address discrimination.
- Guarantees accessible facilities and services for persons with special needs.
- Engages leadership, staff, and students in upholding the policy.

By embedding a formal institutional framework for equality, diversity and inclusion, the University actively supports SDG 5's aim of eliminating gender-based discrimination and fostering women's full and effective participation in all spheres of education and employment. This aligns directly with Indicator 5.6.8, which emphasises the existence of institutional policies and frameworks addressing gender equality.

### 6.2 Women's Monitoring Scheme

The University of Bahrain promotes gender equity through structured mentoring schemes designed to guide and support students, particularly female students, throughout their academic and career journeys. These mentoring mechanisms help create an inclusive environment that empowers women and ensures equitable access to both academic progression and career development opportunities.

Academic Advising is a key component, whereby faculty members are assigned as academic advisors to provide individual guidance following the UOB Academic Advising Regulation. This system is integrated within the Student Information System (SIS), enabling advisors to access real-time data on enrolment, performance, attendance, and academic progress, as well as communicate directly with their advisees. The available data indicate that more than 50% of participants are female.



Career Counselling supports students and new graduates in transitioning into the labor market. Through various programs, such as the CV Submission Service, Nomination Service, On-Campus Recruitment Program, and the Annual Career Fair, students receive tailored support that enhances their employability and expands access to job opportunities. Together, these mentoring mechanisms contribute to fostering an inclusive environment that empowers female students and promotes equal access to academic and career advancement.

### 6.3 Women's graduation rate:



The University of Bahrain continues to demonstrate significant progress in promoting female employability and participation in the labor market.

The University of Bahrain continues to make notable progress in enhancing female employability and strengthening women's participation in the labor market. In the 2023/2024 academic year, female graduates accounted for 66.8% of all graduates, reflecting the University's ongoing commitment to advancing gender equality and supporting women's transition into the workforce.

### 6.4 Female Distribution by STEM Specializations (2023/2024)

The University of Bahrain continues to strengthen women's participation in STEM disciplines, aligning with national efforts to promote gender equality in high-demand sectors. In the 2024, a total of 483 female students graduated from programs in Science, Technology, Engineering, and Mathematics (STEM) fields.

The University of Bahrain maintains an integrated system to track graduates and update key demographic and employment data, including gender, nationality, academic level, sector, and salary. Data are analysed using Power BI and presented in interactive dashboards accessible to decision-makers, supporting data-driven planning and the continuous enhancement of academic programs.

[UOB Graduates Analytics & Tracking Dashboard](#)



*Female nurses taking the oath—championing SDG 5 and women's leadership in health.*

## 7. Recognition of Women's Achievements

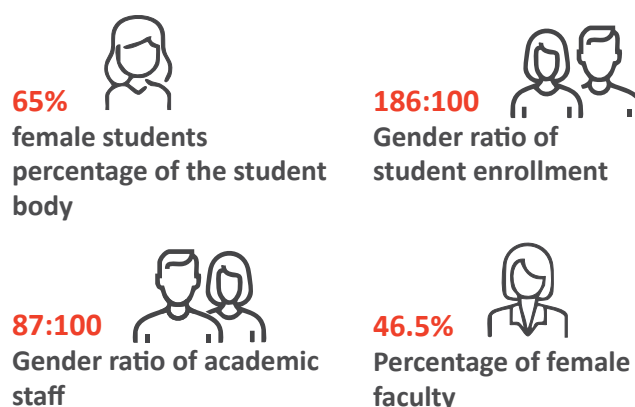
In alignment with Sustainable Development Goal 5 (Gender Equality), the University of Bahrain demonstrates its commitment to recognizing and promoting the role of women through a series of targeted initiatives and events.

First, in celebration of International Women's Day, the Equal Opportunities Committee organized a seminar titled "Women's Brilliance: Leadership and Excellence." The event showcased the leadership journeys and societal contributions of distinguished women. It also featured a presentation by Prof. Al-Allani on "Women's Rights in Tunisia," which provided valuable regional insights. [International Women's Day Symposium](#)

Furthermore, the University reinforces this commitment through its participation in programs like She Leads, a leadership development initiative organized by Advance HE. This program brought together 32 distinguished academics and professionals from Bahrain and the GCC to nurture women's leadership potential and promote equity in higher education through sessions on essential strategies, challenges, and opportunities. ["She Leads" Program](#)

The University's dedication extends beyond academia, as evidenced by the success of the Bahrain Theatre Club at the 6th GCC University Theatre Festival. Competing against ten Gulf universities, their play "Musaferoon – Travelers" received multiple awards, including Best Female Artist (First Place) for Lamya Al-Shuwaikh. This achievement highlights the University's encouragement of women's creativity and excellence across diverse fields.

Collectively, these actions reflect the University of Bahrain's sustained commitment to fostering an inclusive environment that empowers women, advances gender equality, and cultivates their roles as leaders and changemakers.



32 Women Leaders Complete the "She Leads" Program At UOB

# 6 CLEAN WATER AND SANITATION





## CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all.

The University of Bahrain emphasizes that clean water and sanitation are critical for health, environmental sustainability, and resilience, especially in the arid climate of Bahrain. The University's initiatives focus on efficient water management, innovative treatment technologies, and community engagement.

The University of Bahrain recognizes that access to clean water and effective sanitation is fundamental to human health, environmental sustainability, and national resilience, particularly within the arid context of the Kingdom of Bahrain. The University actively contributes to the sustainable management of water resources through efficient conservation practices, wastewater recycling, and the adoption of smart water infrastructure across its campuses. Additionally, the University plays a leading role in advancing research and innovation in desalination and water treatment technologies, supporting national and regional strategies for water security.



## 1. Water Conservation and Management

### 1.1 Water Conservation Policy

- **Comprehensive Framework:** The University has established a policy that encompasses all aspects of water use, including conservation, efficient management, and sustainable practices throughout its campuses. UOB maintains a comprehensive policy framework for the conservation, efficient use, and sustainable management of water resources across its campuses. The policy focuses on optimizing consumption, recycling wastewater, and integrating sustainable infrastructure to minimize environmental impact.
- **Data-Driven Decisions:** The total water consumption; covering academic, residential, and administrative facilities; of 440,148 m<sup>3</sup> in 2024 is analysed to identify trends and areas for improvement, leading to targeted conservation efforts.
- **Responsible Use Campaigns:** The University conducts awareness campaigns that educate the community about the importance of water conservation, leveraging technology to track and report water usage effectively. The University actively promotes responsible water use through institutional measures, awareness programs, and technological upgrades.

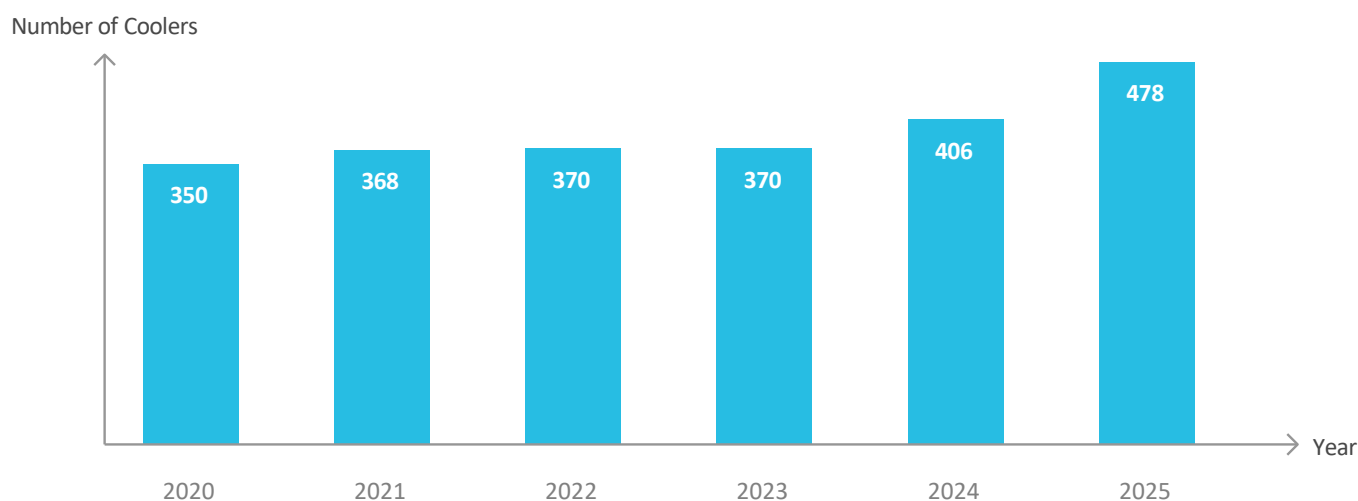
### 1.2 Provision of Safe and Accessible Drinking Water

- **Campus-Wide Dispensers:** Free drinking water is made accessible through strategically placed dispensers, encouraging students and staff to refill reusable bottles rather than relying on single-use plastics.
- **Impact Metrics:** The reduction in bottled water use -19,722 bottles(20L) in 2023-demonstrates a significant shift towards sustainable practices and reduced plastic waste.
- **Plastic-Free Initiatives:** Programs such as the “Plastic-Free Campus” initiative have engaged various colleges (Bahrain Teachers College’s) in sustainable practices, showcasing the University’s commitment to environmental stewardship. That initiative-have successfully reduced the use of single-use plastic bottles from 875 to 363 per week within five months. These actions emphasize equitable access to clean water and sanitation while reducing plastic waste and pollution.

### • Improved Access to Drinking Water (2020–2025)

The University of Bahrain provides free access to clean drinking water across all campuses as part of its commitment to sustainability and student well-being. In recent years, student feedback indicated that the number and distribution of water coolers were insufficient to meet daily demand, particularly during peak hours and in high-traffic areas. In response, the University conducted a facilities review and increased

the number of drinking water coolers while upgrading to water-efficient units to maintain environmental responsibility. This initiative ensures that all students have equitable access to safe and sustainable drinking water—a key component of Sustainable Development Goal 6 (Clean Water and Sanitation) and Goal 3 (Good Health and Well-being).



**Based on student feedback about limited access to drinking water, the University of Bahrain increased and redistributed drinking water coolers across campuses.**

## 2. Wastewater Treatment, Recycling, and Reuse

### 2.1 Campus Wastewater Treatment Plant

- **Operational Excellence:** In 2024, the plant's 98% treatment efficiency is a testament to advanced technologies and operational practices that emphasize resource recovery.
- **Daily Processing:** Treating an average of 397 m<sup>3</sup>/day of effluent allows the University to reclaim water for irrigation, significantly reducing reliance on freshwater sources. The total influent volume for the year was 4,859 m<sup>3</sup>/day, with 4,762 m<sup>3</sup>/day treated and reused primarily for landscape irrigation and greenery maintenance.
- **Environmental Impact:** The near-closed-loop system minimizes freshwater demand, demonstrating best practices in institutional wastewater management. By using treated effluent for irrigation, UOB simultaneously contributes to improving water quality through recycling and sustainable land management through efficient water reuse.

### 2.2 Detailed Wastewater Metrics

- **Monthly Data Insights:** The influent and effluent statistics reveal consistent performance throughout the year, allowing for ongoing assessment and improvement.
  - For example, January's influent was 398 m<sup>3</sup>, with an effluent of 390 m<sup>3</sup>, indicating effective treatment processes.
- **Effluent Reuse:** The treated water is primarily used for landscape irrigation and maintenance of green spaces, contributing to both environmental sustainability and aesthetic enhancement of the campus.



**Table 1. The amounts of influent and effluent of the waste treatment plant at the University of Bahrain in 2024**

Month	Influent 2024	Effluent 2024
January	398	390
February	436	427
March	440	431
April	405	397
May	386	378
June	318	312
July	303	297
August	323	317
September	427	419
October	467	458
November	479	470
December	477	467
<b>Average</b>	<b>405</b>	<b>397</b>
<b>Total / year</b>	<b>4859</b>	<b>4762</b>

### 3. Sustainable Water Infrastructure

#### 3.1 Water-Saving Fixtures and Sanitation Systems

The University has invested in infrastructure upgrades designed to promote water efficiency and sustainability.

- **Technological Integration:**
  - Sensor-based faucets: These fixtures reduce water wastage by adjusting flow based on user presence, significantly lowering overall consumption.
  - Dual flushing mechanisms: These fixtures reduce water wastage by adjusting flow based on user presence, significantly lowering overall consumption.
  - Tap aerators, Aerators: These devices limit water flow while maintaining pressure, promoting efficient water use without compromising user experience.
- **Educational Impact:** The infrastructure serves as a live model for students, illustrating the application of sustainable technologies in real-world scenarios.

#### 3.2 Smart Irrigation Systems

UOB's commitment to sustainable landscaping is reinforced through the installation of the following:

- **Automated Monitoring:** The irrigation system uses sensors to assess soil moisture and environmental conditions, enabling precise water application that minimizes waste.
- **Scheduling Efficiency:** Watering is scheduled during cooler parts of the day to reduce evaporation losses, demonstrating smart resource management.
- **Sustainability in Landscaping:** The system supports the University's goal of maintaining green spaces while conserving water, linking environmental aesthetics with responsible management.



### 3.3 Conserving irrigation water

The University of Bahrain employs a highly efficient irrigation system designed to maximize water conservation, particularly important in the arid climate of Bahrain. This system incorporates both sprinkler and drip irrigation technologies to ensure optimal water use.

The University of Bahrain's commitment to conserving irrigation water through efficient sprinkler and drip irrigation systems exemplifies its dedication to sustainable practices. By optimizing irrigation schedules and utilizing treated water, the University not only conserves resources but also fosters a culture of environmental.

#### • Efficient Sprinkler Systems

- Design and Functionality: The sprinkler systems are strategically designed to distribute water evenly across landscaped areas while minimizing overspray and runoff. This targeted approach ensures that water reaches the plants' root zones effectively.
- Timing Mechanism: To further enhance efficiency, sprinklers operate during cooler parts of the day, specifically from 3 to 9 AM and 4 to 6 PM. This timing is crucial for reducing water loss through evaporation, which is particularly high during the hotter hours.

#### • Drip Irrigation Systems

- Precision Water Delivery: Drip irrigation delivers water directly to the soil at the plant's root zone, minimizing evaporation and runoff. This method is especially effective for maintaining healthy plants while conserving water.
- Adaptability: The drip system can be adjusted based on specific plant needs, ensuring that each type of vegetation receives the appropriate amount of water without excess.

#### • Water Conservation Strategies

- Irrigation Scheduling: By conducting irrigation during early morning and late afternoon, the University effectively reduces water loss due to evaporation. This strategic scheduling allows plants to absorb moisture more efficiently, promoting better growth and health.
- Monitoring and Adjustments: The irrigation system is equipped with sensors that monitor soil moisture levels, allowing for real-time adjustments based on current weather conditions and plant needs. This dynamic approach further enhances water conservation efforts.

#### • Environmental Impact

- Reduced Freshwater Demand: By utilizing treated wastewater for irrigation, the University significantly reduces its reliance on freshwater sources. This practice not only conserves valuable water resources but also supports the sustainable management of water within the campus.
- Landscape Health and Biodiversity: The efficient irrigation practices contribute to the health of the landscape, ensuring that plants thrive while maintaining biodiversity. Healthy vegetation also aids in reducing soil erosion and improving air quality.

#### • Educational Opportunities

- Hands-On Learning: The irrigation system serves as a practical model for students studying environmental science, agriculture, and sustainability. By observing and interacting with the system, students gain valuable insights into modern irrigation techniques and water management practices.
- Workshops and Training Sessions: The University conducts training sessions and workshops focused on irrigation efficiency and water conservation, promoting awareness and engagement among the campus community.

## 4. Research, Innovation, and Knowledge Dissemination

### 4.1 Research in Desalination and Water Treatment Technologies

The University of Bahrain (UOB) plays a pivotal role in advancing scientific research and innovation in the field of water desalination and treatment technologies. As a leader in the region, UOB focuses on developing sustainable solutions to address the pressing challenges of water scarcity, particularly in arid environments like Bahrain.

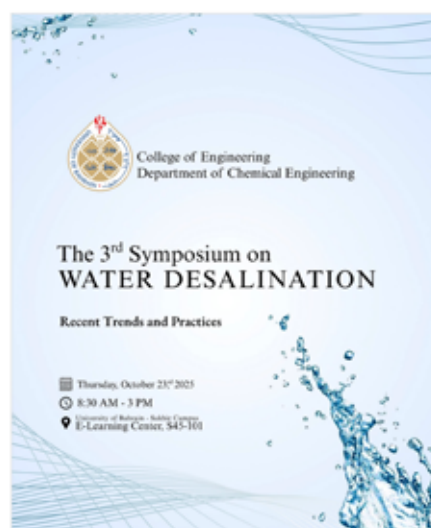
The University of Bahrain plays a regional leadership role in advancing scientific research and innovation related to water desalination and treatment technologies. Through its academic and research programs, the University seeks to develop sustainable solutions for water scarcity challenges prevalent in arid environments such as Bahrain.

To facilitate knowledge exchange and collaboration, UOB organizes the Micro Water Desalination Forum: Modern Trends and Practices. This regional scientific platform gathers leading experts, researchers, and industry practitioners to share insights on the latest technological advancements and best practices in desalination.

- **Regional Leadership:** The University is a hub for research in desalination and treatment technologies, addressing critical water scarcity issues in Bahrain and the broader region.
- **Innovation Platforms:** Events like the Micro Water Desalination Forum facilitate knowledge exchange among experts, fostering collaboration on cutting-edge technologies and practices.

- **Sustainable Solutions Development:** Research initiatives aim to create viable solutions for efficient water use, focusing on innovations that can be implemented in arid regions.

This initiative not only fosters research and innovation but also strengthens partnerships for sustainable water management in the region.



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## 4.2 Academic Engagement and Capacity Building

In addition to its research contributions, the University of Bahrain (UOB) actively hosts seminars, symposia, and workshops focused on water sustainability topics. These events create a valuable platform for dialogue among academia, policymakers, and industry stakeholders, significantly enhancing Bahrain's national capacity for integrated water resource management.

- **Seminars and Workshops:** Regularly scheduled events promote dialogue among academia, industry, and policymakers, enhancing understanding of integrated water resource management.
- **Student Involvement:** Students are encouraged to engage in research projects, focusing on topics like water reuse and pollution control, which are critical for future sustainability.
- **Collaborative Research:** Partnerships with local and international institutions strengthen research capabilities and expand the impact of findings on policy and practice.

UOB also prioritizes student participation in research projects that address critical issues such as water reuse, desalination efficiency, and pollution control. This engagement ensures that principles of sustainability are not only integrated into academic learning but also translated into practical innovation. By involving students in meaningful research, UOB fosters the next generation of leaders in water management.

## 5. Community Engagement and Awareness

The University of Bahrain extends its sustainability commitment beyond campus boundaries through community outreach and awareness initiatives. Campaigns promoting water conservation, pollution reduction, and plastic-free lifestyles engage students and staff as active participants in environmental protection.

Through its public events such as garden shows, research forums, and collaborations with national agencies, the University fosters a culture of responsible water use across society. These efforts directly align with the efforts related to community engagement and partnerships in promoting sustainable water and sanitation practices.

- **Outreach Programs:** The University extends its sustainability efforts into the community through targeted campaigns that promote water conservation and pollution reduction.

- **Active Participation:** Students and staff participate in events that encourage responsible water use, reinforcing the importance of community involvement in environmental sustainability.
- **Public Events:** Collaborations with national agencies and public forums serve to raise awareness about sustainable water practices, ensuring that these principles are adopted beyond campus borders.

The University of Bahrain's initiatives under SDG 6 – Clean Water and Sanitation.

Exemplify a comprehensive approach to water management, integrating conservation, innovative technologies, and community engagement. By fostering a culture of sustainability, the University not only enhances its own operations but also contributes to broader regional efforts in water security and environmental stewardship.



# **7** AFFORDABLE AND CLEAN ENERGY





## AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all.

The University of Bahrain (UOB), as the nation's premier higher education institution, is deeply committed to supporting the transition toward a low-carbon future. UOB continues to promote awareness and action on reducing CO<sub>2</sub> emissions and fossil-fuel reliance, fully aligning its initiatives with Sustainable Development Goal 7 and Bahrain's national vision of achieving a 30% reduction in carbon emissions by 2035 and net-zero emissions by 2060.

### Bahrain unveils National Energy Strategy to achieve net zero emissions by 2060

📅 30 Nov 2023    ⌚ Created: 05:10 PM    🔄 Last Updated: 05:10 PM    👁 Views: 1507



Bahrain's national commitment to clean and sustainable energy was reinforced through an official announcement by His Royal Highness Sheikh Nasser bin Hamad Al Khalifa, published by the Bahrain News Agency (BNA). [The announcement outlined the Kingdom's National Energy Strategy, which sets clear targets to reduce national CO<sub>2</sub> emissions by 30% by 2035 and achieve net-zero carbon emissions by 2060.](#)

This strategy focuses on improving energy-demand efficiency, diversifying the national power mix, and

deploying low-carbon technologies across hard-to-abate sectors. These national directives provide the guiding framework for the University of Bahrain's initiatives under SDG 7, particularly in expanding renewable-energy generation, reducing fossil-fuel dependency, and adopting smart energy-efficient campus systems.

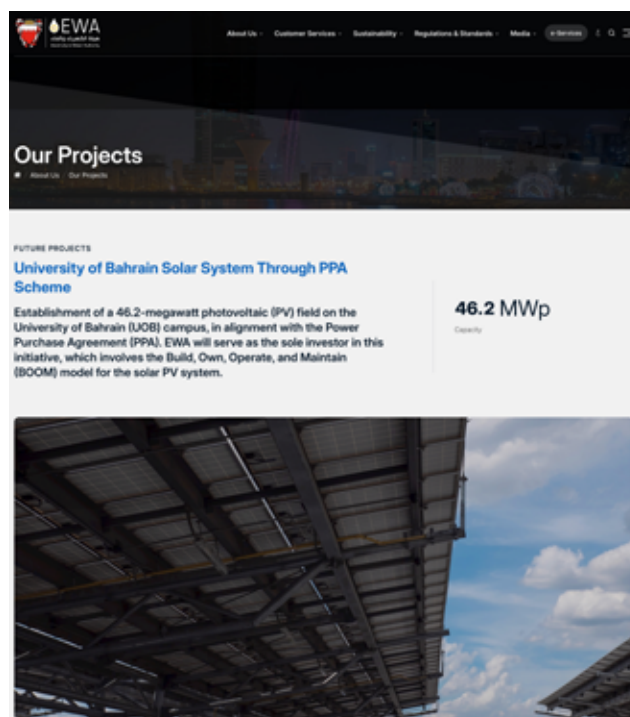
To advance the transition toward affordable, clean, and renewable energy, the University of Bahrain (UOB) has taken a leading role through the development of one of the largest photovoltaic (PV) projects in the Kingdom. In partnership with the Electricity and Water Authority (EWA), UOB is implementing a 46.2 MW solar PV installation, covering approximately 280,000 m<sup>2</sup> of campus carparks and open areas with 64,600 solar panels.

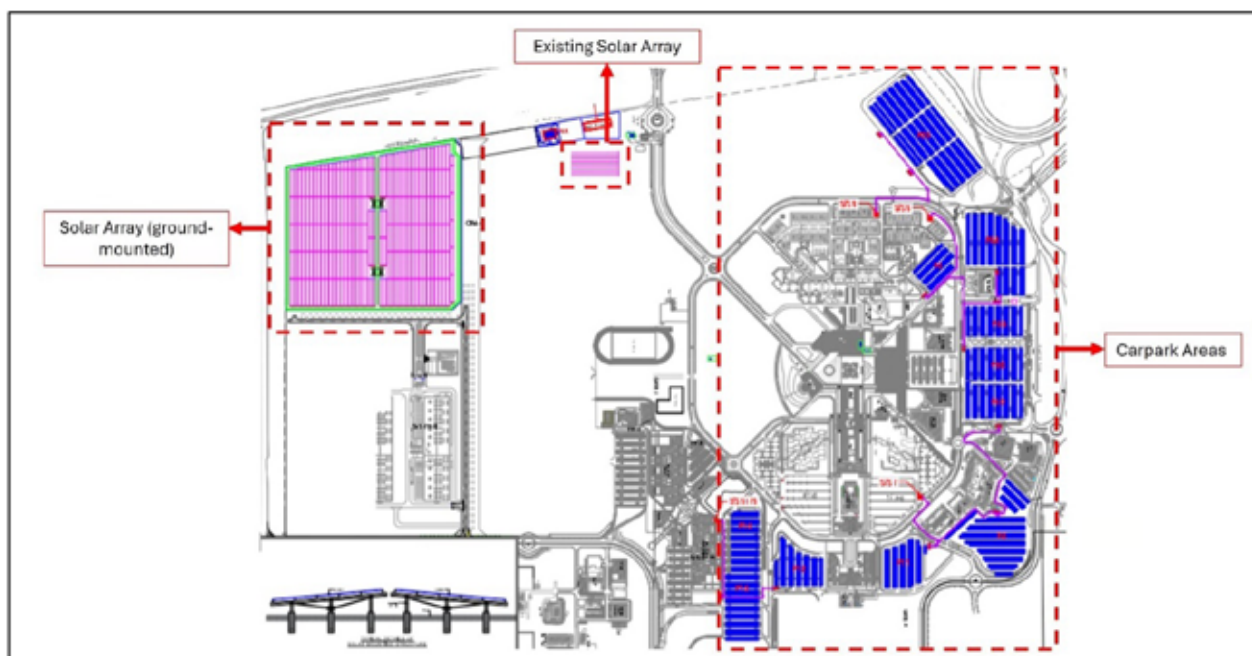
This national-scale project, under preparation during the academic year 2023/2024, is designed to supply 100% of UOB's daytime electricity demand, resulting in an estimated 30% reduction in the annual electricity bill. When fully operational, the system is expected to reduce carbon emissions by 35,000 tonnes of CO<sub>2</sub> per year, positioning UOB as a key contributor to Bahrain's clean-energy targets and a model for sustainable campus transformation.

### [University of Bahrain Solar System Through PPA Scheme](#)

This large-scale renewable-energy initiative significantly strengthens Bahrain's clean-energy capacity and enhances national energy security.

### [EWA launches Bahrain's first solar power plant](#)





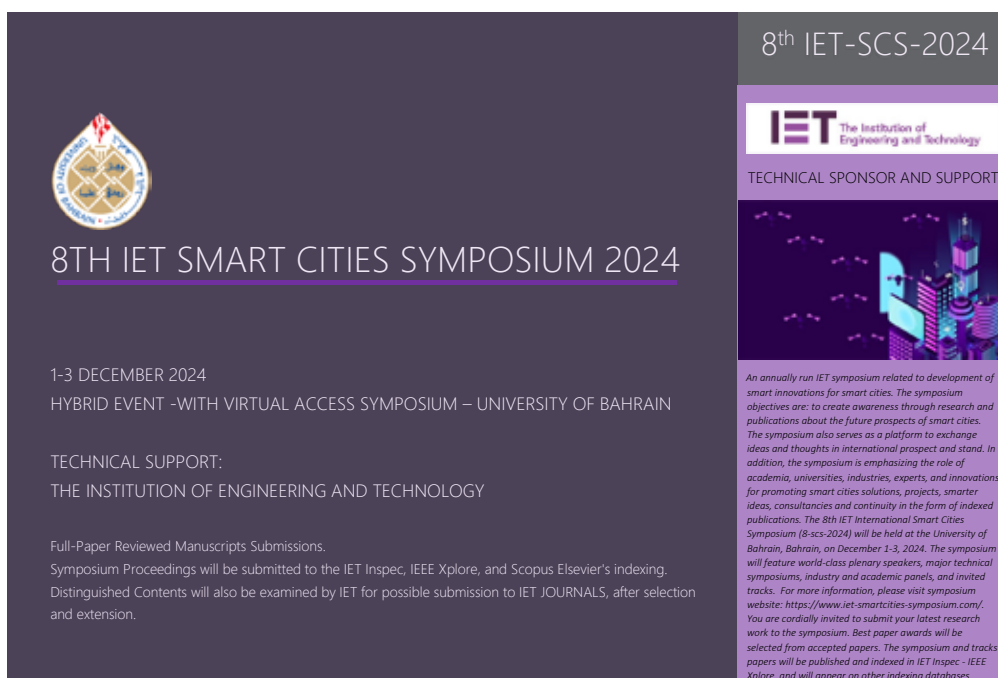
The conceptual design of the UOB–EWA photovoltaic (PV) project illustrates the installation of approximately 64,600 solar panels across all university carpark and selected open areas. Following detailed studies and simulation analyses, designated Points of Connection (POCs) were established to link the PV system to the national grid through two newly constructed intake substations, ensuring safe and efficient power integration.

To accommodate the substantial increase in generated power-expected to exceed the university’s daytime energy demand by nearly six times-UOB is upgrading its electrical infrastructure. This includes replacing existing 150 mm<sup>2</sup> underground cables with higher-capacity 300 mm<sup>2</sup> cables, and equipping substations with power-factor correction capacitor banks to reduce reactive-power losses. These upgrades enhance grid stability, improve energy efficiency, and maximize the utilisation of PV-generated electricity fed into the EWA network.

In parallel, UOB is implementing smart energy-management systems across campus buildings to optimize consumption patterns and further reduce operational costs. Preliminary estimates indicate significant financial and environmental benefits:

- At least 50% reduction in daytime electricity costs due to PV generation
- Around 30% reduction in nighttime consumption through smart-building controls
- A minimum of 10% reduction from improved power-factor efficiency

Collectively, these measures are expected to deliver a minimum overall reduction of 50% in UOB’s annual electricity bill.



The 8th IET International Smart Cities Symposium (8th IET-SCS–2024), held at the University of Bahrain from 1 to 3 December 2024, has evolved into one of the University’s most prominent annual academic events. Organized in collaboration with the Institution of Engineering and Technology (IET), the symposium provides a global platform for researchers, industry professionals, and innovators to exchange knowledge and showcase emerging developments in smart-city technologies, sustainable urban systems, and green-energy solutions.

The three-day symposium was designed “to create awareness through research and publications about the future prospects of smart cities”, offering an environment that fosters dialogue on digital transformation, intelligent infrastructure, energy-efficient cities, and technology-driven urban planning. The program featured international plenary speakers, specialized technical sessions, focused industry and academic panels, and curated invited tracks addressing advanced themes in urban innovation,

renewable-energy integration, smart mobility, data-driven governance, and resilient city design.

Participants included university researchers, industry leaders, technology developers, policy specialists, and experts from regional and international institutions—collectively contributing to a multidisciplinary exchange of ideas. In recognition of outstanding academic contributions, Best Paper Awards were presented to selected researchers. All accepted papers were peer-reviewed and published in IET Inspec, IEEE Xplore, and other leading international indexing databases, ensuring global visibility and long-term accessibility of the research outputs generated through the symposium.

Through its scale, international participation, and high-impact publications, the symposium has strengthened the University’s position as a regional hub for smart-city research, sustainable innovation, and advanced technological development.

A central focus of the presentation was printable indoor photovoltaics (PIVs)—a new class of lead-free perovskite-based devices capable of harvesting ambient indoor light to power Internet-of-Things (IoT) devices. Professor Pecunia demonstrated how these PIV systems can replace traditional batteries in many applications, thereby reducing electronic waste, lowering maintenance costs, and enabling fully autonomous, self-powered IoT ecosystems within buildings. This technology opens opportunities for powering environmental sensors, security systems, occupancy detectors, and responsive smart-building features without the need for wired connections or battery replacement.

Furthermore, the keynote explored how the flexibility, low environmental impact, and low-energy manufacturing processes of printed electronics position them as a sustainable alternative to traditional semiconductor technologies. Their compatibility with large-area printing techniques makes them ideal for widespread deployment in urban infrastructure, on building surfaces, within indoor environments, and across public-service systems.



Overall, Professor Pecunia’s keynote provided a forward-looking vision of how next-generation printable electronics and energy harvesters can accelerate the global transition toward greener, smarter, and more resilient cities. His insights reinforced the importance of material innovation and interdisciplinary research in shaping future urban sustainability.

A session dedicated to Smart Energy Systems at the 8th IET International Smart Cities Symposium (8SCS–2024) showcased a diverse range of research contributions addressing emerging challenges and technological advancements in renewable-energy integration, grid resilience, and sustainable urban energy management. Chaired by Dr. Marwa M. Eid, the session brought together researchers from the University of Bahrain and international institutions to present applied studies and innovative approaches for optimizing smart-energy infrastructures.

The presentations covered several key themes, beginning with wind-turbine fault detection and diagnosis using machine-learning techniques, where Dr. Mohammed Majid M. Al-Khalidy and his team explored data-driven models for enhancing the reliability and operational efficiency of wind-energy systems. This was followed by a multidisciplinary study on optimizing wastewater treatment plant operations through machine-learning tools designed to analyze energy consumption and climate dynamics, led by researchers from the USA, Egypt, Bahrain Polytechnic, and Ain Shams University.

Another contribution focused on a greedy algorithm-based model to assess the environmental impacts of renewable-energy integration in smart cities, presented by Dr. Rajeshbabu S from India. The session also featured research from Dr. Saraa Naseer Alasadi

on the application of Building Information Modeling (BIM) to strengthen energy efficiency, sustainability practices, and operational optimization in built environments.



Further discussions highlighted practical applications of renewable energy, including integrating renewable-energy systems in smart cities (Mrs. Supriya Haresh Shukla), and promoting energy-positive buildings—structures that generate more energy than they consume—to advance greener urban futures (Mrs. Anjali Sharma and team from India and the USA).

### The session also showcased two Bahrain-focused technical studies:

- Feasibility analysis of offshore wind-energy potential in Bahrain using RETScreen, conducted by Mr. Mohammed Abu Ajrah and colleagues from UOB and Jubail Industrial College, Saudi Arabia.
- Investigation of the impact of electric-vehicle (EV) integration on Bahrain’s distribution network, presented by Mr. Ebrahim Alsaleh and collaborators from UOB and the Electricity and Water Authority.

Collectively, the session offered a comprehensive view of the technological, environmental, and operational aspects of smart-energy systems, demonstrating the growing role of machine learning, digital tools, and advanced simulations in improving renewable-energy deployment and supporting sustainable smart-city development.






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## Bahrain / Arab IoT & AI Challenge - 3rd Edition

A national program that aims to incubate ideas and build different capabilities of university students and startups.

[The “Bahrain / Arab IoT & AI Challenge – 3rd Edition,”](#) as featured on the national Sharekna platform, represents one of the University of Bahrain’s most significant annual initiatives, held between September and October 2024. Organized by the University for the third consecutive year, the event has become a national and regional landmark that positions UOB at the forefront of technological innovation and youth empowerment.

This national competition encourages the integration of modern technologies—particularly Artificial Intelligence (AI) and the Internet of Things (IoT)—to develop creative, impactful, and future-oriented solutions. The event plays a vital role in fostering innovation among university students, young professionals, and startups across the Kingdom of Bahrain. It also promotes a culture of problem-solving and digital transformation that directly supports national development priorities.

In 2024, the Arab IoT & AI Challenge expanded into a broader regional program, attracting participation from multiple Arab countries including the United Arab Emirates, Jordan, Algeria, Morocco, Saudi Arabia, Tunisia, Oman, Qatar, Lebanon, Libya, and Egypt. Selected Bahraini teams participated with high-impact projects—several of which explored renewable-energy integration, energy-efficiency applications, smart-grid solutions, and intelligent urban systems. These projects demonstrate UOB’s role in nurturing talent and advancing sustainable, technology-driven solutions for the energy sector.

Through this annual initiative, the University continues to strengthen national capabilities in innovation, digital skills, and renewable-energy applications, reaffirming its leadership in shaping the next generation of sustainable technologies across Bahrain and the wider Arab region.

## M.Sc. in Renewable Energy Engineering

### • Program objectives:

The M.Sc. in Renewable Energy Engineering aims to achieve the following Program Educational Objectives (PEO)s:

**PEO1:** Engage in productive contributions in developing novel solutions for the regional and global renewable energy and clean systems problems, through carrying out fundamental and applied knowledge/research using appropriate design methods and analysis tools.

**PEO2:** Advance in responsibility, leadership, and principal roles in the development of academic and industrial organizations in the field of renewable engineering, locally and within the region.

**PEO3:** Engage in ongoing professional development activities by pursuing PhD and/or other advanced postgraduate studies.

### • Program intended learning outcomes

1. Demonstrate critical knowledge using specialist theories and concepts of Renewable Energy Engineering with energy systems, energy generation, storage, utilization, and its major current issues.
2. Apply critical knowledge of mathematics, chemistry, physics, computing, safety, and engineering to research complex and unpredictable sophisticated problems, including analysis, design, optimization, and control of components, systems, and processes in Renewable Energy Engineering.
3. Critically analyze and evaluate current issues and/or principles in Renewable Energy Engineering using a combination of approaches and professional levels of insight and interpretation.

4. Apply specialized research methodologies, design, analysis and/or experimental investigation of the engineering problems to evaluate and provide solutions within renewable energy systems.

5. Demonstrate proficiency in writing and oral presentation skills to effectively communicate renewable energy system ideas and techniques to a range of specialists.

6. Develop innovative technical solutions to address issues related to renewable energy systems.

In parallel with its major national initiatives in sustainability and clean energy, the University of Bahrain (UOB) has been strengthening its academic offerings to support the Kingdom's transition toward renewable and low-carbon energy systems. One of the most significant achievements in this direction

### Detailed Study Plan

#### Year 1 - Semester 1

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
EEM601	Statistical Data Analysis and Research Methods	4	0	4	MR	—	YES
REE601	Renewable Energy Systems Fundamentals	4	0	4	MR	—	YES
REE602	Photovoltaic Energy Systems	4	0	4	MR	—	YES

#### Year 1 - Semester 2

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
REE603	Wind Energy Systems	4	0	4	MR	—	YES
REE604	Solar Thermal Energy	4	0	4	MR	—	YES
REE605	Special Topics in Renewable Energy Engineering	4	0	4	MR	—	YES

#### Year 2 - Semester 3 - 4

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
EEM699	Thesis	0	36	12	MR	Completion of 20 credits	No

is the establishment of the Master's in Renewable Energy Engineering (REE), launched in 2020 as a modern, specialized program designed to rejuvenate and replace the earlier MSc in Electrical and Electronics Engineering. The program is structured to address emerging global challenges in clean-energy generation, smart grids, and sustainable energy technologies.

The MSc in REE focuses on building advanced competencies in the futuristic domain of Smart Power Grids (SPG) and distributed renewable-energy systems. It offers six advanced courses covering the full spectrum of renewable-energy concepts, including system operation, technical specifications, performance assessment, and the integration of photovoltaic (PV) distributed generation into smart grids. These courses include:

- REE 601 – Renewable Energy Systems Fundamentals
- EEM 601 – Statistical Data Analysis and Research Methods
- REE 602 – Photovoltaic Energy Systems
- REE 603 – Wind Energy Systems
- REE 604 – Solar Thermal Energy
- REE 605 – Special Topics in Renewable Energy Engineering

In addition to coursework, the program culminates in a research-based Master's Thesis (EEM 699), through which students develop applied and fundamental contributions using advanced analytical tools and design methodologies. The program is ideally structured to be completed within three academic semesters, enabling students to gain specialized knowledge within a practical and efficient time frame.

A dedicated webpage outlines the program's objectives and Intended Learning Outcomes (ILOs), emphasizing the development of students' abilities to formulate innovative solutions to regional and global challenges in clean energy. The ILOs focus on equipping graduates with the capacity to carry out rigorous research, apply contemporary design tools, and contribute productively to the advancement of renewable-energy technologies and sustainable energy systems.

[\(Program link\)](#)

## M.Sc. in Sustainable Energy Transition Systems

### • Program objectives:

1. Providing students with a comprehensive understanding of the technical, economic, and policy aspects of sustainable energy systems.
2. Equipping students with the skills and knowledge needed to design, implement, and manage sustainable energy projects.
3. Developing students' critical thinking skills and ability to analyze complex energy systems, identify potential problems, and propose effective solutions.
4. Fostering an interdisciplinary perspective that integrates science, engineering, economics, and policy to address sustainability challenges.
5. Preparing students for careers in the sustainable energy industry, government agencies, research institutions, or consulting firms.
6. Encouraging students to develop ethical and socially responsible approaches to energy systems design and management.
7. Providing opportunities for students to conduct research and engage in hands-on projects related to sustainable energy.

### • Program intended learning outcomes

1. Demonstrate critical Knowledge using specialist theories and concepts of sustainable energy transition systems, policies, economics, energy generation, storage, utilization, and its major current issues.
2. Apply critical Knowledge of science and engineering to research complex problems that include analysis, economic evaluation, design, and optimization to realize sustainable energy transition systems.
3. Critically analyze and evaluate contemporary issues and/or principles in sustainable energy transition systems using a combination of approaches and professional levels of insight and interpretation.
4. Apply specialized research methodologies and/or experimental investigation to address energy-transition-related problems.
5. Demonstrate proficiency in writing and oral presentation skills to effectively communicate energy-transition system ideas and techniques to various specialists.
6. Develop novel engineering solutions to achieve sustainable energy-transition-related problems.

### Study Plan

Course No.	Course Title	CH
SETS 601	Energy Systems	4
SETS 602	Carbon Capture, Utilization, and Storage (CCUS)	4
SETS 603	Corporate Finance, Accounting, and Policy for Energy Systems	4
SETS 604	Advanced Energy Conversion	4
SETS 605	Digitalization for Energy Systems	4
SETS 6xx	Elective	4
SETS 699	M.Sc. thesis	12
<b>Total Credits</b>		<b>36</b>

Complementing the MSc in REE, UOB also offers the Master's in Sustainable Energy Transition Systems (SETS), an interdisciplinary graduate program designed to prepare specialists capable of addressing the technical, economic, policy, and digital dimensions of the global transition to sustainable energy. The program consists of 36 credit hours, including six advanced courses and a research thesis, and is structured to be completed within three academic semesters.

The program's objectives and Intended Learning Outcomes (ILOs), as outlined on its official webpage, emphasize developing graduates who can analyse and design sustainable-energy systems, evaluate contemporary energy-transition challenges, apply advanced research methodologies, and propose innovative engineering and policy solutions that support low-carbon development. The curriculum provides a comprehensive understanding of modern energy infrastructures, carbon-reduction strategies, market and regulatory frameworks, and the digital transformation of energy systems.

The SETS study plan comprises the following advanced courses:

- SETS 601 – Energy Systems
- SETS 602 – Carbon Capture, Utilization and Storage (CCUS)
- SETS 603 – Corporate Finance, Accounting and Policy for Energy Systems
- SETS 604 – Advanced Energy Conversion
- SETS 605 – Digitalization for Energy Systems
- SETS 6xx – Elective Course (e.g., hydrogen technologies, biofuels, biorefineries, or special topics)

The coursework is completed with the Master's Thesis (SETS 699), enabling students to conduct applied or theoretical research on critical elements of sustainable-energy transitions, including decarbonisation pathways, technology assessment, policy frameworks, and systems planning.

Through the SETS program, the University of Bahrain provides a complementary academic pathway to the MSc in Renewable Energy Engineering (REE), collectively equipping graduates with the technical and strategic competencies needed to support Bahrain's transition toward secure, efficient, and low-carbon energy systems.

[\(Program link\)](#)

Together, the REE and SETS programs position the University of Bahrain as a leader in preparing highly skilled professionals capable of contributing to the Kingdom's national clean-energy goals and supporting the wider regional transition toward sustainable, resilient, and technologically advanced energy systems.

## Bachelor of Science in Electrical and Electronics Engineering

The Bachelor of Science in Electrical and Electronics Engineering (BSc EEE) at the University of Bahrain has also been updated to integrate core topics related to renewable energy and smart power-grid technologies, ensuring that undergraduate students are exposed to modern practices in sustainable energy systems. The revised curriculum incorporates specialized courses that address the principles, design, and application of clean-energy systems and next-generation electrical networks. These courses include:

- **EENG 446 – Solar and Wind Renewable Systems**  
(Fundamentals, design, performance assessment, and operational considerations of solar and wind energy technologies.)
- **EENG 419 – Electrical Distribution Systems and Smart Grid**  
(Modern distribution systems, smart-grid architectures, automation, monitoring, and distributed-generation integration.)
- **EENG 442 – Special Topics in Electrical Engineering**  
(A flexible course allowing students to explore emerging themes such as renewable-energy technologies, energy management, or smart-grid applications.)

In addition, students are strongly encouraged to incorporate sustainability-focused themes in their final Senior Project (EENG 490), where many projects address challenges in renewable-energy integration, smart-grid design, power-system optimization,

and energy-efficiency solutions. This ensures that graduates are well prepared to contribute to national and regional initiatives in sustainable energy development.

[\(Program link\)](#)

The study plan of the BSc in Electrical Engineering, showing the course EENG 446 (Solar and Wind Renewable Systems), highlights the program's commitment to integrating renewable-energy education within the undergraduate curriculum. EENG 446 provides students with a comprehensive understanding of the principles, design, and operation of both solar photovoltaic (PV) and wind-energy systems. The course covers resource assessment, system components, performance analysis, and the technical and economic considerations required for planning and implementing renewable-energy projects.

Students enrolled in this course gain hands-on exposure to modeling and evaluating solar and wind resources, designing small- and medium-scale renewable-energy installations, and analyzing grid-integration challenges associated with intermittent energy sources. By addressing key topics such as power quality, system efficiency, and the role of solar and wind technologies in modern smart-grid infrastructures, the course equips students with essential knowledge and skills aligned with the global transition toward clean and sustainable energy systems.

#### Year 4 - Semester 8

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
EENG496	Senior Design Project II	0	6	2	MR	EENG495	YES
EENG413	Power Systems Protection	3	2	3	MR	EENG311	YES
EENG446	Solar and Wind Renewable Systems	3	2	3	MR	EENG342 EENG334	YES
EENG4XX	Elective III	3	2	3	ME		YES
EENG4XX	Elective IV	3	2	3	ME		YES
		12	14	14			

#### Major Elective Courses:

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
EENG410	Power Systems Quality and Reliability	۳	2	۳	ME	EENG311, STAT273	YES
EENG411	Power System Operation and Planning	3	2	3	ME	EENG311	YES
EENG416	Power System Dynamics and Control	3	2	3	MR	EENG311, EENG382	YES
EENG418	Electrical Power Generation	3	2	3	MR	EENG311	YES
EENG419	Electrical Distribution System and Smart Grid	۳	2	۳	ME	EENG311, EENG334	YES
EENG438	Flexible AC Transmission Systems	۳	2	۳	ME	EENG334	YES
EENG439	HVDC Transmission Systems	۳	2	۳	ME	EENG334	YES
EENG440	Advanced Electric Drives	3	2	3	ME	EENG443	YES
EENG441	Electrical Machinery Analysis	۳	2	۳	ME	EENG342	YES
EENG442	Special Topics in Electrical Engineering	۳	2	۳	ME	EENG311 EENG334	YES

## Bachelor of Science in Chemical Engineering

The above revisions were alongside those of the BSc in Chemical Engineering, which has also been updated to incorporate topics related to renewable energy and sustainable engineering practices. As part of the revised curriculum, the Special Topics course (CHEN 479) provides students with exposure to emerging advancements in clean-energy technologies, sustainable chemical processes, and environmentally conscious engineering solutions. In addition, students are strongly encouraged to address sustainability-related issues within their Senior Project (CHEN 490), where many projects focus on renewable-energy applications, energy-efficiency improvements, waste-

to-energy pathways, and environmentally responsible industrial processes. These enhancements ensure that Chemical Engineering graduates are well equipped to contribute to national and global efforts in sustainable development and the transition to low-carbon energy systems.

([Program link](#))

## Major Elective Courses

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
CHEN 471	Aluminum Processing	2	2	3	ME	CHEN 316	Yes
CHEN 472	Analytical Measurements	2	2	3	MR	CHEN 316	Yes
CHEN 473	Bioprocess Engineering	2	2	3	ME	CHEN 317	Yes
CHEN 474	Corrosion Engineering	2	2	3	ME	CHEN 305	Yes
CHEN 475	Environmental Engineering	2	2	3	ME	CHEN 315	Yes
CHEN 476	Process Safety	2	2	3	ME	CHEN 312	Yes
CHEN 477	Quality Assurance and Reliability Engineering	2	2	3	ME	Completion of 90 credits	Yes
CHEN 478	Water Desalination	2	2	3	ME	CHEN 315	Yes
CHEN 479	Special Topics	2	2	3	ME	Completion of 90 credits	Yes
MENG 418	Engineering Management	2	2	3	ME	MENG 302	Yes

## The Bachelor in Architecture and the Bachelor of Science in Interior Design

The Bachelor in Architecture and the Bachelor of Science in Interior Design have also incorporated sustainability and sustainable-energy themes within their revised curricula. These updates ensure that future architects and interior designers are equipped with the knowledge and skills necessary to contribute to energy-conscious and environmentally responsible built environments. Within the Architecture program, the course ARC 431 (Sustainability in Architecture) introduces students to sustainable design principles, energy-efficient building technologies, passive and active environmental strategies, and the integration of renewable-energy concepts in architectural practice. The study plan highlights ARC 431 as a core component supporting sustainability education in the discipline.

Similarly, the Interior Design program includes INTD 427 (Special Topics in Interior Design), which allows students to explore emerging issues related to sustainable materials, energy-efficient interior systems, environmental performance, and innovative low-carbon design approaches. These enhancements encourage students to address sustainability considerations in their studio projects and final design portfolios, aligning creative disciplines with national and global priorities in sustainable development and responsible energy use.

[Bachelor of Architecture](#)  
[B.Sc. in Interior Design](#)

## Major Elective Courses

Course Code	Course Title	Course Hours			Course Type	Pre requisite	Major GPA
		LEC	PRAC	CRD			
CHEN 471	Aluminum Processing	2	2	3	ME	CHEN 316	Yes
CHEN 472	Analytical Measurements	2	2	3	MR	CHEN 316	Yes
CHEN 473	Bioprocess Engineering	2	2	3	ME	CHEN 317	Yes
CHEN 474	Corrosion Engineering	2	2	3	ME	CHEN 305	Yes
CHEN 475	Environmental Engineering	2	2	3	ME	CHEN 315	Yes
CHEN 476	Process Safety	2	2	3	ME	CHEN 312	Yes
CHEN 477	Quality Assurance and Reliability Engineering	2	2	3	ME	Completion of 90 credits	Yes
CHEN 478	Water Desalination	2	2	3	ME	CHEN 315	Yes
CHEN 479	Special Topics	2	2	3	ME	Completion of 90 credits	Yes
MENG 418	Engineering Management	2	2	3	ME	MENG 302	Yes

Several research outputs and institutional initiatives related to sustainable and renewable energy were produced at the University of Bahrain between September 2023 and December 2024. During this period, UOB faculty and students contributed to multiple studies, technical investigations, and applied research addressing renewable-energy integration, smart-grid technologies, energy-efficiency solutions, and sustainable urban systems. In parallel, a number

of university-led activities were dedicated to raising public awareness on the importance of transitioning toward cleaner and more resilient energy systems.

These collective efforts—ranging from research publications and funded projects to community-oriented events and awareness campaigns—are summarized in the photos and table below.



**Photo showing the site visit to SOLARTECH Co. by Dr. Raja Mohamed and his students enrolled in EENG 466 (Solar and Wind Engineering).** The visit provided students with valuable first-hand exposure to real-world renewable-energy installations, allowing them to observe the practical application of concepts taught in the classroom. Through on-site demonstrations and

technical discussions, students were able to connect theoretical knowledge with operational practices in solar- and wind-energy systems, enhancing their understanding of system components, performance considerations, and field-level implementation challenges.

A complementary photo from the same site visit captures Dr. Raja Mohamed and his students inside the PV system control room, where they observed the monitoring interface, data-logging tools, and performance dashboards used to supervise large-scale PV installations. This hands-on exposure allowed students to better understand how operational decisions are informed by real-time system data, further reinforcing the practical relevance of the concepts covered in the **EENG 466 (Solar and Wind Engineering)** course.



Photo showing Dr. Raja Mohamed with the management team of SOLARTECH Co. This engagement reflects UOB's ongoing efforts to strengthen collaboration with the local renewable-energy industry. Such interactions not only support academic-industry partnerships but also contribute to raising public awareness about the importance of Sustainability and Green Energy as key pillars of future national development.



Photo of Dr. Raja Mohamed during the Solar Appreciation Day held on the University of Bahrain campus. This event was organized to promote interest and **awareness in Sustainable Development and Renewable Energy**, highlighting their vital role in shaping future energy systems. The initiative aligns with the **Kingdom of Bahrain's national vision to achieve Carbon Neutrality by 2060**, and reflects UOB's commitment to fostering a culture of environmental responsibility and clean-energy awareness among its students and the wider community.



Poster circulated for a keynote presentation delivered by **Prof. Naofal Al-Dhahir** from the University of Texas at Dallas. The talk, hosted at the University of Bahrain, focused on **Green AI federated learning for energy-efficient research in next-generation wireless networks**.

This event highlights UOB's commitment to engaging with leading international experts and fostering global academic exchange. Such interactions strengthen the University's ties with the international research and scientific community, particularly in areas related to **energy efficiency, sustainable technologies, and Green Energy innovations**.

[https://www.instagram.com/p/DGafmQuM\\_GI/](https://www.instagram.com/p/DGafmQuM_GI/)



**Photo of Prof. Naofal Al-Dhahir from the University of Texas at Dallas during his presentation titled “Green AI Federated Learning for Energy-Efficient Research in Next-Generation Wireless Networks.”** The session provided UOB students and faculty with insights into emerging approaches that integrate artificial intelligence, energy efficiency, and advanced wireless technologies. This engagement reflects UOB's commitment to exposing its academic community to global expertise in sustainable and energy-conscious research directions.



## Research on Renewable Energy

#	Authors	Title	Year	Source title	Cited by	DOI
1.	Prof. Ebrahim Mattar	Smart City Symposium	2024	IET Proceeding		<a href="#">Link</a>
2.	AJAZ RASHID	Sustainable Water Production: Utilizing Peltier Elements for Atmospheric Water Harvesting	2024	IET proceedings		<a href="#">Link</a>
3.	Muhammad Rizwan	Municipal solid waste supply chain optimization for value-added product development under uncertainty	2024	Elsevier		<a href="#">Link</a>
4.	Omar Al Abbasi	Experimental and CFD simulation studies of biodiesel production in an in-house Tesla-shaped microreactor	2023	Elsevier		<a href="#">Link</a>
5.	Prof. Ghulam Hussain	A novel design of mono and bi-cells based hybrid auxetic structures and assessment of their compressive properties	2024	Elsevier		<a href="#">Link</a>
6.	AJAZ RASHID	2nd Symposium on Water Desalination	2024	2nd Symposium on Water Desalination		<a href="#">Link</a>

#	Authors	Title	Year	Source title	Cited by	DOI
7.	Nuha Al-Zayani	Senior Project	2024	UOB Engineering Project exhibition	<a href="#">Link</a>	
8.	Al-Taei, S.; Abou Elseoud, M.; Alkhaldi, F.K.	Climate Change-GDP Nexus for GCC Countries: Environmental Kuznets Curve Hypothesis	2024	Sustainability and Climate Change	1	10.1089/scc.2024.0127
9.	M. Ishtiaq et al.	Traditional ethnobotanical knowledge of important local plants in Sudhnoti, Azad Kashmir, Pakistan	2024	Scientific Reports	12	10.1038/s41598-024-73431-7
10.	Imran, M.; Khan, M.K.; Alam, S.; Wahab, S.; Tufail, M.; Zhang, Z.	The implications of the ecological footprint and renewable energy usage on the financial stability of South Asian countries	2024	Financial Innovation	33	10.1186/s40854-024-00627-1
11.	A.D. Abousoliman et al.	Exploring the relationship between nursing students' knowledge and attitudes towards climate change and their psychological distress: a cross-national investigation	2024	BMC Nursing	9	10.1186/s12912-024-01927-8

#	Authors	Title	Year	Source title	Cited by	DOI
12.	Sheraz, M.; Sinha, A.; Qin, Q.; Mumtaz, M.Z.	The asymmetric nexus between energy transition and its drivers: New evidence from China	2024	Energy	3	10.1016/j.energy.2024.133236
13.	Naser, H.; Alaali, F.; Abdulla, Y.; Ebrahim, R.	The impact of oil price and COVID-19 pandemic on clean energy stocks: an empirical approach using ARDL	2024	Arab Gulf Journal of Scientific Research	2	10.1108/AGJSR-10-2022-0246
14.	Sheraz, M.; Qin, Q.; Mumtaz, M.Z.; Khan, M.H.	Moving toward sustainable goals 7 and 13: An inclusive mechanism to achieve environmental sustainability through digitalization and energy transition in OECD countries	2024	Journal of Environmental Management	10	10.1016/j.jenvman.2024.122288
15.	Alam, S.; Dinçer, H.; Kisswani, K.M.; Khan, M.A.I.; Yüksel, S.; Alsharif, M.	Analysis of green energy-oriented sustainable development goals for emerging economies	2024	Journal of Open Innovation: Technology, Market, and Complexity	8	10.1016/j.joitmc.2024.100368
16.	MUNIR, Q.; Lean, H.H.; Teplova, T.; Nazeer, N.	The threshold effect of energy intensity on the emission-growth nexus in Malaysia	2024	Environment, Development and Sustainability	2	10.1007/s10668-023-03600-7

#	Authors	Title	Year	Source title	Cited by	DOI
17.	Alalaiwat, D.; Khan, E.	Post-combustion carbon capture process modeling, simulation, and assessment of synergistic effect of solvents	2024	International Journal of Greenhouse Gas Control	6	10.1016/j.ijggc.2024.104145
18.	Alam, S.; Adebayo, T.S.; Said, R.R.; Alam, N.; Magazzino, C.; Khan, U.	Asymmetric impacts of natural gas consumption on renewable energy and economic growth in Kingdom of Saudi Arabia and the United Arab Emirates	2024	Energy and Environment	28	10.1177/0958305X221140580
19.	Alalawi, N.S.; Omar, O.	Towards Greener Campuses: Assessing Pro-Environmental Behaviours in the University of Bahrain Campus	2024	Sustainability (Switzerland)	5	10.3390/su16051869
20.	Irfan, M.; Naga Manikanta, C.H.; Gochhait, S.; Allam, Z.	Green and Renewable Energy Impact on Sustainable Indices: Empirical Study on Selected Indian Stocks	2024		0	10.1109/SIBF63788.2024.10883882
21.	Fathy El Dessouky, N.F.	Sustainable Decision-Making for Sustainable Development Policy: Future Prospects, Opportunities and Challenges	2024		0	10.1109/DASA63652.2024.10836408

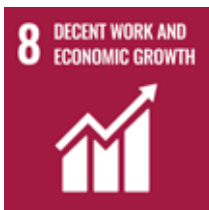
#	Authors	Title	Year	Source title	Cited by	DOI
22.	Kumar, N.S.; Sahu, T.; Al Ansari, M.S.; Khan, S.A.; Swagatha, J.P.; Infant Raj, I.I.	A Hybrid CNN- GRU Approach with Transfer Learning for Advanced Waste Classification in Support of Environmental Sustainability	2024		0	10.1109/ICISAA62385.2024.10828836
23.	Farooq, F.; Leong, C.W.; Faheem, M.; Chebab, D.; Nousheen, A.	Non-Renewable Energy, Green Technological Innovation, and CO2 Emissions in South Asia	2024	Pakistan Journal of Commerce and Social Sciences	1	
24.	BinZaiman, F.; Edhrabooh, K.M.; Alromaihi, M.; Al-Shammari, M.	Predicting Environmental, Social, and Governance Scores with Machine Learning: A Systematic Literature Review	2024		1	10.1109/ICDABI63787.2024.10800444
25.	Al Khalifa, F.	Readiness for transformation towards smart sustainable city models: residents' perspective	2024	Smart and Sustainable Built Environment	2	10.1108/SASBE-05-2024-0178
26.	Ateeq, A.; Alaghbari, M.A.; Milhem, M.; Alzoraiki, M.; Ateeq, R.A.	Sustainability in the Modern Workplace: A Conceptual Exploration of Eco-friendly Strategies and Corporate Responsibility	2024	Studies in Systems, Decision and Control	0	10.1007/978-3-031-62102-4_8

#	Authors	Title	Year	Source title	Cited by	DOI
27.	Janahi, F.; Hamdi, H.; Mili, M.	How does energy intensity impact economic growth for the case of a small island country	2024	Natural Resources Forum	0	10.1111/1477-8947.12535
28.	Sumsudeen, R.M.; Alarfaj, M.; Aruna Jeyanthi, P.A.	Investigating the Effect of Shade on Rooftops Solar PV Systems in Hot Arid Regions	2024		0	10.1109/INCOS59338.2024.10527557
29.	Alnaser, W.E.; Tomaszewicz, M.; Buzaboon, A.; Alnaser, N.W.	Need of Artificial Intelligence to Encounter the Impact of Future Climate Change on The Renewable Energy Potential in The Kingdom of Bahrain	2024		0	10.1109/OIDT59407.2024.11082690
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32.	Sadiq, A.S.; Al Khalifa, F.	Evaluating Smart Sustainable Urban approaches: a case study of Bahrain Bay	2024	IET Conference Proceedings	0	10.1049/icp.2025.0828

**8**

# DECENT WORK AND ECONOMIC GROWTH





# DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

[The University of Bahrain \(UoB\)](#) is the Kingdom's national university and a key driver of Bahrain's Vision 2030. Through education, research, and community engagement, UoB advances sustainable and inclusive economic growth in alignment with the United Nations Sustainable Development Goals (SDG's).

SDG 8 Decent Work and Economic Growth is integral to UoB's mission. The university provides equitable employment, prepares graduates for the labour market, and fosters entrepreneurship that contributes to national prosperity. Between September 2023 and December 2024, UoB implemented wide-ranging initiatives that strengthened employability, innovation, and economic inclusion while maintaining fair and ethical workplace standards.

## 1. Research Supporting Sustainable Economic Growth

UoB researchers produced peer-reviewed studies on inclusive and sustainable economic development, financial resilience, and entrepreneurship. Key themes included:



To translate this research into practice, UoB hosted the [4th International Conference on Sustainable Islamic Business & Finance](#) (27 Nov 2024), uniting academics, business leaders, and entrepreneurs to explore how Islamic finance can advance ethical and sustainable growth.

## 2. Ethical and Inclusive Employment Practices

UoB's employment framework reflects Bahrain's [Civil Service Bureau](#) (CSB) standards and international labour norms.



### Living wage

All university employees and core outsourced staff receive salaries at or above the national living-wage threshold.



### Anti-discrimination

The [Equality, Diversity & Inclusion Policy](#) prohibits discrimination based on gender, religion, age, disability, or nationality, promoting a respectful and inclusive workplace.



### Gender equity

The university follows the [Ministry of Finance & National Economy \(MoFNE\)](#) Gender Balance Programme, which mandates gender-responsive budgeting and monitoring of pay equity.



### Payscale fairness

Through the CSB's unified pay structure, women and men in the same grade receive equal compensation and advancement opportunities.



### Employee rights

Staff have access to grievance and appeal channels through UoB and the CSB, ensuring procedural transparency.



### Labour rights

Bahrain's national decrees and the [Equal Opportunities Committee](#) safeguard fair treatment, vocational rehabilitation, and non-discrimination for all workers.

These frameworks demonstrate UoB's institutional commitment to dignity at work and equality of opportunity for all employees.

## 3. Investment in Human Capital

The university invests heavily in its people.

During the 2023 financial year, UoB's operating expenditure (excluding capital costs) reached approximately BHD 44 million, supporting around 2,980 full-time equivalent (FTE) employees. This equates to an investment of about BHD 14,770 per employee in salaries, training, and wellbeing.

Continuous professional development is embedded in UoB's culture.

Highlights include the "She Leads" Leadership Programme (14 Aug 2024), which graduated 32 women from Bahrain and the GCC, strengthening women's leadership in academia and public administration, and the Entrepreneurship Trainer Graduation (23 Apr 2024) in partnership with the UNIDO Investment & Technology Promotion Office, which prepared faculty to teach entrepreneurial skills and innovation management.

## 4. Student Employability and Work-Integrated Learning

UoB aligns curricula with national labour-market needs to ensure graduates are career-ready. Between Sep 2023 and Dec 2024, the university enrolled about 28,400 students, with 4,650 students (16%) completing placements of over one month in sectors such as finance, IT, engineering, and healthcare.

Notable initiatives:

- [Practical Training Workshop](#) (25 Jun 2024) prepared business students for the workplace through modules on ethics, self-management, and problem-solving.
- [IT Projects Exhibition](#) (6 Feb 2024) showcased 50 graduation projects by 150 students in artificial intelligence, cybersecurity, and blockchain, improving employability and applied research skills.

Such programmes bridge the gap between academic learning and real-world employment, reinforcing SDG 8's objective of productive and decent work for all.

## 5. Secure and Long-Term Employment

UoB ensures employment stability by maintaining a predominantly long-term workforce. As of 2024, around 85% of employees were on contracts exceeding 24 months (including permanent or rolling appointments). Short-term contracts are limited to temporary or visiting roles, ensuring organisational continuity and professional security for staff.

## 6. On-Campus Career Development Outreach for School Students, University Students, and Graduates

Career Day 20 constitutes a major outreach initiative through which the University of Bahrain provides structured career-development support to young people beyond its enrolled students. Held during the 2023–2024 academic year, the event engaged 1,469 school students from across the Kingdom, including learners from both public and private schools, alongside University of Bahrain students and graduates. This comprehensive engagement created a multi-level platform for career exploration, early labor-market exposure, and informed decision-making for future professional pathways.

Documented attendance includes 599 students from 20 private schools, 630 female students from 21 public secondary schools, and 540 male students from 18 public secondary schools. This broad participation demonstrates the University’s commitment to community-wide employability enhancement and equitable access to structured career-readiness opportunities.

Through direct interaction with employers and industry representatives, participating school students, university students, and graduates gained early awareness of sector-specific skills requirements, emerging employment trends, and future career trajectories. Such engagement aligns with international best practices for strengthening youth readiness for productive employment and supporting national workforce development.

The scale, structure, and documented impact of Career Day 20 provide clear evidence of alignment with SDG 8.4.1, reflecting the University of Bahrain’s sustained commitment to extending job-training, career guidance, and employability support to the wider community during the 2023–2024 academic year.



*Career Day 20: Students explored career paths and gained industry insights.*

## 7. Entrepreneurship and Economic Empowerment

### 7.1 Business Incubator Centre

UoB's [Business Incubator Centre \(BIC\)](#) is a hub for innovation and startup development.

In the academic year 2023/2024, the BIC supported 45 student and alumni startups, organised over 20 entrepreneurship workshops, and connected participants with mentors and investors.

The BIC provides coworking spaces, access to university laboratories, and guidance on financing, directly contributing to Bahrain's entrepreneurial ecosystem.

### 7.2 MicroShabab Youth Entrepreneurship Forum (1–3 Oct 2024)

Under the patronage of HH Shaikh Khalid bin Hamad Al Khalifa, the sixth edition of the [MicroShabab Forum](#) gathered 300+ young entrepreneurs and investors. Participants pitched innovative projects, joined mentoring sessions, and established business networks that have already resulted in several micro-enterprise launches.



*MicroShabab Youth Entrepreneurship Forum*

### 7.3 Innovation & Entrepreneurship Forum (24 Apr 2024)

As part of Manama Entrepreneurship Week, UoB hosted the 6th Innovation & Entrepreneurship Forum featuring startups such as Early Riser, Rizq, Rain, and Daleel ([uob.edu.bh](http://uob.edu.bh)). The event facilitated mentorship, collaboration, and networking that directly led to new internship and startup opportunities.

### 7.4 Applied Creativity and Cultural Enterprise

Student projects translated creative design into economic activity.

The Social Marketing “Convergence” Exhibition (12 Dec 2023) reimagined Bahraini folklore through digital campaigns, encouraging entrepreneurship in the cultural sector, while the Food Kiosk Design Exhibition (25 Apr 2024) showcased innovative retail-design concepts for small businesses.

### 7.5 Innovation in Workplace Safety – SANAD (Nov 2024)

During Bapco Gas Company’s Health, Safety & Environment Week, UoB nursing students won the Best University-Level Presentation Award for SANAD, an AI-driven occupational-safety app ([uob.edu.bh](http://uob.edu.bh)).

The project exemplifies technology-enabled improvements in worker wellbeing and productivity.

### 7.6 Business and Human Rights Workshop (21 May 2024)

In collaboration with the [United Nations Development Programme \(UNDP\)](#), UoB hosted a cross-faculty workshop integrating Business and Human Rights principles into curricula.

Participants from business, law, and social-science departments explored ethical supply chains, corporate responsibility, and human-rights-based economic models.

### 7.7 King Hamad Prize for Agricultural Development (2023–2025 Cycle)

Administered by the College of Science, the King Hamad Prize promotes innovation among farmers, researchers, and entrepreneurs to enhance Bahrain’s agri-food sustainability and job creation in rural industries ([uob.edu.bh](http://uob.edu.bh)).

### 7.8 Sadaf Social Enterprise Initiative (Oct–Dec 2024)

The Sadaf project upcycled seashell waste into handcrafted goods sold to benefit orphaned children, combining social entrepreneurship with environmental awareness.

It demonstrates how student-led ventures can generate income while addressing social and ecological goals.

## 8. Embedding the SDGs in Education

In partnership with the [United Nations Development Programme \(UNDP\)](#), UoB launched the SDGs Academic Programme (2 Dec 2024), embedding sustainability content into English, science, and law curricula.

Students completing these courses receive dual certifications, equipping them with the skills and values required for an inclusive, knowledge-based economy.

By integrating sustainability into learning outcomes, UoB ensures every graduate contributes to national development and the global 2030 Agenda.

From September 2023 to December 2024, the University of Bahrain advanced SDG 8 through research, fair employment, capacity-building, and entrepreneurial empowerment.

Its alignment with Bahrain's Vision 2030, adherence to ethical employment policies, and partnerships with organisations such as [UNDP](#), [UNIDO](#), [CSB](#), and [MoFNE](#) demonstrate its leadership in promoting sustainable economic growth.

By investing in human capital, fostering innovation, and embedding sustainability into education, UoB continues to create opportunities that drive inclusive prosperity for Bahrain and beyond.

## 9. Employment Practice on Unions

The University of Bahrain (UoB) provides formally recognized staff-representation and labour-relations mechanisms that ensure all employees—including women, international staff, academic faculty, and administrative personnel—have access to an equitable and protected collective voice within the institution. In accordance with national legislation, public-sector institutions operate through officially mandated representative bodies rather than external trade unions; these structures are legally recognised and serve as the primary channels for employee participation, consultation, and protection of rights. UoB maintains several standing committees with clear authority, independent oversight, and guaranteed accessibility for all staff groups:

- Academic Grievance Committee
- Administrative Grievance Committee
- Appeals Committee

These committees function as institutional equivalents to union representation, providing staff with recognised avenues for collective representation, dispute resolution, consultation on employment matters, and safeguards against discrimination or retaliation. Their mandates include reviewing workplace concerns, advising leadership on staff welfare, and ensuring fair, transparent, and rights-based employment practices.

Through these mechanisms, the University provides comprehensive protection of employee rights, **including:**

- Equal treatment and nondiscrimination regardless of gender, nationality, or employment category
- Access to impartial review panels with defined procedures and timelines
- Freedom to raise concerns without fear of retaliation
- Protection from unfair disciplinary action and assurance of due process
- Compliance with national labour standards, occupational safety requirements, and ethical employment practices
- Fair remuneration and timely wage payments

UoB also engages staff representatives in regular dialogue on workplace policies, well-being initiatives, and institutional governance, ensuring that employees have a meaningful role in decision-making and that their collective perspectives directly inform university policies.

Through these formally recognised, inclusive, and accessible staff-representation structures, the University of Bahrain upholds international labour-rights principles, advances SDG 8 (Decent Work and Economic Growth), and demonstrates a strong institutional commitment to ensuring a safe, equitable, and participatory working environment for all employees, consistent with THE Impact Rankings requirements.

## 10. Tracking Pay Scale for Gender Equity

The University of Bahrain systematically measures and tracks pay scale gender equity through annual institutional reporting and national gender balance reports. This monitoring ensures equal pay for equal work and aligns with SDG 8.2.7.

### • Salary Framework

- Salaries, allowances, and benefits are determined under the Civil Service Law and Financial Regulations titled “Regulations on Determining Salaries, Employment Benefits, and Eligibility Criteria for Employees Subject to the Civil Service Law.”
- All employees receive compensation based on salary scales and wage tables issued by the Civil Service Bureau, ensuring fairness and non-discrimination.

### • Gender Pay Equity Tracking

- Annual reporting includes National Gender Balance Reports (2019–2024) with detailed data on male and female employees, wage expenditure, promotions, and overtime payments.
- Key indicators tracked: average wage per employee, gender pay gap percentage, female share of employees, and female share of promotions.
- Gender pay gap reduced from 19.5% in 2019 to 15.1% in 2024, demonstrating measurable progress.

### • Governance and Transparency

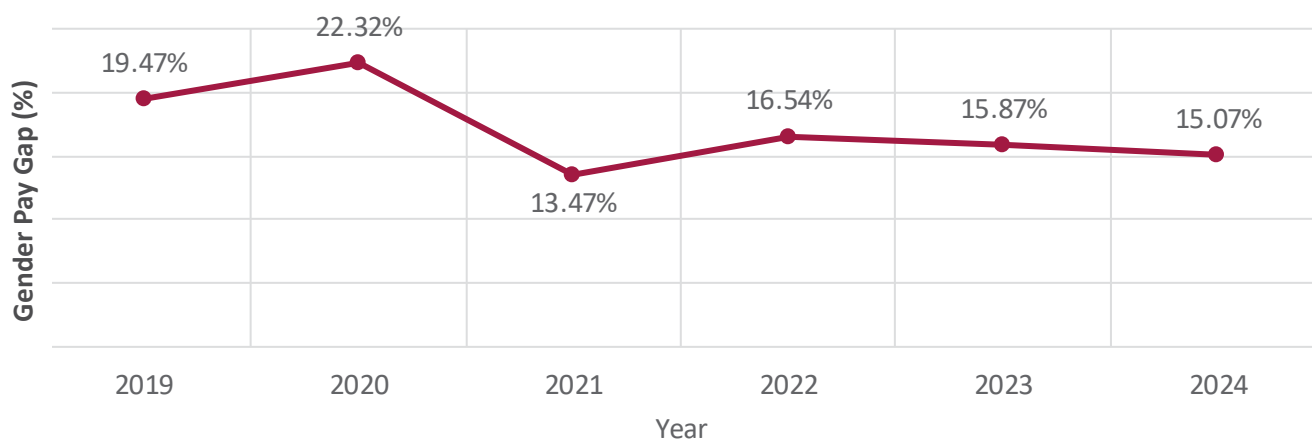
- The Equal Opportunity Committee reviews indicators annually and oversees corrective actions to reduce unjustified gaps.
- Metrics are sourced from verified HR records and payroll systems; detailed tables and trend visualizations are published on the University's website for transparency.

This comprehensive monitoring process aligns with Bahrain's Vision 2030 and demonstrates UoB's strong commitment to gender pay equity in full alignment with SDG 8.2.7 and THE Impact Rankings requirements.

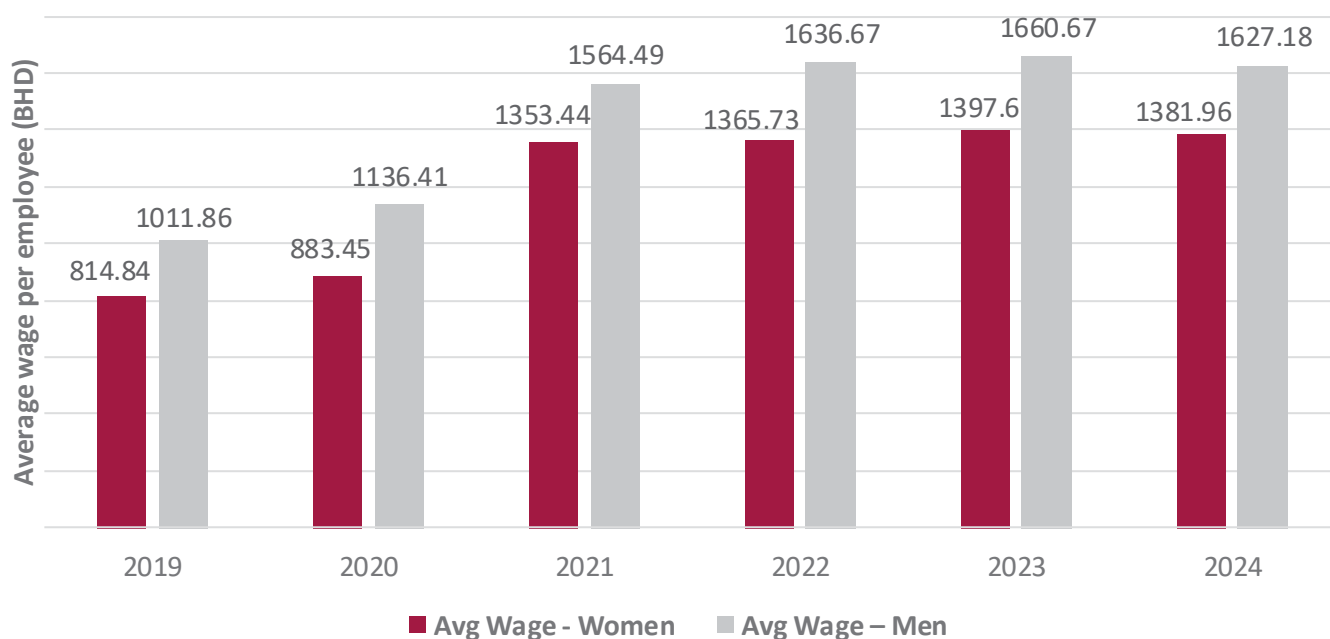
### Gender Pay Gap Trend (2019–2024)

Year	Avg Wage – Women (BHD)	Avg Wage – Men (BHD)	Gender Pay Gap (%)	Female Employees (%)	Female Promotions (%)
2019	814.84	1011.86	19.47	41.39	39.47
2020	883.45	1136.41	22.32	42.52	34.95
2021	1353.44	1564.49	13.47	44.07	33.33
2022	1365.73	1636.67	16.54	44.57	40.74
2023	1397.60	1660.67	15.87	44.67	37.78
2024	1381.96	1627.18	15.07	44.62	36.73

### Average wage per employee by gender (2019-2024)



Average wage per employee by gender (2019-2024)



## 11. Employment Practice on Labour Rights

The University of Bahrain formally recognizes labour rights, including freedom of association and collective participation in institutional decision-making, in alignment with national legislation and SDG 8. The University is fully committed to ensuring fair, safe, transparent, and equitable working conditions for all employees and faculty members, as mandated by the Civil Service Law and Regulations. All rights and protections apply equally to men and women and extend to non-Bahraini staff employed by the University in accordance with applicable national laws.

### 11.1 Freedom of Association and Institutional Participation Mechanisms

Although formal trade unions are not established within public sector entities under national legislation, the University ensures that employees can meaningfully participate in collective decision-making through a robust governance framework that reflects the spirit of freedom of association guaranteed under Article (27) of the Constitution of the Kingdom of Bahrain.

### • Right to Join Unions

Public sector employees, including University staff, may lawfully join labour unions established under the Labour Law for the private sector or the Maritime Law, and retain the right not to be compelled to join or remain in any association or union.

### • Functional Equivalence to Collective Bargaining

While traditional trade-union collective bargaining is not applicable under public-sector regulations, the University provides functional equivalents to collective bargaining through structured academic and administrative councils. These bodies allow faculty and staff to collectively review, provide input into, and influence employment policies, workload standards, professional development frameworks, and resource allocation—ensuring group-based representation in key employment matters.

### • Academic and Administrative Governance Structures

Faculty and staff participate in institutional decision-making through established representative bodies, including:

- **Department Councils:** Where faculty deliberate and anonymously vote on academic policies, workload distribution, curriculum changes, and operational decisions.
- **College Councils:** Providing broader academic participation through collective review and approval of department-level proposals.
- **University Council:** Comprising university leadership and faculty representatives, responsible for approving academic policies, employment-related frameworks, and institutional plans.

Together, these mechanisms provide continuous, democratic, and structured channels for collective employee voice.

### • Annual Institutional Self-Evaluation (QAAC)

The annual Institutional Self-Evaluation process, coordinated by QAAC, is led by faculty-based committees at the department and college levels. These committees collectively assess teaching conditions, workload adequacy, curriculum quality, research support, and professional development needs. Findings directly inform University-wide improvement plans, ensuring that academic staff shape institutional development and working conditions.

### • Additional Employee Voice and Representation Channels

- Grievance Committees for transparent resolution of academic and administrative concerns.
- Appeals Committee for impartial review of employment-related decisions.
- Equal Opportunities Committee to safeguard gender equity and prevent discrimination.

These structures reinforce a participatory environment aligned with international labour standards.

## 11.2 Applicability to Women and International Staff

All governance, participation, grievance, and representation mechanisms apply equally to women and international employees, ensuring inclusive, fair, and non-discriminatory labour rights across all University departments and campuses.

### 11.3 Job Security and Fair Employment Conditions

Consistent with the Civil Service Law, the University ensures:

- Protection from unfair dismissal and transparent contract renewal procedures.
- Regulated working hours and adherence to statutory entitlements.
- Paid annual, maternity, sick, and other legally mandated leaves.
- Transparent, standardized salary scales and benefits applied equally to women and men.
- General protections for non-Bahraini employees according to national legislation.

### 11.4 Safe and Respectful Work Environment

- The University upholds an Equality, Diversity, and Inclusion Policy that prohibits discrimination and harassment based on gender, nationality, disability, age, religion, or any personal characteristic. Occupational health and safety standards are implemented through:
- Campus-wide risk management systems,
- Laboratory Health and Safety Guidelines (2020),
- Occupational Health and Safety Program (180/2019),
- Emergency preparedness procedures and regular facility inspections.

All employees are entitled to a healthy, safe, and respectful working environment.

### 11.5 Transparent Communication and Complaint Channels

The University is integrated with the national “Tawasul” Government Platform, enabling employees to confidentially submit inquiries or complaints and track the resolution process directly with University leadership.

### 11.6 Supportive Work Conditions

The University provides:

- On-campus housing for non-Bahraini faculty.
- Access to medical services, wellness facilities, and work-life balance programs.
- Opportunities to join national professional associations (engineering, legal, scientific) to strengthen professional representation and development.

Through its legally compliant labour-rights framework, functional collective bargaining mechanisms, inclusive governance councils, staff-led quality processes, and structured representation platforms, the University of Bahrain demonstrates strong alignment with SDG 8.2.9 – Labour Rights. The University ensures equitable, safe, and non-discriminatory working conditions for all employees, with full and equal protections for women and international staff in accordance with national legislation and international labour standards.

# **9** **INDUSTRY, INNOVATION AND INFRASTRUCTURE**





## INDUSTRY INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.

The University of Bahrain (UoB) actively supports Sustainable Development Goal 9 (SDG 9): Industry, Innovation, and Infrastructure, which calls for building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation.

Through its advanced digital transformation strategy, global partnerships, and entrepreneurship-centered educational model, UoB contributes directly to developing a sustainable innovation ecosystem in Bahrain.

This report highlights a set of institutional initiatives and partnerships that strengthen research, infrastructure, and entrepreneurship at UoB:

1. The UoB Cloud Innovation Center (a collaboration with AWS and Tamkeen);
2. The UoB Incubation Center;
3. Senior Project Exhibitions at the Colleges of Engineering and Information Technology;
4. The Huawei ICT Academy partnership.

Together, these initiatives build national capacity for innovation, enable technology transfer, support emerging industries, and align Bahrain's education sector with the UN 2030 Agenda for Sustainable Development and Bahrain's Vision 2030.

### UOB Cloud Innovation Center (CIC) – Partnership with AWS and Tamkeen

The University of Bahrain Cloud Innovation Center (CIC) is a flagship partnership between the University of Bahrain, Amazon Web Services (AWS), and Tamkeen, representing one of the most advanced university–industry–government collaborations in the Kingdom. The CIC is the first AWS-affiliated innovation center in the region dedicated to serve the public sector for free, designed to accelerate digital transformation and provide cloud-based, sustainable, and scalable solutions to national challenges.

The Center aligns closely with the objectives of SDG 9 (Industry, Innovation and Infrastructure), which promotes inclusive and sustainable industrialization, fosters innovation, and builds resilient infrastructure. The CIC embodies this vision by empowering Bahraini innovators and public institutions to leverage emerging technologies to drive efficiency, creativity, and long-term digital resilience.

## Driving Public Sector Innovation through Sustainable Partnership

The CIC operates as a collaborative innovation hub where public entities bring forward operational and strategic challenges, which are then addressed through a collaboration between university students, AWS engineers, UOB faculty, and industry mentors. This model ensures that innovation is not theoretical, but rather applied and impactful, solving real-world problems with measurable public value.

Through this tripartite partnership:

- **AWS** provides access to global expertise in cloud architecture, data analytics, artificial intelligence, and Internet of Things (IoT) solutions, alongside up to the required AWS Cloud credits for experimentation and solution deployment.

- **Tamkeen** funds and supports innovation activities, training programs, and student stipends, ensuring that Bahrain's national human capital development priorities are integrated into every project.
- **UOB** contributes research excellence, technical supervision, and infrastructure (including the UOB CIC facility, high-speed connectivity, and access to university laboratories) to host and manage the innovation process.

Together, these partners have created a sustainable innovation ecosystem that supports the digitalization of government services, stimulates entrepreneurial activity, and enhances the national infrastructure for research and development.



## Enabling Cutting-Edge Solutions for Public Entities

Over the past four years, the CIC has collaborated with more than a dozen public institutions, successfully addressing over 33 national challenges. Each project applies advanced cloud technologies to improve public services, operational efficiency, and citizen engagement. Examples include:

- **Bahrain Paralympic Committee:** Boccia Smart Judging System – the world’s first automated judging system for adaptive sports, improving accuracy and inclusion.
- **Bahrain Authority for Culture and Antiquities (BACA):** AI Hologram Guide and Smart Museum Management System – enhancing visitor experiences and digital preservation of cultural heritage.
- **Ministry of Information Affairs:** Instant Sign Language Translation System – promoting accessibility and inclusion through AI-powered communication tools.
- **Bapco and Tamkeen:** Data Analytics and Sustainability Monitoring Systems – improving decision-making through intelligent data-driven insights.
- **Ministry of Education and Customs Affairs:** VIBE – Visual Interactive Book Experience and SenseAI – leveraging AI and AR to advance education and border efficiency.

These initiatives exemplify how UOB-CIC translates innovation into practical infrastructure improvements, advancing Bahrain’s digital transformation agenda and contributing to the national vision for a smart, diversified economy.

## Building Innovation Capacity and Human Infrastructure

- **Training and Upskilling:** Each semester, CIC organizes specialized workshops and certification programs led by AWS experts, UOB faculty, and industry mentors. Participants gain hands-on experience in cloud computing, AI, ML, IoT, and cybersecurity.
- **Entrepreneurial Enablement:** Through integration with the UOB Business Incubator Center and Tamkeen’s entrepreneurship programs, students receive business development training to turn prototypes into viable startups.
- **Employment Pathways:** Graduates of the CIC programs enjoy exceptionally high employability rates. Many have secured leadership roles in both public and private sectors, further strengthening Bahrain’s digital talent pipeline.
- **Incentive and Recognition Programs:** AWS-funded student incentive schemes reward innovative solutions, motivating young researchers to push technological boundaries.

Through these initiatives, CIC contributes to building a sustainable human infrastructure capable of sustaining innovation ecosystems long after individual projects conclude.



## Recognition and National Impact

The UOB-CIC has achieved national and international recognition as one of the most active and innovative AWS Cloud Innovation Centers globally. Its student-led projects have won multiple awards at the University of Bahrain's senior project exhibitions and have been showcased in front of national decision-makers, including leaders from the Information & eGovernment Authority (IGA), Bahrain Authority for Culture and Antiquities, and Tamkeen.

Several CIC projects have evolved into successful startups valued in the millions of Bahraini Dinars, contributing to economic diversification and job creation. These outcomes illustrate how academic innovation directly supports sustainable industrial growth, aligning with Bahrain's Vision 2030 and the United Nations SDG framework.



## Selected UOB-CIC Innovation Projects and Their Impact

The UOB Cloud Innovation Center (CIC), through its partnership with Amazon Web Services (AWS) and Tamkeen, has developed a diverse portfolio of public-sector projects that leverage cloud computing, artificial intelligence, and IoT to solve real-world challenges in Bahrain.

Each project not only showcases technological creativity but also reflects the Center's mission to build sustainable digital infrastructure and stimulate inclusive innovation ecosystems aligned with SDG 9.

### 1. Boccia Smart Judging System – Partnership with Bahrain Paralympic Committee

#### Objective:

To enhance accessibility and fairness in sports for athletes with disabilities by automating the judging process for Boccia, a Paralympic precision sport.

#### Description:

Developed in collaboration with the Bahrain Paralympic Committee, this project is the first fully automated Boccia judging system in the world. Using AI-powered computer vision and IoT-enabled sensors, the system accurately detects ball positions, measures distances, and provides real-time scoring, eliminating human error and ensuring inclusive participation.

#### SDG 9 Relevance:

- **Innovation:** Pioneers new assistive sports technologies, integrating AI and sensor networks.
- **Infrastructure:** Creates digital infrastructure to support inclusive sports management.
- **Industry Collaboration:** Jointly developed with national sports bodies and AWS engineers.



## 2. AI Hologram Guide and Smart Museum Management System – Partnership with Bahrain Authority for Culture and Antiquities (BACA)

### Objective:

To enrich visitor engagement and modernize cultural infrastructure through interactive technology and smart management.

### Description:

In partnership with BACA, the CIC developed an AI-powered 3D holographic guide that interacts with visitors, answers questions, and provides virtual tours. Complementing it, the Smart Museum Management System digitizes artifact cataloging and storage tracking using cloud-based data management.

### SDG 9 Relevance:

- **Industry Innovation:** Merges cultural preservation with AI, IoT, and cloud solutions.
- **Infrastructure:** Digitally transforms Bahrain's museum systems for sustainable heritage management.
- **Public–Academic Partnership:** Collaboration between BACA, AWS, and UOB faculty and students.

### Impact:

The project represents a new model for digital cultural infrastructure, improving operational efficiency, preserving national heritage, and providing a globally competitive visitor experience.



### 3. Instant Sign Language Translation System - Partnership with Ministry of Information Affairs

#### Objective:

To promote accessibility and inclusion for the hearing-impaired community in Bahrain's media and communication sector.

#### Description:

This innovation utilizes machine learning and computer vision to translate spoken language into real-time sign language animations on digital screens. AWS cloud services provide the computational resources to process data and deliver translations efficiently.

#### SDG 9 Relevance:

- **Inclusive Innovation:** Promotes social equity through accessible communication tools.
- **Digital Infrastructure:** Builds scalable cloud infrastructure supporting national media systems.
- **Public-Private Collaboration:** Developed with input from AWS experts and public media specialists.

### 4. VIBE – Visual Interactive Book Experience – Partnership with Ministry of Education

#### Objective:

To enhance learning engagement through interactive and immersive digital education tools.

#### Description:

"VIBE" is an augmented reality (AR) and AI-based platform that transforms textbooks into interactive learning experiences. Students can scan pages to view 3D models, animations, and voice-assisted explanations hosted on the AWS cloud.

#### SDG 9 Relevance:

- **Innovation in Education Infrastructure:** Advances Bahrain's digital education ecosystem.
- **Industry Linkage:** Bridges academia and edtech industries for scalable learning solutions.
- **Sustainability:** Reduces dependency on printed materials, aligning with green innovation practices.

#### Impact:

VIBE has been recognized for its potential to revolutionize STEM education in Bahrain by making learning more engaging, adaptive, and technologically integrated.

## 5. Kerosene Support Monitoring System – Partnership with Bahrain Petroleum company (Bapco)

### Objective:

To optimize subsidy management and promote efficiency in national energy resource allocation.

### Description:

Developed with Bapco, this project introduces a cloud-based data analytics system for monitoring kerosene consumption and detecting misuse of government subsidies. The platform applies predictive analytics to identify trends and anomalies.

### SDG 9 Relevance:

- **Industry and Infrastructure:** Strengthens digital infrastructure in the national energy sector.
- **Sustainability:** Supports responsible energy management and economic efficiency.
- **Innovation Ecosystem:** Engages students and AWS experts in applied industrial research.

### Impact:

The system has improved transparency and reduced administrative overhead, aligning with Bahrain's broader goal of data-driven public governance.

## 6. “Jalsah” Electronic Conferencing System – Partnership with Ministry of Foreign Affairs and Institute of Public Administration

### Objective:

To improve digital collaboration, meeting efficiency, and information sharing among government institutions.

### Description:

The “Jalsah” system is a secure, cloud-based meeting and documentation platform that facilitates multi-agency coordination and archiving of official communications. It was developed through joint design sprints involving AWS engineers and UOB researchers.

### SDG 9 Relevance:

- **Digital Infrastructure:** Enhances national e-government capacity.
- **Innovation:** Custom-built to meet local governance needs while ensuring data sovereignty.
- **Industry Collaboration:** Involves close engagement between government officials and academic developers.

### Impact:

“Jalsah” contributes to resilient digital governance infrastructure, supporting Bahrain's transformation toward a paperless, connected public sector.

## 7. SenseAI – Partnership with Bahrain Customs Affairs

### Objective:

To enhance border security and customs efficiency using artificial intelligence.

### Description:

SenseAI integrates AI-based recognition systems and IoT sensors to monitor and analyze customs operations in real time. It helps detect irregularities, streamline inspections, and improve border throughput.

### SDG 9 Relevance:

- **Industry Innovation:** Applies AI to enhance logistics infrastructure.
- **Sustainability:** Improves operational efficiency and resource management.
- **Infrastructure Resilience:** Strengthens Bahrain's critical trade and transport infrastructure.

### Impact:

The system supports secure and efficient trade facilitation, contributing to Bahrain's competitiveness in regional logistics.

### Overall Impact

Collectively, these projects illustrate how the UOB-CIC ecosystem contributes to the realization of SDG 9 by:

- **Building resilient digital infrastructure** across diverse national sectors;
- **Fostering sustainable innovation** through academia, industry, and government collaboration;
- **Enhancing national competitiveness** through technology adoption and human capital development.
- **Ensuring inclusivity and accessibility**, embedding sustainability and equality into Bahrain's innovation landscape.

## Capacity Building through Training and Workshops

When students join the University of Bahrain Cloud Innovation Center (UOB-CIC), they participate in a series of structured training sessions and workshops delivered in collaboration with Amazon Web Services (AWS) experts, UOB faculty members, and industry mentors. These sessions are designed to build technical depth, innovation mindset, and collaborative problem-solving skills that prepare students to co-create solutions for real public-sector challenges.



### The core workshops provided typically include:

- **Agentic AI Workshop:** introduces students to the emerging field of Agentic Artificial Intelligence, focusing on the design and development of autonomous, reasoning AI systems. Students learn how to integrate multi-agent systems and large language models (LLMs) with AWS cloud tools to develop dynamic, intelligent, and scalable solutions.
- **Generative AI and AWS Bedrock Workshop:** offers hands-on training in Generative AI technologies and their deployment using AWS Bedrock, Amazon's foundation model service. Participants explore how to build applications powered by generative AI—such as text generation, summarization, and conversational agents, using responsible AI frameworks and secure cloud environments. This workshop directly supports the national drive toward AI-driven innovation and sustainable digital transformation.

- **AWS Foundations Workshop** – provides a comprehensive introduction to AWS cloud architecture and services, covering compute (EC2), storage (S3), identity management (IAM), serverless computing, and security best practices. Students gain essential cloud-skills that underpin Bahrain's future digital infrastructure and sustainable industrial innovation.

- **Hands-On Session: Introduction to GitHub + Development Lifecycle + Team Collaboration:** guides students through modern software-development practices, including version control, agile workflow, continuous integration/deployment (CI/CD), and collaborative coding. This training emphasizes teamwork and project management, skills that are vital for large-scale innovation projects.

- **KickJam Workshop** – a highly interactive design-thinking and ideation session where students, AWS mentors, and UOB faculty collaborate to define project challenges, generate innovative concepts, and create actionable prototypes. Based on Amazon's innovation methodology ("Working Backwards"), KickJam workshops inspire creative problem-solving and foster interdisciplinary collaboration. These workshops are offered each semester and adapt dynamically based on the type of challenges received from public-sector partners and the technologies involved in the innovation cycle—whether Artificial Intelligence, Internet of Things (IoT), data analytics, or blockchain.

By combining technical training, innovation methodology, and industry engagement, the UOB-CIC ensures that every participant develops both hard skills and innovation competencies. This capacity-building approach nurtures a new generation of cloud-

fluent, innovation-driven professionals capable of accelerating Bahrain's transition toward a knowledge-based, digitally empowered economy.

In alignment with SDG 9: Industry, Innovation and Infrastructure, these workshops strengthen Bahrain's human and digital infrastructure by:

- Building advanced technical capacity in cloud and AI technologies.
- Enhancing collaboration between academia, industry, and government.
- Empowering youth to design sustainable, technology-enabled solutions for societal challenges.
- Fostering continuous innovation that contributes to resilient and inclusive economic growth.

The UOB Cloud Innovation Center stands as a national model for sustainable, inclusive innovation infrastructure. Through its partnership with AWS and Tamkeen, it translates the University's research and technical expertise into tangible outcomes that improve public sector performance, empower youth, and strengthen Bahrain's position as a regional hub for digital innovation.

By bridging education, industry, and government, the CIC advances the core goals of SDG 9, fostering resilient infrastructure, promoting sustainable industrialization, and driving innovation that benefits society and the economy alike.



## The Benefit AI Lab: Projects Driving Industry, Innovation, and Infrastructure (SDG 9)

The Benefit Advanced AI and Computing Lab (Benefit AI Lab) is a strategic public-private partnership between the University of Bahrain and Benefit Company, established to advance Bahrain's digital economy in line with the nation's Economic Vision 2030 and the UN Sustainable Development Goals (SDGs). Inspired by royal directives on the importance of artificial intelligence, the Lab's mission is to serve the digital economy by developing human capital, fostering domestic innovation, and providing critical digital infrastructure. Its projects directly support the core tenets of SDG 9: Industry, Innovation, and Infrastructure.

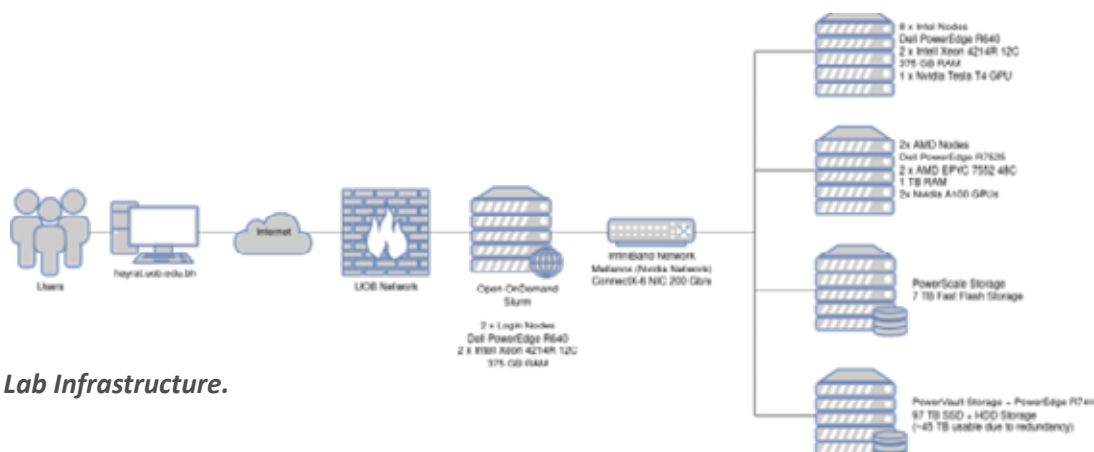
### Core Project: National High-Performance Computing (HPC) Infrastructure (SDG 9.1, 9.4 & 9.8)

At the heart of the Lab is its state-of-the-art High-Performance Computing (HPC) infrastructure, a purpose-built environment for advanced AI research and development. The cluster includes multiple compute nodes, specialized GPU nodes with high-end NVIDIA Tesla T4 and A100 GPUs, and parallel-processing technology designed for intensive machine learning tasks.

Crucially, the HPC cluster was established as a “national resource available to all researchers, students and entrepreneurs in Bahrain”. This mandate transforms the Lab from a university facility into a foundational piece of national innovation infrastructure. By democratizing access to high-cost, high-capability computing, the Lab removes a primary financial and technical barrier to entry for students, startups, and researchers.

This provision of shared, centralized computing power aligns directly with several SDG 9 targets:

- **SDG 9.1 (Resilient Infrastructure):** The HPC cluster represents modern, high-quality digital infrastructure that supports broad economic development and human well-being.
- **SDG 9.4 (Sustainable Upgrades):** A centralized HPC resource is more resource-efficient than multiple decentralized systems, particularly in terms of energy consumption, contributing to the “increased resource-use efficiency” called for by the goal.
- **SDG 9.8 (Access to ICT):** The Lab provides a higher order of access to Information and Communications Technology, empowering users to create new knowledge and technologies, not just consume information.



Benefit Lab Infrastructure.

## Key Initiatives for Innovation and Human Capital

Building on the foundation of its HPC infrastructure, the Lab executes key projects designed to build a self-sustaining innovation ecosystem.

### Building a Skilled Workforce: Advanced Academic Programs (SDG 9.2 & 9.5)

To address the high-tech skills gap, the Benefit AI Lab support a suite of formal, advanced academic programs to create a domestic talent pipeline. These include:

- An MSc program in Machine Learning and Artificial Intelligence.
- An MSc program in Big Data Science and Analytics.
- Undergraduate courses in artificial intelligence and parallel processing.

These specialized programs produce the qualified experts needed to build a knowledge-based economy. This initiative directly supports SDG 9.5 by systematically increasing the number of “research and development workers” in the nation and enhancing scientific research capabilities. Furthermore, by creating a predictable supply of highly skilled local graduates, the Lab makes Bahrain a more attractive destination for high-tech industry, supporting SDG 9.2 (promote inclusive and sustainable industrialization).



*A training session in collaboration with NVIDIA Deep Learning Institute.*

## Fostering Applied Innovation: The Annual AI Hackathon (SDG 9.7 & 9.5)

To translate academic knowledge into practical solutions, the Lab hosts an annual AI Hackathon. The event is explicitly designed to “utilize innovative AI techniques & methods to solve problems... in the Kingdom of Bahrain”. The hackathon convenes undergraduate and postgraduate students from national institutions like the University of Bahrain, Bahrain Polytechnic, and others, giving them access to the Lab’s HPC cluster to build sophisticated AI models.

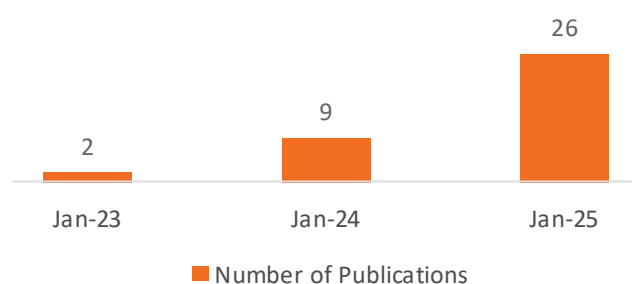
The challenges are rooted in real-world local issues, such as “predicting the size of energy consumption,” “finding methods to generate electricity,” and addressing traffic congestion. This project is a direct implementation of SDG 9.7 (support domestic technology development, research and innovation) by providing the space, tools, and motivation for local talent to create homegrown solutions. It also serves as a catalyst for SDG 9.5 by encouraging applied innovation and problem-solving.



*Projects presentations during Benefit Hackathon.*

## Advancing Scientific Research: Global Partnerships (SDG 9.5)

The Lab's joint research activities with prestigious international partners like CERN further enrich Bahrain's educational and research environment, exposing students and faculty to world-class scientific challenges. This collaboration directly enhances the nation's capacity for high-level scientific research, aligning with the ambitions of SDG 9.5.



## Synthesis of Contributions to SDG 9

The Benefit AI Lab's projects form an integrated system that creates a self-reinforcing cycle of development. The educational programs build talent, the hackathon applies that talent to local problems, and the HPC infrastructure provides the essential tools for both. This holistic ecosystem systematically builds the human, intellectual, and technological capacity required for a sustainable digital future.

Lab Initiative/Project	Description of Contribution	Primary SDG 9 Target	Secondary SDG 9 Target(s)
<b>MSc Programs (ML/AI, Big Data) &amp; Undergraduate Courses</b>	Develops a domestic, high-skilled workforce for the AI and data science sectors, building the nation's core R&D capacity.	9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors... encouraging innovation and substantially increasing the number of research and development workers.	9.2: Promote inclusive and sustainable industrialization... raise industry's share of employment.
<b>Annual AI Hackathon</b>	Incubates local innovation by creating a platform for applying AI to solve national challenges in sectors like energy and transportation.	9.7: Support domestic technology development, research and innovation in developing countries.	9.5: Enhance scientific research... encouraging innovation.  9.4: Upgrade infrastructure and retrofit industries to make them sustainable... greater adoption of clean and environmentally sound technologies.

Lab Initiative/Project	Description of Contribution	Primary SDG 9 Target	Secondary SDG 9 Target(s)
<b>HPC Cluster as a National Resource</b>	Provides democratized access to essential, high-cost computational infrastructure for students, researchers, and entrepreneurs.	9.1: Develop quality, reliable, sustainable and resilient infrastructure... to support economic development.	9.8: Significantly increase access to information and communications technology.  9.4: Upgrade infrastructure... with increased resource-use efficiency.
<b>Joint Research with CERN &amp; Other Partners</b>	Engages in high-level scientific research, enhancing Bahrain's standing in the global research community and providing advanced training opportunities.	9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors.	9.7: Support domestic technology development, research and innovation.

### University of Bahrain–Huawei Bahrain Collaboration: Advancing Digital Skills and Educational Partnerships

In pursuit of Bahrain's national vision for sustainable development and innovation, the University of Bahrain (UoB) has forged a strategic partnership with Huawei Bahrain through the Huawei ICT Academy initiative. This collaboration advances both SDG 17—through the strengthening of cross-sector partnerships—and SDG 4—by improving access to quality technical education and digital skills development.

The initiative represents one of Bahrain's leading examples of industry–academia collaboration designed to build digital capacity, foster innovation, and prepare students for the evolving demands of the global ICT sector. Importantly, the Huawei ICT Academy at UoB operates beyond a single university framework—serving as a national platform for collective training, certification, and knowledge exchange across educational institutions and the public sector.

## Building a National Digital Learning Ecosystem

Following its inception, Huawei supported UoB in establishing the Huawei ICT Academy Lab within the College of Information Technology. This lab provides world-class technology infrastructure, access to proprietary Huawei training materials, and globally recognized certification programs.

While initially founded to serve UoB students and faculty, the Academy has expanded its scope to include universities, local schools, and professional institutions across Bahrain. In 2024, the Academy program evolved into a multi-institutional collaboration, delivering ICT capacity building programs to major higher education institutions in the Kingdom.

To strengthen this national reach, UoB is establishing the Huawei ICT Academy Support Center (IASC). The Center functions as a coordination hub that supports other Bahraini universities and schools in implementing accredited ICT training under the Huawei framework. The IASC also plays a central role in delivering specialized workshops and certification courses for public sector professionals, contributing to Bahrain's broader digital transformation and upskilling agenda.

## Collaborative Education and Capacity Development

### 1. Curriculum Integration and Instructor Training

- Integration of Huawei ICT modules—including networking, cloud computing, AI fundamentals, and cybersecurity—into undergraduate courses at UoB and partner institutions.

- Training of 60 faculty members across Bahrain's universities as Huawei Instructors, enabling local delivery of global standards-based training.
- Implementation of instructor development workshops that promoted shared teaching materials and best-practice pedagogy.

### 2. Student and Multi-Institutional Training Programs

- Over 1,200 students from various Bahraini universities and schools completed structured training programs.
- Access to virtual learning tools, real-lab practice sessions, and certification exams increased equitable opportunities for students from different educational and socio-economic backgrounds.

### 3. Public Sector and Continuing Education Activities

- Many professionals from government agencies participated in digital transformation training coordinated through UoB's ICT Academy.
- These modules addressed applied ICT in public service delivery, cybersecurity awareness, and network management—reinforcing the role of education in national sustainability and governance modernization.

## Innovation and Collaborative Engagement

The partnership between UoB and Huawei Bahrain also emphasizes innovation-based learning and cross-sector engagement:

### • Huawei AI Innovation Hackathon 2024:

The event, jointly organized by UoB and Huawei, drew participants from all Bahraini universities under the theme of AI Applications for Sustainable Development. Teams developed projects related to smart city management, environmental monitoring, and digital inclusion. Winners received mentorship and access to Huawei innovation resources.

### • Huawei ICT Competition 2024:

The University of Bahrain continued its role as a central coordinating and mentoring institution, with UoB professors guiding teams from other national universities. This initiative strengthened academic relationships and created a unified learning network across Bahrain's tertiary institutions.



## University of Bahrain (UoB) Business Incubator Center

The UoB Business Incubator Center is the University of Bahrain's primary platform for cultivating enterprise creation, applied innovation, and cross-sector collaboration. It empowers students, faculty, and graduates to transform ideas some of which are derived from academic research into technologically viable and socially relevant ventures.

The Center ensures that knowledge generation at the university directly supports industrial innovation and sustainable entrepreneurship, operationalizing the objectives of SDG 9 – Industry, Innovation and Infrastructure. By bridging higher education, industry, and the entrepreneurial ecosystem, the Center embeds innovation capability within Bahrain's human capital and contributes to national strategies for economic diversification, technological advancement, and resilient industrial growth.

### Purpose and Strategic Focus

The UoB Business Incubator Center provides an enabling environment for transforming creativity into commercially applicable innovations. Its strategic priorities encompass:

- **Entrepreneurship Capacity Building:** Developing a generation of graduates capable of generating businesses grounded in research, technology, and sustainability.
- **Research-to-Industry Connectivity:** Channelling academic work and student projects toward practical industrial or social applications.
- **Cross-Sector Collaboration:** Partnering with national entities, private companies, and nonprofit organizations to strengthen the innovation infrastructure that supports startup creation.

- **SME Development and Industrial Relevance:** Promoting technology-based micro and small enterprises that enhance Bahrain's innovation and SME ecosystem.
- **Inclusive Access:** Ensuring that entrepreneurial opportunities are open to all disciplines and gender groups, contributing to broad-based national industrial inclusion.

### Core Activities and Services

#### 1. Pre Incubation and Ideation

Workshops and ideation camps guide students through the early phases of problem definition, solution design, and prototype building. Participants draw on university labs and technical support to transform abstract research concepts into tangible, testable products.

#### 2. Business Development and Mentorship

Entrepreneurial teams receive customized coaching in market validation, financial planning, and intellectual property protection. Expert mentors from academia and industry refine projects' business models and scalability potential.

#### 3. Innovation Bootcamps and Competitions

The Center annually runs Innovation Challenges and Startup Bootcamps that link student innovators with potential partners and sponsors. These events strengthen creativity, teamwork, and exposure to real entrepreneurial challenges.

#### 4. Legal, Financial, and Marketing Guidance

Specialist advisors assist entrepreneurs in registering their companies, complying with regulatory requirements, and developing branding and go to market strategies.

#### 5. External Partnerships with the Innovation Ecosystem

The Center maintains strong collaborations with national and regional institutions to enrich its incubation programs and create experiential learning opportunities that mirror real market conditions.

#### Partnerships and Collaborative Programs

##### • INJAZ Bahrain Collaboration:

The Center collaborates with INJAZ Bahrain, a leading national organization promoting youth entrepreneurship and employability. Through co hosted programs such as Innovation Camp and Company Program for Universities, UoB students engage in experiential workshops where they design, launch, and manage businesses. This partnership strengthens participants' financial literacy, leadership, and problem solving capabilities.

In 2024, over 300 students from various colleges participated in INJAZ Company Program and over 600 students participated in the Innovation Camps facilitated by the Center. Several teams progressed to national level entrepreneurship competitions, reflecting UoB's strong standing within Bahrain's innovation community.

##### • Mashroo3i Entrepreneurship Engagement:

UoB collaborates with the Mashroo3i Youth Entrepreneurship Program, organized the Labour Fund (Tamkeen) and other national entities. The initiative provides mentorship, soft skills training, and real world exposure by connecting students with Bahraini entrepreneurs and business incubators.

Through the Center's integration with Mashroo3i, UoB students gain first hand knowledge of enterprise operations, contributing to their professional readiness and the expansion of the national entrepreneurial network.

##### • Industry and Agency Linkages:

Continuous engagement with Tamkeen, Bahrain Development Bank, and corporate partners in technology, energy, and finance sectors provides incubated startups access to advisory resources, product testing environments, and commercialization channels.

These partnerships operationalize SDG 9's emphasis on building industrial capacity and fostering technological innovation through cross sectoral collaboration and knowledge transfer.

### Key Achievements (2024)

• **Incubation and Startup Creation:**

The Center supports 34 projects spanning AI, FinTech, Renewable Energy, Smart Education, Health Technology, and Environmental Solutions.

• **Entrepreneurship Skills Development:**

Over 480 students, graduates, and faculty participated in structured entrepreneurship programs and workshops throughout the year.

• **Mentorship Ecosystem Expansion:**

A network of 60+ mentors from business, academia, and government agencies was consolidated, providing specialized guidance for emerging ventures.

• **Collaborative Bootcamps:**

Ten high impact Innovation Bootcamps and Challenge Events were hosted, resulting in more than 50 validated concepts moving into incubation or further research development stages.

• **Inter Program Synergy:**

15 senior project teams from the Colleges of Engineering and IT were transitioned into incubation programs, demonstrating the university’s seamless linkage between academic research and enterprise development.

### Quantitative Overview – 2024

Activity Area	Outcome Summary (2024)
Total participants trained	480 students and faculty entrepreneurs
Startups in incubation	34 projects across six key sectors
Mentorship network members	60+ experts and industry leaders
Entrepreneurship events	10 Bootcamps and Innovation Challenges
Collaborative partner programs	INJAZ Bahrain & Mashroo3i entrepreneurship initiatives
Integrations with academic projects	15 senior research projects transitioned to incubation

## Institutional and National Relevance to SDG 9

The UoB Business Incubator Center operationalizes SDG 9 as part of the University's institutional mission.

- **Advancing Inclusive and Sustainable Industrialization:**

The Center supports individuals from diverse disciplines and backgrounds in developing startups that reinforce local supply chains, introduce digital solutions, and expand Bahrain's industrial sectors into high value, sustainable domains.

- **Upgrading Scientific and Technological Capacity:**

By translating applied research and student innovation into functional prototypes and enterprises, UoB contributes to the national knowledge economy and builds the skilled workforce required for advanced industrial activity.

- **Building Innovation Infrastructure:**

The Center strengthens Bahrain's innovation infrastructure by linking educational institutions with the larger entrepreneurship ecosystem—public agencies, investors, accelerators, and corporates—thereby ensuring that digital and industrial transformation is continuously fueled by locally generated knowledge.

Partnerships with INJAZ Bahrain and Mashroo3i further amplify this impact by promoting youth inclusion, entrepreneurship literacy, and private sector engagement, ensuring that the benefits of innovation are distributed broadly across society.

Through these channels, the Center represents a micro infrastructure for sustainable industry formation, embodying how a university can serve as an active pillar of national innovation rather than a passive producer of graduates.

## UOB-EWA Joint Mega PV Project

The UoB-EWA Joint Mega PV project is another addition in the list of initiatives to consolidate UOB's sustainable infrastructure. It aims at ensuring affordable, clean, and renewable energy with its 46.2 MW PV capacity (one of the highest in the country) in partnership with the Bahraini Electricity and Water Authority.

This project has been in preparation since Sept 2023 and is expected to meet all of UOB's energy needs during daytime and save over 50 % in fossil fuel use. It consists of 64600 PV panels distributed over 280,000 sq. m. covering all of the car parks on campus, and is expected to reduce CO2 emissions by 35000 Tons yearly.

[Bahrain Launches Tender For 44 MW Solar Power Plant](#)

## UOB-EWA Industrial Training Programs

The UoB Industrial Training Programs are an integral part of its academic programs and aim at establishing a symbiosis between academia and the local industry. This opens a valuable window of communication and feedback with the companies in order to fine tune UOB's academic programs and better prepare its students for the work environment. This also provides the students with opportunities to contribute towards solving practical problems and challenges facing the local industry through their senior projects. An example of such a collaboration is the Smart and Automated baby incubator project that has been

developed in cooperation between UOB (College of Engineering) and the Salmaniya Hospital. This joint effort resulted in an original incubator design that is being patented and should help in improving fist-aid care for newborn babies. It has won the first prize at an international student invention competition in South Korea in November 2023.



[Students being honored by HE UOB President](#)



[And honored by HE Minister of Health](#)



*First Prize announcement for best student invention in South Korea*



*Project exhibition at South Korea*

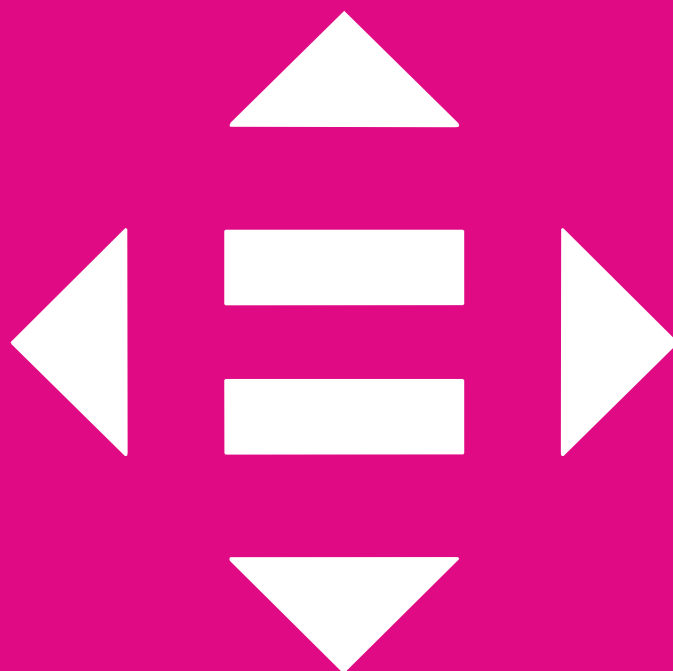


*Honored at the Gulf Council Countries Office for Patents*



*Exhibiting the invention at DUBAI Gitex 2024*

# 10 REDUCED INEQUALITIES





## REDUCED INEQUALITIES

Reduce inequalities for all.

The University of Bahrain (UOB) upholds the principles of fairness, equality, and inclusivity across all aspects of university life. Guided by its Equality, Diversity, and Inclusion (EDI) Policy, UOB ensures that every student and staff member—regardless of gender, socioeconomic background, or physical ability—has equal access to education, facilities, and services. This reflects the University’s strategic alignment with Bahrain’s Vision 2030 goals of justice, equity, and sustainable development.

### Council of Representatives Award for People of Determination

The University of Bahrain’s dedication to inclusivity and empowerment was nationally recognized when a UOB graduation project won the Council of Representatives Award for Empowering People of Determination. The winning project focused on innovative assistive technologies designed to enhance accessibility for individuals with disabilities, reflecting UOB’s commitment to community-centered research and social innovation.

This recognition highlights the University’s broader institutional efforts to integrate inclusion into education, research, and community engagement. By encouraging students to create practical solutions that address accessibility challenges, UOB fosters a culture of empathy, innovation, and social responsibility.

[Read more](#)



## Catalyst Award 2024 for Diversity and Inclusion

Catalyst Award Achievement (SDG 10: Reduced Inequalities)

In 2024, the University of Bahrain (UoB) achieved a milestone that reflects its commitment to diversity, equity, inclusion, and belonging. The University was honored with the Catalyst Award in the Diversity, Equity, Inclusion, and Belonging category, presented by Anthology, a global leader in e-learning systems. This recognition is not only a celebration of UoB's innovative use of technology in education but also a testament to its role in reducing inequalities and ensuring inclusive access to learning opportunities.

The Catalyst Award is a highly competitive global recognition. In 2024, one hundred and eight institutions from nineteen countries submitted applications across nine categories. Out of these, thirty-five winners were selected, and UoB stood out in the Diversity, Equity, Inclusion, and Belonging category. This award highlights UoB's pioneering role in integrating advanced e-learning tools to create a more interactive, comprehensive, and inclusive educational experience. Dr. Fuad Mohammed Al-Ansari, President of UoB, emphasized that this victory reflects the University's pioneering role in employing technology to provide a comprehensive and innovative educational experience. He noted that UoB's achievement enhances its position on the global stage and demonstrates its commitment to comprehensive and advanced education.

This recognition is significant because it directly supports SDG 10: Reduced Inequalities. By embedding diversity and inclusion into its educational practices,

UoB ensures that students from different backgrounds, genders, and social statuses can access high-quality education. The University's initiatives reduce barriers to learning by expanding access through digital platforms, promoting equity in teaching and learning, and creating a culture of belonging where all students feel valued. It also supports women and marginalized groups in their academic journeys, ensuring that education is not limited to those with traditional access but extended to all who aspire to learn.

UoB's success lies in its innovative use of technology. By integrating modern e-learning systems, the University has made education more interactive and engaging, provided flexible access for students who face geographic, financial, or social barriers, and encouraged other institutions to adopt inclusive practices, amplifying the impact beyond Bahrain. This approach ensures that education is extended to diverse learners, thereby reducing inequalities in higher education.

The 2024 Catalyst Award builds on UoB's earlier recognition in 2022, when the University won the Excellence in Innovation Award, also presented by Anthology. That award highlighted UoB's role in promoting innovation and excellence in education. Together, these achievements demonstrate a consistent trajectory of leadership in advancing inclusive, equitable, and innovative educational practices.

The Catalyst Award provides tangible evidence of UoB's contribution to SDG 10: Reduced Inequalities. Its impact can be seen in reducing educational

inequalities by ensuring equal access to advanced learning opportunities, promoting gender equality by supporting women’s participation in education and leadership, enhancing global competitiveness by positioning Bahrain as a hub for inclusive and innovative education, and encouraging institutional change by inspiring other universities to adopt similar practices.

The story of UoB’s Catalyst Award is one of transformation. It demonstrates how a national university can leverage technology to break down barriers, empower diverse learners, and set new standards for inclusivity. It is a story of how innovation and equity can go hand in hand, creating opportunities for those who might otherwise be left behind. By winning this award, UoB has shown that reducing inequalities is not just about policy but about practice—embedding inclusivity into the very fabric of education. This achievement reflects the University’s vision of education as a right for all, not a privilege for a few.

The University of Bahrain’s recognition through the Catalyst Award in 2024 is more than an accolade; it is a testament to its role in shaping inclusive education globally. By aligning its practices with SDG 10: Reduced Inequalities, UoB demonstrates that innovation and equity are powerful drivers of change. This

achievement strengthens Bahrain’s reputation in higher education and contributes to the global movement toward inclusive and sustainable development. It is a narrative of success, impact, and leadership—one that underscores UoB’s commitment to building a future where education reduces inequalities and empowers all learners.



## Financial Aid and Scholarships

UOB recognizes financial accessibility as a cornerstone of educational equality. As the national university, it subsidizes over 90% of tuition fees for Bahraini undergraduate students to ensure that higher education remains affordable and accessible.

Beyond these subsidies, UOB operates a comprehensive financial aid and exemption program to support students facing economic challenges. During the 2023–2024 academic year, 464 students benefited from tuition exemptions and financial assistance provided through the Deanship of Student Affairs. These exemptions are allocated transparently based on need, academic standing, and merit, ensuring fairness and accountability.

UOB also collaborates with public institutions and private sponsors to offer external scholarships that expand opportunities for academically distinguished or financially disadvantaged students. This support framework reflects the University’s commitment to social mobility and equal opportunity for all learners.

[Tuition Fees Information](#), [Tuition Exemption Announcement](#)

## Affordable Food and Student Support Partnerships (OrderJet & Unipal)

To promote affordability and inclusiveness in daily student life, UOB has established strategic partnerships with OrderJet and Unipal, ensuring accessible and affordable food and service options across all campuses.

All food outlets at UOB offer special discounted prices for students, providing a variety of cuisines and price ranges to meet different financial situations. The OrderJet platform simplifies the ordering process, enabling students to view menus and place orders directly through their phones. The platform is also launching a delivery service, further enhancing convenience—especially for students with disabilities or demanding study schedules.

Unipal, a Bahraini student benefits platform, offers UOB students exclusive discounts at more than 100 partner outlets across the Kingdom, including restaurants, cafes, retail shops, gyms, and bookstores. These initiatives enhance students’ financial well-being and ensure that basic needs remain affordable and accessible.

By collaborating with these platforms, the University fosters a financially inclusive campus ecosystem where all students—regardless of economic background—can fully participate in academic and social life.

[Student Services and Food Access Guide](#)

## Accessibility Services and Commitment to Inclusion

The University of Bahrain affirms its deep and continuing commitment to ensuring that all students, regardless of physical, sensory, or learning differences, have equitable access to education and campus life. This commitment is embedded in the University's Equality, Diversity, and Inclusion (EDI) Policy and operationalized through a comprehensive framework of services and infrastructure managed by the Deanship of Student Affairs.

UOB's Accessibility Services provide individualized academic, psychological, and social support to students with disabilities. The University's approach goes beyond physical accessibility to include inclusive pedagogy, mental well-being, and student empowerment. Dedicated counselors, academic advisors, and peer mentors work collaboratively to create an environment that enables students of determination to thrive academically and socially.

The University continuously invests in infrastructure upgrades to enhance physical accessibility across all campuses. Facilities include adapted transportation options, two fully equipped buses, and golf carts that support mobility between colleges, as well as more than 480 designated parking spaces for persons with disabilities. Buildings across the main and satellite campuses are equipped with ramps, elevators, tactile flooring, and accessible restrooms to ensure safe and independent movement for all.

In addition, the Deanship of Student Affairs coordinates with academic colleges to provide Braille and digital materials for visually impaired students and collaborates with the Ministry of Education to

support sign language interpretation for students with hearing impairments. Volunteer student programs also play a crucial role in assisting students of determination during examinations and daily campus activities, reinforcing a culture of empathy and inclusion.

UOB also conducts regular training and awareness programs for faculty and administrative staff on inclusive education practices and the rights of students with disabilities. These initiatives ensure that accessibility and equity are not just services, but a shared responsibility across the university community.

Through these combined measures, the University of Bahrain demonstrates a holistic and proactive approach to inclusion—one that aligns with both the United Nations Convention on the Rights of Persons with Disabilities (CRPD) and Bahrain's national priorities for inclusive education.

[Students with Special Needs Guide \(English\)](#)  
[Students Services and Development](#)

## Initiative: Landmarks in Islamic Culture – A Curriculum for Equality and Social Harmony

In December 2023, the Department of Arabic Language and Islamic Studies at the University of Bahrain (UOB) launched an innovative curriculum reform introducing (Landmarks in Islamic Culture) as a mandatory course for undergraduate students. Developed through collaboration among ten professors, this initiative represents one of UOB's key strategic interventions to embed the values of moderation, equality, and social justice into higher education.

Through eight comprehensive chapters, the course explores social challenges such as economic fairness, gender inclusion, environmental responsibility, and social solidarity, presented through an Islamic ethical and cultural framework. The curriculum bridges classical scholarly thought with modern social realities, demonstrating how cultural and faith based principles can inform equitable policies, civic engagement, and community wellbeing.

The initiative transforms the study of Islamic culture into a multidisciplinary civic education program, engaging students from engineering, business, science, and humanities alike. Discussions on interfaith relations, family structures, and equitable opportunity encourage critical thinking and the ability to view diversity as a strength. Student reported a stronger awareness of fairness and justice in their personal, academic, and social interactions. Faculty noted demonstrable enhancement in tolerance, empathy, and open minded dialogue across classrooms.

The reach of the program—impacting over 12,000 students annually—makes it the ethical initiative of UOB's inclusivity strategy. By ensuring that every student encounters the principles of equality and civic responsibility, UOB is actively cultivating a generation

that supports social cohesion and responsible citizenship in alignment with the Sustainable Development Goals.

In addition to classroom learning, the University extends the course's impact through public exhibitions, community seminars, and interactive sessions local community, where faculty present the course's core themes in accessible, engaging formats. These outreach activities connect academic knowledge with community empowerment, raising awareness of education for sustainable development, social harmony, and inclusion across Bahrain's diverse communities.

Recognizing the transformative potential of this model, UOB is now exploring opportunities to share and adapt the Landmarks in Islamic Culture framework with partner universities regionally. The course design, learning materials, and pedagogical approach can be integrated into other institutions' curricula as a model for teaching inclusion, cultural understanding, and ethical citizenship through local cultural perspectives.

Through both campus and community engagement, Landmarks in Islamic Culture demonstrates how education can be used to reduce social and cultural inequality. It promotes respect for diversity, fosters awareness of social justice, and aligns cultural identity with universal values of fairness, empathy, and human dignity—embodying the mission of SDG 10: Reducing Inequalities within and among societies.

## Initiative: Equal Opportunities through Ethical Finance – UOB and AAOIFI Partnership

On April 30 2024, the University of Bahrain (UOB) entered a five year Memorandum of Understanding (MoU) with the Auditing and Accounting Organization for Islamic Financial Institutions (AAOIFI). Signed during the 22<sup>nd</sup> AAOIFI Shari’a Board Conference, this partnership positions UOB as a regional leader in inclusive and ethical finance education, directly supporting the University’s commitment to advancing social equity, responsible economic opportunity, and sustainable development.

The partnership’s objective is to bridge the gap between academic learning and international professional standards in Shari’a compliant and ethical finance—fields that are often inaccessible to students outside major financial centres. Through this collaboration, UOB and AAOIFI are removing cost and geographic barriers by offering Bahraini and regional students new pathways to professional certification and industry recognized qualifications.

Joint activities include academic conferences, research exchanges, specialized workshops, and certification programs that build technical proficiency while highlighting the ethical foundations of modern finance. Early workshops have introduced students to the integration of Environmental, Social, and Governance (ESG) principles within Islamic finance—demonstrating how sustainable financial tools support fairness, shared prosperity, and accountability in global markets.

By embedding ethical finance education within the University curriculum and aligning it with globally recognized AAOIFI standards, this partnership broadens equal access to high level professional training. It enables students from diverse economic

backgrounds—especially those who may not afford private professional qualifications—to pursue globally relevant careers based on principles of integrity and inclusion.

This collaboration goes beyond academic education. It represents a transformative model of public–private partnership where a university and an international standard setting body jointly democratize access to skill development in a sector shaping global economic equity. Through such alliances, UOB is actively contributing to reducing inequalities within and among societies by:

- Expanding educational access through affordable, high quality professional programs.
- Promoting equal opportunity in emerging sectors of sustainable and Islamic finance.
- Equipping learners with competencies aligned to ethical, inclusive, and sustainable economic growth.

As part of its long term vision, UOB and AAOIFI aim to extend this collaboration to regional partner universities, financial institutions, and community stakeholders through shared events and capacity building seminars. These outreach activities will promote greater understanding of ethical investment, fiscal justice, and financial inclusion, reinforcing Bahrain’s role as a hub for responsible finance aligned with the Sustainable Development Goals.

Through the UOB–AAOIFI partnership, the University exemplifies how higher education institutions can reduce inequality not only in the classroom but also in the financial and professional spheres—ensuring that access to knowledge, qualifications, and ethical prosperity remains open to all.

## Embedding Human Rights in Business Education – UNDP–UOB Workshop

In May 2024, the University of Bahrain (UOB), in strategic collaboration with the United Nations Development Programme (UNDP), hosted a intensive two days Workshop on Business and Human Rights — a milestone dialogue dedicated to reshaping how future business leaders understand ethics, equity, and accountability.

The workshop brought together twenty faculty members from Business, Economics, Law and Accounting disciplines, as well as representatives from governmental and private sector partners. The session’s mission was crystal clear: to embed human rights education within business curricula and ensure that future graduates recognize that competitiveness and compassion are not opposites, but dual imperatives of sustainable enterprise.

The programme was structured as an experiential learning lab, combining expert presentations with scenario based case studies. Guided by UNDP facilitators, participants simulated real world dilemmas — such as ethical supply chain sourcing, gender balance in managerial recruitment, fair labour in offshore production, and the corporate responsibilities arising from environmental externalities. Through these exercises, faculty experienced firsthand the complex intersections between profit, purpose, and social justice.

The workshop also explored global frameworks including the UN Guiding Principles on Business and Human Rights, OECD standards, and emerging ESG (“Environmental, Social & Governance”) benchmarks. Facilitators encouraged participants to analyse Bahraini and regional business contexts, asking how these global principles might be adapted to local conditions. Panels drew attention to issues such as

migrant worker rights in supply chains, equitable access to finance for women entrepreneurs, and ethical governance in small enterprises — all directly linked to SDG 10 (Reduced Inequalities) and SDG 8 (Decent Work and Economic Growth).

The participatory format fostered lively cross disciplinary dialogue, allowing faculty members to co design short course modules and assignments that highlight responsible decision making as a core business competency. Examples developed during the workshop included:

- A finance module that evaluates investments through a “human dignity risk” lens, quantifying the social impact of capital allocation.
- A marketing ethics lab simulating consumer engagement campaigns built on transparency and inclusion.
- A supply chain management project measuring supplier compliance with labour welfare and environmental protection principles.

Post workshop evaluation forms captured resounding impact. Faculty members reported that the collaborative design sessions encouraged them to move beyond theory, embedding fairness and human rights as practical decision frameworks in



their classrooms. This catalytic event did not remain an academic exercise. The College of Business Administration formally adopted a policy commitment to integrate “Equity and Ethics in Enterprise” themes into at least one compulsory course across all undergraduate programmes, ensuring that every graduate is exposed to principles of human rights and social inclusion in business operations. New elective proposals — such as Corporate Justice and Sustainability, and Global Supply Chain Ethics — are currently under review by the college curriculum committee.

The workshop also inspired broader community engagement: faculty participants formed a voluntary Working Group on Responsible Business Education, tasked with developing open access teaching tools and collaborating with Bahrain based companies to

refine fair trade and human capital guidelines. By linking academic research, teaching, and industry partnership, UOB transforms classrooms into laboratories for ethical economic progress.

Through this collaboration, the University of Bahrain and UNDP demonstrated that human rights, when integrated into business education, become mechanisms for reducing inequality rather than abstract moral ideals. By re-orienting business learning towards fairness, dignity, and equal opportunity, the initiative not only aligns with SDG 10’s call for structural inclusivity but also lays a foundation for a new generation of Bahraini business leaders — professionals who view success not solely by financial return, but by the degree to which enterprise uplifts society



## Digital Access for All – Research on Metaverse Enhanced E Learning

At the 7<sup>th</sup> IET Smart Cities Symposium held at the University of Bahrain in December 2023, researchers from the College of Information Technology unveiled a groundbreaking study on metaverse powered e learning systems, signaling a leap forward in inclusive digital education. The project asked a critical question: Can immersive 3D and extended reality environments bridge educational inequalities for students separated by geography, socioeconomic status, or physical limitation?

Over several months, the UOB research team built experimental learning environments using virtual reality (VR) and augmented reality (AR) technologies. Real student engagement datasets—capturing eye tracking movements, interaction duration, and social participation—were analysed to evaluate how these digital spaces influenced motivation and accessibility. Results were illuminating: virtual classrooms reduced isolation in online learning, increased participation among students from remote governorates, and provided safe, responsive learning environments for differently abled students who often face challenges in traditional classrooms.

The project also examined cost dynamics and connectivity barriers common in developing digital economies. By using open source VR frameworks and modular design principles, the team proved that immersive learning need not be expensive or exclusive. A pilot in collaboration with Bahrain Schools Network tested these models on low bandwidth connections, confirming that interactive 3D lessons could operate on standard devices. This opened exciting possibilities for educational inclusion at a national level—particularly for students with limited access to on campus resources.

Beyond the technical findings, the social implications were profound. Informal interviews revealed newly sparked confidence among learners who had previously hesitated to speak in physical classrooms due to language or ability differences. Within the metaverse environment, avatars and shared virtual workspaces reduced visibility based bias, encouraging equal voice in class discussions. Faculty members observed that peer collaboration increased by over 40 percent in VR settings compared to traditional video based e learning.

The study's success inspired institutional action. In early 2024, UOB allocated seed funding for two pilot Metaverse Learning Studios, making it the first public university in Bahrain to turn immersive learning research into operational infrastructure. These labs now serve both instructional and research purposes, enabling educators to design digitized curricula for inclusive, borderless learning.

Through this initiative, UOB directly advances SDG 10 (Reduced Inequalities) and SDG 4 (Quality Education) by translating digital innovation into educational equity. By promoting “access anywhere” education through affordable, immersive simulations, the university exemplifies the principle that connectivity can become equality—ensuring that every learner, regardless of physical location, income, or ability, can participate fully in the future of knowledge.

## Engineering for Equality – World Engineering Day 2024 Hackathon

During 2024, the University of Bahrain joined UNESCO and the World Federation of Engineering Organizations (WFEO) for the World Engineering Day Hackathon, an international celebration of innovation under the theme “Shaping Our Sustainable Future Through Engineering.” This global event mobilized more than 3,000 participants across 90 countries to develop inclusive technological solutions that target some of humanity’s most urgent inequalities—poverty, inadequate housing, and unequal access to basic utilities.

The University of Bahrain’s participation showcased the creativity and civic responsibility of Bahraini engineering students. Guided by faculty mentors from the College of Engineering, UOB’s hackathon teams developed several socially impactful prototypes. Among the most notable were:

- **AgriConnect** – a digital platform linking small scale farmers from rural communities to urban markets, providing real time data on demand, supply, and logistics. The tool allowed producers with limited technical literacy to upload crop availability through simple voice commands, helping ensure fair pricing and steady income streams.
- **AR Home Builder** – an augmented reality mobile app that teaches low income families to construct safe, affordable housing using locally available materials. The app overlays digital architectural guidance onto real world camera views, giving step by step instructions on structure stability and resource efficiency.

UOB’s participation extended beyond invention. The teams’ collaboration reflected a model of inclusion in engineering practice: female engineers led interdisciplinary groups, and mentors conducted real

time virtual coaching to connect Bahraini students with peers from Africa, Asia, and Latin America. Workshops emphasized how inclusive design principles—universal accessibility, cost sensitive production, and user empathy—could combat inequity in developing contexts.

Following the final round, AgriConnect and AR Home Builder were both shortlisted in the top 15 global entries, earning recognition during the international showcase at UNESCO Headquarters in Paris. Beyond the competition, the process itself left a lasting mark. Students reported greater awareness of how engineering decisions influence social cohesion and equal access to resources. One participant explained, “I realized that innovation isn’t just about technology—it’s about who gets to use it.”

The Hackathon thus served as both a competition and a lesson in fairness. By giving equal access to design tools, mentorship, and presentation platforms, the organizers ensured that creativity, not privilege, determined success. Within UOB, the experience is now being leveraged to inspire Engineering for Social Good modules within undergraduate courses and new collaborative projects with local NGOs focusing on assistive technology and rural infrastructure.

Through this initiative, the University of Bahrain reinforces the notion that engineering is a pathway to equality. Every prototype, every team partnership, and every shared code line embodied SDG 10’s principle of “leaving no one behind.” By combining the rigour of technical problem solving with empathy and cultural awareness, UOB’s engineers demonstrated that inclusive innovation is not ancillary to sustainable development—it is its driving force.

# 11 SUSTAINABLE CITIES AND COMMUNITIES





# SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

## 1. Support of arts and heritage

### 1.1 Public Access to Exhibitions and Cultural Spaces:

Although the University of Bahrain does not currently operate a permanent museum facility, it provides occasional free public access to exhibitions, art showcases, and cultural events held across its campuses. These include academic exhibitions, student design showcases, senior projects exhibitions by students, heritage and innovation fairs, and public art displays organised by various colleges and student societies throughout the year. Such events are typically open to students, staff, and community visitors at no charge, offering opportunities to engage with Bahraini creativity, research innovation, and cultural heritage. Examples include annual graduation exhibitions, art and architecture student displays, and innovation fairs held in collaboration with external institutions and partners. Through these exhibitions, the University strengthens its role as a national hub for cultural expression and community learning, contributing to Bahrain's broader cultural and educational landscape while maintaining an inclusive and accessible campus environment.

In alignment with Sustainable Development Goal 11: Sustainable Cities and Communities, the University of Bahrain continues to advance initiatives that promote cultural preservation, sustainable urban design, and community development. Through academic projects, exhibitions, and research symposia, the University fosters innovation and awareness in the fields of architecture, design, and smart city development, reinforcing its role as a driver of sustainable transformation in Bahrain and the region.

The Department of Architecture and Interior Design at the College of Engineering organized the exhibition "Culture and Environmental Design" on April 25, 2024, in the courtyard near the University Library on the Sakhir Campus. The exhibition showcased student projects from the INTA326 course within the Bachelor of Interior Design program, which emphasizes the integration of cultural identity, environmental awareness, and climatic factors into the design process to achieve sustainable design outcomes. More than 100 students, organized into 20 groups, participated in the exhibition, displaying their projects along the



*Department of Architecture and Interior Design organizes "Culture and Environmental Design" Exhibition*

walkway between the library and the food complex. The open-air setting not only encouraged interaction among participants and visitors but also promoted the application of sustainability principles within the university's architectural education framework. [“Culture and Environmental Design” Exhibition](#)

The Department also organized the “Woven Nostalgia” exhibition, which sought to inspire innovation in Bahrain's design industry by bridging cultural heritage with modern design thinking. The exhibition presented creative projects that intertwined stories of the past with visions of the future, emphasizing the importance of cultural continuity and sustainable innovation in shaping the Kingdom's built environment. [“Woven Nostalgia” exhibition](#)

The Cultural and Social Committee of the College of Arts organized seven scientific as part of its cultural program aimed at strengthening the College's role in promoting cultural sustainability and supporting the creative and innovation industries. These seminars provided a platform for dialogue, collaboration, and

the exchange of ideas on topics related to sustainable cultural development and community engagement. [Cultural program with 7 scientific seminars.](#)

During the 7th IET Smart Cities Symposium, held in collaboration with the Institution of Engineering and Technology (IET), United Kingdom, Dr. Fuad Mohammed Al-Ansari, President of the University of Bahrain, reaffirmed the Kingdom's readiness to embrace the concept of smart cities due to its advanced technological infrastructure. In his opening address, Dr. Al-Ansari highlighted the University's ongoing efforts to keep pace with global technological advancements through research, scientific forums, and knowledge-sharing platforms that drive innovation and societal progress. He emphasized the University's expertise in digital twinning for smart cities—a cutting-edge concept involving the creation of comprehensive digital replicas of urban environments using data and digital technologies. This approach supports more informed decision-making, enhances urban planning efficiency, and contributes to improving residents' quality of life. [The 7th Smart Cities Symposium.](#)



*Department of Architecture and Interior Design organizes “Woven Nostalgia” exhibition*

## 1.2 Public access to green spaces:

The University of Bahrain maintains extensive green and open spaces across its campuses, providing an environmentally conscious and aesthetically appealing setting that promotes sustainability, well-being, and community engagement. These landscaped areas, including gardens, shaded walkways, and biodiversity zones- enhance campus life and foster environmental awareness.

While primarily serving students, faculty, and staff, the University offers occasional free access to the public during official events, such as national celebrations (e.g., Bahrain National Day), academic ceremonies (e.g., graduations and open days), and various seminars, conferences, and sustainability initiatives. These events regularly welcome schools, community organizations, and visitors, reinforcing UOB's role as a national hub for learning and engagement.

In addition, paid access is available to external organizations through the Facilities Rental Portal ([facilitiesrental.uob.edu.bh](https://facilitiesrental.uob.edu.bh)), allowing companies, institutions, and partners to book campus venues and outdoor areas for exhibitions, promotional activities, and community programs. This ensures proper management and maintenance of shared spaces.

## 1.3 Record and preserve cultural heritage:

In alignment with national priorities and the Sustainable Development Goals, the University of Bahrain employs an integrated approach to preserve cultural heritage in both its tangible and intangible forms. This includes documenting historical sites, archiving artefacts, and recording oral histories and traditional practices, ensuring that Bahrain's rich cultural legacy is systematically maintained. The University also organizes exhibitions, workshops, and

conferences that promote knowledge sharing and capacity building in heritage preservation.

### UOB Key Initiatives:

- [The annual International Conference on Sustaining Heritage](#) (ICSH) organized by the University of Bahrain, serves as a prominent scholarly platform for the exchange of research and best practices in heritage conservation, digital innovation, and sustainability. The conference brings together experts, academics, and industry professionals to discuss emerging trends, challenges, and technological solutions that support the preservation of cultural heritage in the context of sustainable development. As global environmental challenges intensify, the ICSH emphasizes the critical role of technology in advancing sustainable practices, fostering meaningful dialogue, and promoting collaborative approaches to safeguarding heritage for future generations.

- In October 2023, the University of Bahrain hosted an exhibition titled "[Features of Bahrain's Civilization](#)", organised by the Department of Social Sciences in partnership with the Bahrain Authority for Culture and Antiquities (BACA). University of Bahrain. The exhibition showcased artefacts, texts, short videos and photographs from successive civilizations on Bahraini soil, enabling students and the wider university community to engage first-hand with the Kingdom's historical and archaeological heritage.

- The University of Bahrain actively advances the documentation and preservation of cultural heritage through innovative digital and scholarly initiatives. A key example is the [IEEE](#) published proceedings showcasing advanced methodologies for the digital conservation of heritage assets, highlighting the University's commitment to integrating technologies such as digital modelling, virtual and augmented

reality, and data-capture techniques into heritage-preservation frameworks. By fostering interdisciplinary collaboration across architecture, engineering, heritage science, and computing, the University enables the systematic recording of both tangible and intangible heritage, strengthens institutional capacity for documentation, and bridges academic research with practical heritage management. These initiatives reinforce the University's role in ensuring that Bahrain's cultural heritage is effectively preserved and made accessible for future generations.

- The University reinforces its commitment to cultural heritage preservation through specialized forums that integrate tradition with innovation. A notable example is [Fourth Islamic Architecture and Arts Forum](#), convened by the College of Engineering. At the forum, participants examined how contemporary design and digital technologies are applied to document, reinterpret, and conserve Islamic architectural heritage. Examples include surveying and modelling mosques in Bahrain, blending modern artistic expression with heritage motifs, and using AI-generated visuals alongside traditional forms. By combining heritage documentation with modern technologies, the University supports the systematic recording of built culture and artistic expression, strengthens institutional capacity for heritage conservation, and facilitates the accessible transmission of cultural knowledge to future generations.

- The [architecture curriculum](#) includes a dedicated course titled "Architectural Heritage & Conservation" which teaches students to document, analyse, and conserve heritage buildings in Bahrain, directly contributing to institutional capacity for heritage preservation.

Through these combined efforts, the University enhances its capacity to record, document and preserve the Kingdom's cultural heritage, supporting the national vision of heritage sustainability and ensuring that heritage becomes an enduring resource for research, education and community identity.

## 2. Expenditure on arts and heritage

### 2.1 Arts and heritage expenditure:



**5,651,617/- BD**  
University expenditure



**349,843/337 BD**  
University expenditure on arts and heritage

## 3. Sustainable practices

### 3.1 Sustainable practices targets:



**(5)**  
Electric Vehicles



**(Free Transport)**  
within campus and partnership with the Ministry of Transportation to have buses drop students on Campus

**A2/U2/X2**

A2 Bahrain Investment Gateway - University of Bahrain (Sakhir)

via Airport - Manama - City Centre - Seef - SKBS Hwy - Souq Waqif - Hamad Town - UOB

U2 Qalali - University of Bahrain

via Dair - Samahaj - Busatam - Muharraq - Manama

X2 Manama - University of Bahrain (Sakhir Campus)

via City Centre - Seef - SKBS Hwy - Souq Waqif - Hamad Town

\*Click arrow to view latest maps.

[Bahrainbus](#)

### 3.2 Promote sustainable commuting:

The University has implemented a range of measures to reduce carbon emissions and promote sustainable commuting for students, faculty, and staff. In partnership with the Bahrain Public Transport Company and the Ministry of Transportation and Telecommunications, the University launched dedicated public-transport lines serving its Sakhir campus on September 18, 2022. In addition, free mass-transport services are provided within and between campuses, making sustainable transit accessible to the wider community while helping to reduce traffic congestion and vehicle emissions.

A key initiative, the “Transport, Health and Quality of Life in Smart Cities” Hackathon, brought together over 70 professors and 10 organizations to explore alternative commuting methods, highlighting the University’s commitment to low-carbon mobility. By integrating sustainable commuting solutions into its operations, infrastructure planning, and educational activities, the University actively supports environmentally responsible transport practices.

[Dept. of General Services](#)

### 3.3 Allow remote working:

During the academic year 2023–2024, the University of Bahrain (UoB) aligned its institutional operations with the Kingdom of Bahrain’s nationwide implementation of Instruction 2022-03, the Civil Service Bureau directive that formalizes [remote working](#) arrangements across the public sector. This national policy creates a regulated and standardized framework enabling employees to perform official duties remotely, supporting a transition toward flexible, resilient, and digitally enabled work environments.

In line with this national direction, UoB continued to reinforce remote-working practices across relevant academic and administrative units throughout AY 2023–2024. These practices contributed to **key national objectives by:**

- reducing commuting-related emissions and environmental impacts,
- strengthening digital transformation and e-service delivery,
- enhancing workplace accessibility, operational flexibility, and staff well-being, and
- supporting continuity of essential university services through ICT-enabled processes.
- By aligning with the Kingdom’s sustained remote-working rollout—implemented by several governmental entities for up to 70% of their workforce—UoB directly supported Bahrain’s commitment to embedding sustainable, inclusive, and future-ready work models within public institutions during AY 2023–2024.

This institutional alignment contributes to national progress across multiple SDG targets, particularly SDG 11 (Sustainable Cities and Communities), SDG 9 (Industry, Innovation and Infrastructure), and SDG 16 (Peace, Justice and Strong Institutions). Through this alignment, the University of Bahrain advances its role in promoting a resource-efficient, low-carbon, and digitally empowered public sector, fully consistent with THE Impact Ranking expectations.

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### 3.4 Affordable housing for employees:

During the academic year 2023–2024, the University of Bahrain advanced its commitment to SDG 11: Sustainable Cities and Communities by reinforcing access to affordable, secure, and inclusive housing options for its workforce. In alignment with national frameworks, the Civil Service Bureau implemented a comprehensive housing-allowance system that provides structured financial support to government employees, including university staff, enabling them to obtain adequate and affordable accommodation. The annual allowance schedule—differentiated for single and married employees—ensures equitable access based on family status and employment conditions. This targeted support reduces financial pressure related to housing costs, strengthens social stability, and enhances overall quality of life for university personnel. By guaranteeing that staff have access to safe and appropriate living environments, the policy promotes sustainable, resilient, and people-centered communities.

For the University of Bahrain, this mechanism directly contributes to talent attraction, retention, and workforce continuity, fostering a stable institutional environment that supports academic excellence. The initiative also reinforces national priorities for inclusive urban development, integrating housing affordability with long-term community sustainability. Through this coordinated policy, UoB demonstrates measurable progress toward building a sustainable campus ecosystem, enhancing staff well-being, and supporting the broader SDG 11 objective of making cities and human settlements inclusive, safe, resilient, and sustainable.

[https://csb.gov.bh/MediaManager/Media/Documents/SalaryScales/A03-Eskan\\_allow\\_AR.pdf](https://csb.gov.bh/MediaManager/Media/Documents/SalaryScales/A03-Eskan_allow_AR.pdf)

### 3.5 Local authority collaboration regarding planning and development:

During the academic year 2023 and 2024, the University of Bahrain (UoB) significantly strengthened its collaboration with the Urban Planning and Development Authority (UPDA) under the ongoing Memorandum of Understanding signed in November 2020. This partnership continued to advance evidence-based planning, sustainable land-use management, and resilient urban development in alignment with Bahrain's Vision 2030 and SDG 11 targets.

Over the past two years, UoB and UPDA expanded joint workstreams integrating urban data analytics, GIS-based decision support, and sustainable architecture research to enhance national planning processes. Collaborative projects in 2023–2024 focused on:

- developing smart-city analytical models,
- enhancing urban mobility and accessibility studies,
- conducting community-centered design assessments, and
- applying environmental impact forecasting for future development zones.

UoB faculty and students increased their participation through applied research outputs, technical consultations, and field-based urban assessments that directly support governmental planning needs. These contributions strengthened knowledge transfer, capacity-building, and the application of innovative, low-carbon, and inclusive design principles within national development frameworks.

The Joint Steering Committee, comprising representatives from both institutions, continued to play a central governance role during the academic year 2023–2024. The committee oversaw project prioritization, evaluated research outcomes, facilitated structured data-sharing mechanisms, and coordinated multi-stakeholder policy workshops to reinforce communication between academia and government agencies. This ensured that the partnership remained impactful, measurable, and aligned with global best practices for sustainable, safe, and resilient cities.

# **12 RESPONSIBLE CONSUMPTION AND PRODUCTION**





# RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns.

Responsible Consumption and Production (SDG 12) is integral to the University of Bahrain's institutional vision of "knowledge that serves sustainability."

As Bahrain's national university, UOB acknowledges that education is not only about disseminating ideas but modelling responsible action. The University's plan during 2023–2024 focused on embedding sustainability into everyday practice: raising awareness, reducing waste, integrating sustainability in curricula, and improving infrastructural efficiency.

This report documents UOB's dedicated initiatives that collectively demonstrate tangible progress toward SDG 12. Each project connects knowledge and behaviour, linking individual actions to systemic environmental impact.

## 1. Minimalism and Conscious Consumption

In February 2024, the University of Bahrain launched its SDG 12 activities with a universitywide seminar titled Minimalism and Conscious Consumption, facilitated by sustainability expert Engr. Kai Miethig. The session reframed responsible consumption from a technical concept into a mindset that links institutional efficiency, human wellbeing, and environmental stewardship. Participants from administrative and academic units examined how routine actions—excessive printing, overpurchasing of consumables, redundant documentation, and frequent technology replacement—translate into measurable use of natural resources, particularly energy and water within material supply chains. Discussions grounded sustainability in practical decisions: consuming less means drawing less from waterintensive production, demanding fewer raw materials, and generating less post consumer waste.

The seminar emphasised minimalism as a strategic principle of resource optimisation, using sustainability data to illustrate how each item produced, from office paper to electronic devices, carries an embedded water and energy footprint well beyond direct campus

consumption. By connecting global manufacturing inputs to local behaviour, participants recognised that moderate use on campus indirectly supports SDG 12 targets for sustainable management of natural resources and reduction of waste generation. They identified realistic steps suited to the University's daily operations—shifting to digital circulation of forms and reports, limiting printed coursework to essential cases, reorganising storerooms to use existing supplies before ordering new ones, and encouraging moderation in procurement planning.

Many departments have since applied the minimalist model informally: meeting documentation is now routinely shared electronically, events prefer reusable materials, and several courses include short discussions on mindful consumption. These early changes represent modest but measurable progress toward SDG 12.2 (resource efficiency) and SDG 12.5 (waste reduction) while strengthening awareness of the water and energy embodied in every product or service the University relies upon. By presenting minimalism as a leadership responsibility rather than a restriction, the initiative created a shared

understanding that sustainability begins with deliberate, informed choice and that every avoided unit of material use represents water saved, energy conserved, and production impacts reduced. The Minimalism and Conscious Consumption seminar thus served as the conceptual starting point for the University of Bahrain's continuous action toward responsible consumption and production.

## 2. Sustainability Day – Learning through Action

In March 2024, Bahrain Teachers College (BTC) led the University of Bahrain's flagship community engagement event, Sustainability Day 2024, an experiential learning platform that turned theory on responsible consumption into practical, lived experience. The initiative formed part of the University's broader SDG 12 strategy and demonstrated BTC's leadership in showcasing how education can directly influence behaviour change in support of sustainable lifestyles.

For one day, BTC transformed its courtyard into an interactive learning space divided into four thematic zones — personal, social, environmental, and professional — each highlighting applied actions that connect individual habits to global sustainability outcomes. Students, faculty, and administrative staff moved through the zones exploring demonstrations on waste segregation, energysaving behaviours, water conservation, and sustainable decisionmaking . Hands on activities ranged from crafting multiuse storage boxes from discarded newspaper to friendly contests that tested participants' ability to sort waste correctly under time limits. Each exercise was designed to visualise the hidden flow of resources in ordinary tasks, linking daily consumption to water and energy footprints across production chains.

The event operated under a strict zero single use plastic policy. All decorations were made from reused materials such as repurposed cardboard boxes and recycled paper, while signage and invitations were issued digitally. In place of disposable giveaways, prizes included reusable mugs, potted plants, and handpainted sustainability quotes, reinforcing the value of durability and creativity over convenience. BTC's organisational design itself became a teaching model — an event structured around circular economy principles from conception to cleanup.

Throughout the Day, brief awareness talks and facultystudent presentations tied local action to wider Sustainable Development Goals. Particular focus was given to SDG 12.1 (resource efficiency), SDG 12.2 (waste reduction), and SDG 6.2 (wateruse efficiency). Facilitators illustrated, for example, how choosing a refillable water bottle conserves not only plastic but also the several litres of fresh water used to manufacture a single disposable one. By relating abstract global metrics to personal decisions, participants gained tangible understanding that sustainability begins at the level of daily choice.

A postevent survey recorded measurable influence: more than 40 percent of respondents reported adopting waste segregation in their homes or offices after participating , and many described stronger awareness of how everyday actions affect environmental resources. The event's open design attracted staff, students, and service employees alike, fostering an inclusive sense of shared responsibility that transcended academic boundaries.

Through BTC's leadership, Sustainability Day – Learning through Action showcased how academic institutions can model responsible consumption

not only through policy or curriculum but through community experience. It effectively translated SDG 12 from a theoretical goal into visible, collective practice — an event where environmental mindfulness, social collaboration, and educational purpose merged to create genuine cultural impact.

BTC mentors used each activity to connect daily choices with the broader resource cycle — how using less paper or refusing bottled water indirectly eases pressure on freshwater and energy resources. These discussions linked the experience to SDG 12 targets on waste reduction and efficient use of natural resources and to SDG 6 targets on water efficiency. A short followup questionnaire found that more than 40 percent of participants began separating recyclables at home or in their offices within weeks of the event, and many said the experience changed the way they viewed water and material use.

Because of the clear response from students and staff, the University endorsed BTC's proposal to make Sustainability Day an annual institutional annual event, with different colleges contributing new sustainability themes each year under BTC's coordination. The initiative has since been recognised internally as a model for experiential education that joins environmental literacy, operational efficiency and social participation.

### 3. Stop Single Use Plastic Campaign

On 9 May 2024, the University of Bahrain launched the student-driven campaign "Stop Single Use Plastic," an institution-wide drive to reduce bottled water dependency and disposable packaging. The initiative addressed the continued use of plastic bottles on campus even though water tanks and dispensers are already available in all academic and administrative buildings. The campaign's central goal was to

encourage consistent use of these refill points and establish a refill culture that links daily habits directly to responsible consumption under SDG 12 and efficient water management under SDG 6.

Planned and executed by a group of sustainability-minded students with faculty mentoring, the campaign combined environmental science, communication design, and social engagement. Through colourful displays and student-led discussions, it presented data that plastic is not only a waste problem but one of resource inefficiency — each plastic water bottle embodies several litres of water consumed in production and significant energy expended in manufacture and transport. By revealing these upstream impacts, the initiative reframed the conversation from litter disposal to resource preservation.

Using the memorable slogan "Refill Not Landfill," the campaign unified multiple components: poster exhibitions fabricated entirely from reused cardboard and paper; social media challenges where students documented their daily refilling routines; and small quiz booths made from scrap materials inviting visitors to match household items with their hidden water and carbon footprints. The displays themselves illustrated the campaign ethos — everything built from what already existed on campus — so that the event produced no additional waste or expense.

A core message of the week-long awareness drive was that the university's water tanks and dispensers are an existing sustainability asset that must be fully used. Stickers fixed near the dispensers carried water-saving facts. Departments and student organisations were encouraged to provide drink stations at meetings instead of distributing bottled water. These subtle reinforcements normalised the image of refillable

bottles as standard campus practice rather than a niche environmental gesture.

The campaign also explored behavioural and cultural dimensions of plastic use. Workshops and informal talks helped participants recognise that consumption is often driven by habit and branding rather than necessity. Visual timelines illustrated how a bottle's life cycle — from petroleum extraction to cooling, moulding, packaging, and transport — draws on global water reserves and energy supplies before becoming a single-use item discarded after minutes of use. Linking these stages to students' own daily purchases turned abstract sustainability language into immediate responsibility.

By the close of the campaign, refill stations near water tanks recorded visibly higher use. Faculty encouraged students to re-fill and introduced “bring your own bottle” reminders for gatherings, and academic units voluntarily shifted to reusable dispensers.

The Stop Single-Use Plastic Campaign demonstrated that effective environmental progress does not necessarily require new infrastructure — only smarter engagement with what already exists. Through creative communication and consistent messaging, students helped activate the university's network of water tanks and dispensers as a living demonstration of circular practice. The initiative successfully linked personal convenience to planetary cost, promoting refill behaviour that conserves both water and energy while advancing the University of Bahrain's commitments to Responsibly Consumed Resources (SDG 12) and Water Use Efficiency (SDG 6).

#### 4. My Sustainable Close – Slow Fashion Education

The University of Bahrain participated in a regional sustainability competition between April and November 2024 with the student-initiated project “My Sustainable Closet.” The competition encouraged research and creative communication on sustainable consumption issues, and UOB's students chose to focus on the growing problem of fast fashion – the worldwide trend of buying low-cost clothing in large quantities and discarding it quickly after minimal use. They identified that this pattern of impulsive and emotional purchasing has rapidly become one of the leading causes of textile waste, contributing to landfill overflow and unnecessary consumption of water and energy across production chains. The project aligned directly with SDG 12, as it addressed waste prevention, responsible resource use, and education for sustainable lifestyles.

As part of the competition, it was observed that most young consumers buy clothing for emotional satisfaction, seasonal trends, or social influence rather than actual need, and few considered the environmental consequences of constant wardrobe turnover. Using the findings, the student team carried out a small-scale lifecycle analysis comparing the resource and water requirements for producing typical textile items such as jeans and cotton shirts. These insights confirmed that consumer choices at the individual level directly influence global energy and water demand as well as solid-waste accumulation from textile disposal.

Drawing from this research, the students produced a practical Handbook titled “My Sustainable Closet,”

a guide intended to make shopping more mindful, meaningful, and needbased rather than impulsive or emotionally driven. The handbook summarises clear actions for responsible consumption in everyday life: evaluating real need before purchase, choosing quality and durability over quantity, maintaining and repairing existing garments to extend their lifespan, and exploring clothingexchange or donation channels to prevent waste. It also encourages readers to view fashion as a medium of selfexpression that can coexist with environmental care rather than overconsumption. Simple illustrations explain how thoughtful purchasing positively impacts SDG 12 targets on sustainable production, waste reduction, and resource efficiency as well as SDG 6 targets on water sustainability, given the high water footprint of textile manufacturing.

To broaden awareness, the students organised small swapevents and presentations where they shared research results and distributed the handbook electronically. The approach turned statistical information into relatable examples; audiences easily connected the data on waste accumulation with their own shopping behaviour. Discussions often extended beyond clothing to cover broader lifestyle choices, reinforcing that conscious buying is part of a holistic sustainableliving mindset. The project's messages – buy less, choose well, make it last – became touchstones for youthdriven environmental responsibility across campus.

### 5. Sadaf – From the Sea to Creative Hands

Between October and December 2024, the University of Bahrain launched the “Sadaf – From the Sea to Creative Hands” initiative, an innovative communityengagement project that merged environmental sustainability with humanitarian support. Developed within the Department of Media,

Tourism, and Fine Arts, the initiative sought to address two intertwined concerns—the accumulation of natural waste along Bahrain's coasts and the limited creative and emotional outlets available for orphaned children—by transforming discarded seashells into beautiful handcrafted products. The project worked in direct collaboration with local orphancare societies including Al Kawther Society for Social Care, Tree of Life Charity Society, and Sanabel Society for Orphan Care, demonstrating how sustainability programmes can have equal social and environmental purpose.

The “Sadaf Initiative” functioned as a socialmarketing campaign and educational movement. Its core idea revolved around collecting naturally discarded seashells from Bahrain's beaches, cleaning and recycling them, and then repurposing them into accessories and decorative items such as bracelets, necklaces, and small ornaments. These handcrafted pieces were exhibited and sold during a public event held at the University, with all proceeds directed toward supporting local orphan children—providing school materials, festive gifts, and psychologicalcare activities. By upcycling natural waste through art, the initiative reinforced the principle of circular economy central to SDG 12 (Responsible Consumption and Production), while also contributing to SDG 14 (Life Below Water) through coastalwaste reduction and marineecosystem care.

Workshops formed the heart of the campaign. University students, faculty volunteers, and orphans worked side by side in hands on arts sessions where participants learned to polish shells, design small ornaments, and combine colours and textures into creative artefacts. These gatherings provided more than technical skills—they created emotional spaces for selfexpression, confidence building, and social inclusion. For the participating children, handling

natural materials and seeing the final product sold publicly offered a tangible sense of achievement and dignity, aligning the initiative's humanitarian dimension with SDG 1 (No Poverty), SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), and SDG 10 (Reduced Inequalities).

To amplify its reach, the team ran a targeted digital awareness campaign. Short videos and behind-the-scenes clips were shared on Instagram and TikTok, illustrating the journey from raw shells to finished jewellery. These posts attracted youth audiences and built a virtual community of followers who identified with Sadaf's values of creativity, compassion, and environmental responsibility. Social media activity also helped recruit new volunteers and draw attention from local businesses. Through partnerships with 29 commercial and media sponsors, the campaign gained logistical support such as exhibition materials and media coverage.

The University hosted a two-day public exhibition booth showcasing the products and displaying educational materials on marine conservation and recycling. Interactive stations invited visitors to try simple crafting techniques and contribute ideas for reducing waste. Approximately 480 people visited the exhibition, including representatives from public schools, media outlets, and community organisations. The exhibition demonstrated how research, art, and civic engagement can merge to strengthen community solidarity around environmental goals.

Environmentally, Sadaf contributed to Bahrain's coastal preservation by collecting and reusing a material that would otherwise be discarded or sent to landfill. While the project did not quantify its carbon savings, it succeeded in fostering a circular economy mindset and inspiring ongoing volunteer cleanups along the shoreline. Socially, the workshops and charity activities generated measurable psychological benefits: the orphans who participated expressed joy, confidence, and belonging through their creative work. Economically, Sadaf showcased a replicable model for microenterprise—a self-financing, community-oriented craft that supports social welfare while reducing environmental waste. Partnerships with NGOs, businesses, and media outlets also advanced SDG 17 (Partnerships for the Goals) by demonstrating how academia and civil society can collaborate for mutual benefit.

The initiative reached far beyond its modest scale. It inspired volunteerism, strengthened community empathy, and emphasised the potential of art and design as instruments of sustainability education. By merging environmental care with social compassion, "Sadaf: From the Sea to Creative Hands" created a new model of locally grounded sustainable development—one that links marine conservation, creative reuse, and child empowerment into a single, coherent story of hope and responsibility. It remains one of the University of Bahrain's most visible examples of how an SDG 12 commitment can simultaneously heal ecosystems, nurture human potential, and generate lasting cultural change.

## 6. Gharsa – Gamifying Sustainable Agriculture

In December 2024, students designed and launched the educational card game Gharsa (“planting”) to teach resource efficiency in agriculture.

The game simulates real farm management: players balance water, fertilizer, and profit while facing unpredictable weather events.

This simple, engaging format demonstrates the complexity of sustainability decisions and their environmental consequences.

After pilot use in university workshops, Gharsa was introduced to ten public schools during teacher training sessions.

Teachers reported stronger student understanding of water scarcity and interdependence between human choices and natural systems. The project successfully localized global sustainability ideas using Bahraini cultural context and language.

## 7. Transforming Waste into Energy – Research for Circular Systems

Beginning September 2023 and continuing through December 2024, the Transforming Waste into Energy research project examined how Bahrain’s municipal solid waste could be converted into renewable fuels.

Engineering students collaborated with faculty mentors to test organic and food waste in smallscale biodiesel production experiments.

The project achieved up to 60 percent conversion efficiency in laboratory conditions and assessed cost and emissions savings for scaled operations.

The findings were shared in national environmental forums and referenced in policy consultations.

Student participants subsequently developed theses expanding on energy recovery methodologies.

This research not only produced scientific results but also confirmed that the principles of responsible production can guide national waste management innovation.

## 8. Arab IoT and AI Challenge – Technology for Efficiency

The University of Bahrain hosted the national round of the Arab Internet of Things and Artificial Intelligence Challenge through its College of Engineering, marking the third consecutive year that the University served as organiser of the Bahrain IoT and AI Challenge. The Challenge is part of a regional capacity building and preincubation programme that aims to nurture innovative ideas in the fields of IoT, AI and related technologies, and to accelerate digital transformation across Arab countries.

Organised in partnership with the IEEE ComSoc Bahrain Chapter and the Bahrain Society of Engineers, the Challenge provides university students and startups with mentorship, training workshops, and technical guidance to turn ideas into deployable prototypes. National winners from each participating country later compete in the Arab IoT & AI finals held during GITEX Global in Dubai, creating a platform for regional collaboration and knowledge exchange.

The 2024 edition in Bahrain attracted student and startup teams developing technology driven solutions that directly support responsible consumption and sustainable production. Participants created

IoT and AI-based systems that optimise energy consumption in buildings and industries, reduce waste through predictive maintenance and recycling analytics, monitor air and water quality, and support sustainable agriculture. Their projects demonstrated that intelligent automation and data analytics can reduce resource losses and environmental footprints in real time.

Three University of Bahrain teams tested prototypes on campus: a smartbin system signalling fullness to improve collection efficiency; a realtime energy dashboard that adjusts lighting and temperature based on occupancy patterns; and a network of lowcost sensors monitoring indoor air quality. Initial results showed measurable power savings and better scheduling of waste handling, turning the campus into a living laboratory for SDG 12 implementation.

Beyond technological innovation, the Challenge fostered a community of practice linking higher education, industry and government. More than a hundred young innovators from twelve Arab countries — including Algeria, Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Palestine, Qatar, Saudi Arabia and the United Arab Emirates — joined the programme, sharing technical expertise and sustainability knowledge. Extensive public engagement accompanied the competition through UOB's dedicated communication channels and the official socialmedia platforms of the Bahrain IoT and AI Challenge (@bahrainiotai). Regular updates, short videos, and behindthescenes coverage documented mentorship sessions, prototype development, and team achievements, transforming the Challenge into an ongoing learning showcase for both participants and the broader community. Awareness clips such as the official launch video on YouTube ([link](#)) highlighted the scale of Arab collaboration and celebrated

UOB's role as the academic hub catalysing national and regional innovation. This digital storytelling approach aligned with the Challenge's educational mission—using accessible media to explain how data, automation, and artificial intelligence can directly contribute to responsible consumption, smart industry, and more efficient use of natural resources across the Arab region.

As a capacitybuilding initiative, the Bahrain IoT & AI Challenge advanced several interlinked Sustainable Development Goals: SDG 12 by improving efficiency and promoting circular production models; SDG 9 (Industry, Innovation and Infrastructure) by cultivating researchbased engineering capacity; and SDG 17 (Partnerships for the Goals) by joining universities, NGOs, and private sponsors in a shared technological mission. The Challenge has proven that responsible resource use can be built into technology design itself — through algorithms that prevent energy waste, sensors that guide smarter logistics, and digital tools that quantify consumption for continuous improvement.

Through sustained leadership, the University of Bahrain's College of Engineering demonstrated that technology, education, and sustainability are inseparable pillars of modern development. By transforming the Arab IoT & AI Challenge into an active platform for sustainable innovation, the University helped position Bahrain as a regional hub for intelligent, resourceefficient solutions that translate SDG 12 from concept into measurable action.

## 9. Campus Infrastructure and Operational Efficiency

Throughout the 2023/2024 academic year, the university advanced resource-efficiency upgrades that complemented its awareness programs.

**Water Management:** Sensoractivated taps and dualflush toilets implemented across all buildings resulted in an estimated 27 percent reduction in water consumption. Greywater recycled from laboratories in the Engineering Building irrigates campus landscaping, saving around 18 000 litres monthly.

**Energy Efficiency:** Motionsensitive LED lighting in lecture halls cut electricity use by around 12 percent. Timers and occupancy sensors prevent wasted energy during offhours.

**Waste and Material Flow:** Installation of 150 tribin stations for recyclables, compostables, and landfill waste increased recycling from 18 percent to 39 percent of total waste. Contracts with local recyclers ensure responsible endprocessing.

**Procurement and Data Transparency:** The draft Green Procurement Framework established lifecycle analysis for major purchases and vendor sustainability evaluation. The new online Sustainability Portal displays realtime consumption statistics, helping staff and students monitor impacts and stay accountable.

These infrastructure measures ground sustainable culture in the university's physical and policy landscape.

The University of Bahrain classifies its waste streams into four primary categories: inorganic waste, organic waste, toxic waste, and residential waste. This report summarizes the approximate quantities generated annually and highlights the amount recycled or treated.

## 10. Inorganic Waste

Inorganic waste includes paper, plastic, and other materials such as wood and steel.

### • Paper Waste:



**97.28 tons**

Generated in 2024

**21.80 tons**

Generated in 2025



### • Plastic Waste:



**263.10 tons**

Generated in 2024

**168.80 tons**

Generated in 2025



### • Other Inorganic Waste (wood and steel):



**75.591 tons**

Produced in 2024

**74.341 tons**

Produced in 2025



## 12. Toxic Waste

### • Chemical Waste:



**2.3 tons and 2,400 liters**

(liquid waste) in 2024

**2.37 tons and 2,465.5 liters**

(liquid waste) in 2025



## 11. Organic waste

Organic waste consists of landscaping waste, cafeteria food waste, and biological waste.

### • Agricultural (landscaping) waste



**240 tons**

(estimated)

### • Food Waste (cafeterias & food courts):



**870 tons**

(estimated based on student and staff population)

### • Biological Laboratory Waste:



**0.348 tons**

in 2024

**0.130 tons**

in 2025



## 13. Residential Waste

Residential food waste generated from campus housing:



**27.74 tons**

(estimated)

## Summary Tables

**Table 1: Annual Waste Generation**

Waste Category	Sub-category	2024 Amount	2025 Amount	Notes
Inorganic Waste	Paper	97.28 ton	21.8 ton	Recycled
	Plastic	263.1 ton	168.8 ton	Estimated generation
	Wood & Steel	75.591 ton	74.341 ton	Estimated
Organic Waste	Agriculture waste	240 ton	240 ton	Estimated
	Food waste	870 ton	870 ton	Estimated
	Biological waste	0.348 ton	0.130 ton	Lab waste
Toxic Waste	Chemical waste	2.30 ton + 2400 L	2.37 ton + 2465.5 L	Solid + liquid
Residential Waste	Campus housing	27.74 ton	27.74 ton	Estimated

**Table 2: Waste Recycled / Treated**

Waste Category	Sub-category	2024 Amount	2025 Amount
Paper	97.28 ton	2024	Fully recycled
	21.8 ton	2025	
Agriculture waste	240 ton	Annual	Composted / contracted disposal
Biological waste	0.348 ton	2024	Treated/ contracted disposal
	0.130 ton	2025	
Chemical waste (solid)	2.40 ton	Annual	Hazardous disposal/ contracted disposal
Chemical waste (liquid)	2,471 L	Annual	Neutralized / contracted disposal

# 13 CLIMATE ACTION





## CLIMATE ACTION

Take urgent action to combat climate change and its impacts

The University of Bahrain (UOB), with its strong dedication to research, education, and community involvement, is leading the charge in combating climate change. Strong action against climate change and its effects is urgently needed, and UOB is in line with Sustainable Development Goal 13 (SDG 13). The institution is committed to sustainability and climate resilience, guided by Bahrain's National Renewable Energy Plan. The University of Bahrain is expected to achieve carbon neutrality in 2027, upon the completion of the project and its becoming operational in Q3 2026. In order to meet the climate goals the Kingdom committed to at COP26, namely a 30 percent reduction in emissions by 2035 on the path to net-zero emissions by 2060, Bahrain revealed its National Energy Strategy, a transparent, credible, and responsible approach.

[Bahrain unveils National Energy Strategy to achieve net zero emissions by 2060](#)

This report outlines the university's energy use, climate change research, and preparations for coping with the effects of climate change. It also shows the university's efforts to inform and educate the general public about the significance of taking action.

### Low-carbon energy use

The university is committed to quantifying the amount of low-carbon energy utilized on campus in order to support our commitment to sustainability. This entails evaluating and measuring the overall amount of energy produced by low-carbon or renewable sources, such solar, tracking annual electricity use, and figuring out the carbon footprint in relation to the university's population. This establishes its contribution to the total energy usage of the university.

#### • Low-carbon energy tracking

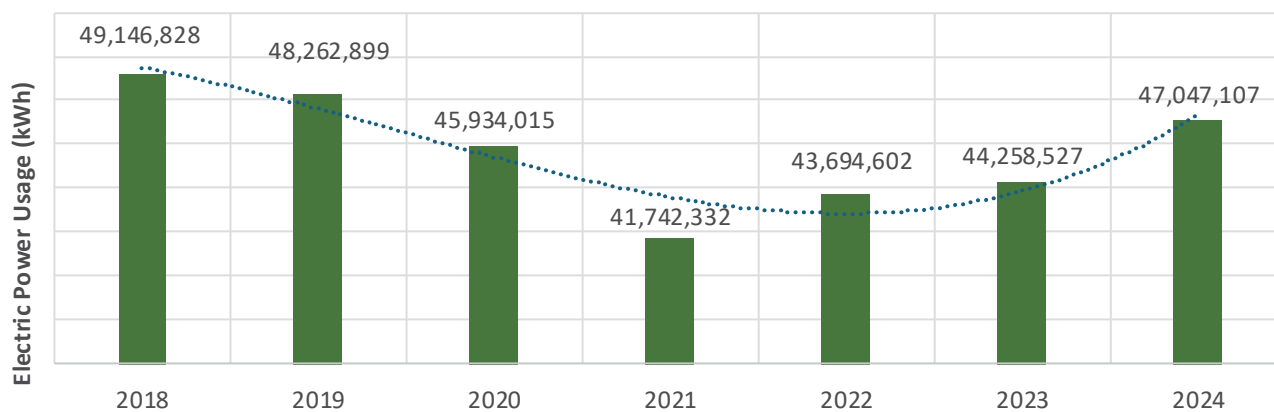
Within the Sakhir campus of the University of Bahrain, transportation (Scope 1) and power use (Scope 2) are the two primary sources of emissions.

Free shuttle services are offered by the university to move employees and students between buildings and colleges as well as from parking lots to the appropriate buildings and colleges. Students with special needs are also eligible for shuttle assistance. As a result,

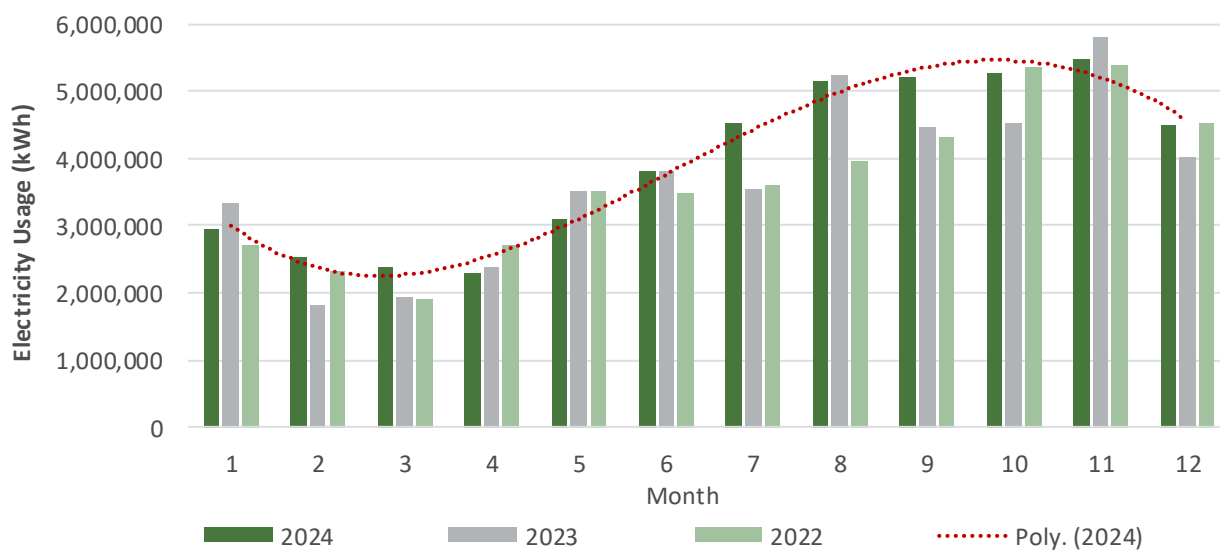
the fleet of buses on campus is responsible for the transportation emissions included in this report.

Electricity is the total amount of energy consumed in all Sakhir campus facilities during the entire year (2024). The Electricity and Water Authority of Bahrain, the country's water and electricity supplier, generated the electrical bills that were used to calculate the energy usage for 2024.

In the year 2024, the Sakhir Campus used 47,047,107 kWh of power. The main campus of the University of Bahrain in Sakhir uses electricity for lab equipment, lighting, and cooling.



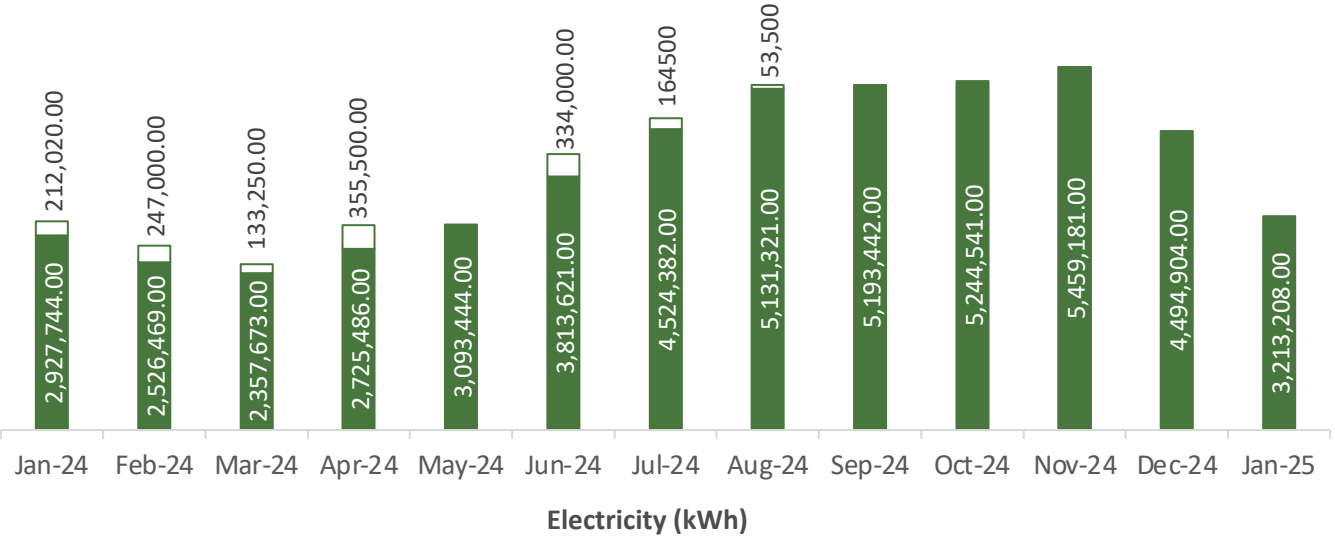
Annual Electricity Consumption in 2018-2024 (University of Bahrain Main Campus, Bahrain)



Monthly Electricity Consumption (kWh) (University of Bahrain Main Campus, Bahrain)

A 6.3% increase in electrical energy usage was recorded in 2024 compared to 2023. However, the electricity used in 2024 was still lower than that in 2019 (pre-CODID-19) by 2.5%.

Considering the university population (27,700 students +1,300 staff) to be ~29,000, the electricity usage is 1,622 kWh/person.



Electricity consumption (kWh) table:

Month	2021	2022	2023	2024
Jan	2,589,965.862	2,712,180.345	3,317,067	2,927,744
Feb	1,671,678.621	2,310,075.690	1,816,687	2,526,469
March	1,723,723.793	1,907,971.034	1,926,037	2,357,673
April	2,166,824.138	2,698,203.172	2,363,331	2,275,486
May	2,830,221.724	3,482,850.000	3,516,168	3,093,444
June	4,091,584.828	3,474,806.897	3,795,202	3,813,621
July	4,352,988.621	3,583,533.448	3,531,941	4,524,382
Aug	5,206,118.966	3,946,895.034	5,232,102	5,134,732
Sep	4,679,582.069	4,310,256.621	4,442,963	5,193,424
Oct	4,993,696.207	5,344,799.310	4,507,463	5,245,410
Nov	4,228,432.069	5,384,655.517	5,809,203	5,459,818
Dec	3,207,514.828	4,528,375.172	4,000,363	4,494,904
Total	41,742,332	43,694,602	44,258,527	47,047,107

### Scope 1: Transportation

The emissions from the university bus fleet are 875.93 tons of CO<sub>2</sub> equivalent.

### Scope 2: Electricity

The energy consumption of the year 2024 was directly sourced from the electricity bills produced by Electricity and Water Authority in Bahrain, which is the provider of the electricity and water. The total electricity for the Sakhir campus in 2024 was 48,991,978 KWh.

The emissions resulted from the total electricity consumption in Sakir campus are 23,272.69 tons CO<sub>2</sub> equivalent. Total Emissions from scope 1 and scope 2 in 2024 = 24,148.62 tons CO<sub>2</sub> equivalent. Most of the emission is attributed to the electricity consumption of 96.37% .

### Contribution of emissions from transportation and electricity consumption

Scope	Source	Emissions (t CO <sub>2</sub> e)	Contribution %
1	Shuttles	875.93	3.63
2	Electricity	23,272.69	96.37
Total		24,148.62	

### • Low-carbon sources

In June 2012, the UOB installed a 'smart' array, with each panel in the array having its own micro-inverter to convert the DC to AC and connect to the grid. Moreover, each PV panel reports on itself (power produced, fault, voltage, and current produced). The array consists of 2,088 PV panels (polycrystalline) with a total area of 3,400 m<sup>2</sup> covering a total ground area of nearly 100,000 m<sup>2</sup>. The PV panels are distributed in 8 rows with 261 PV panels per row. Each panel

measures 1.64 m x 0.992 m x 0.35 m, and weighs 18.2 kg, generating a maximum of 240 W under standard test conditions.

The following table presents the actual monthly and total PV electricity production (kWh) from the UOB PV Farm for 2024. PV electricity production in 2024 was 13% lower than in 2023.

### *The Total Carbon Footprint (CO<sub>2</sub> emission in the last 12 months, in metric tons) was calculated as follows:*

Date	Actual kWh
Jan	2,927,744
Feb	2,526,469
March	2,357,673
April	2,275,486
May	3,093,444
June	3,813,621
July	4,524,382
Aug	5,134,732
Sep	5,193,424
Oct	5,245,410
Nov	5,459,818
Dec	4,494,904
Total	47,047,107

The ratio of renewable energy production divided by total energy usage per year is determined to be at 0.92% as shown in the table below:

No	Energy	Quantity (kWh)
1	Renewable Solar Energy produced	435,150
2	Total Electricity Consumed	47,047,107
	Percentage	0.92%

In addition, as per the university’s management plan to equip the buildings with smart technologies and solutions. low-energy technologies and installations are applied in several projects such as the renovation of the toilets in which elements of green buildings are incorporated (Infra-red taps, two-button flush toilets, etc.)

Moreover, the University of Bahrain replaced most of the fluorescent lamps on the campuses with LED ones. Through its awareness of the impact of energy reduction on global warming, all street lighting

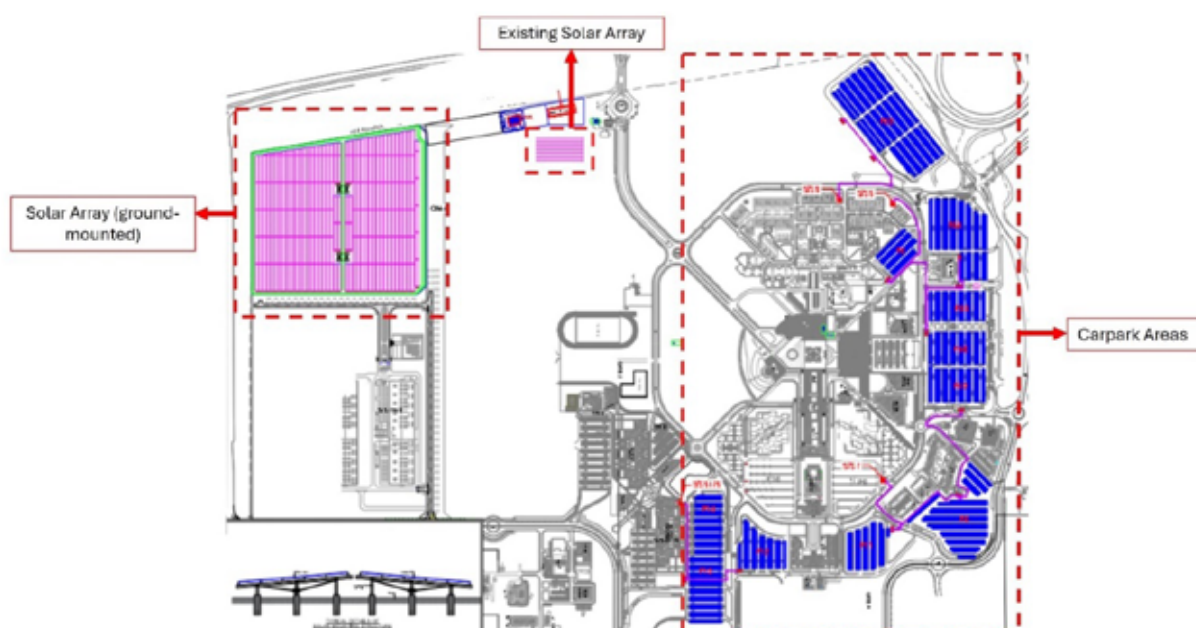
columns in the parking areas (both the old and the new planned ones) are using LED lamps. Additional energy savings are achieved through the use of Energy Star computers, energy-efficient water heaters, and insulated water pipes. The air conditioning is achieved either by chillers (old buildings), central A/C systems (new buildings), or split A/Cs (classrooms and offices in old buildings that are not connected to the chillers). More than half of the split A/Cs are 6-star rated.

Appliance	Total Number	Total number of energy-efficient appliances	Percentage
Lamps	11308	11000 LED Lamps	97.27%
Split A/C	116	58 6-star rated A/Cs	55%
Average Percentage			76%



The Electricity and Water Authority (EWA) plans to establish a solar power plant with a capacity reaching 46.2 MWp on the University of Bahrain campus, aiming to generate approximately 70GWh per year. The university has a vast car park and open land area where EWA intends to develop ground-mounted and car park solar PV systems. This project aligns with Bahrain's commitment to green initiatives to mitigate climate change, as announced by HR the Crown

Prince under the directives of HM the King, aiming to reduce Bahrain's greenhouse gas emissions by 30% by 2035 and achieve net zero by 2060. The tender for the project is implemented on a turnkey basis, covering engineering, design, manufacturing, supply of materials, installation, testing, commissioning, and civil and electromechanical works.



*Solar Power Farm – Car park and ground-mounted locations*

The project is considered one of the largest renewable energy projects implemented at the level of educational institutions in the Kingdom. The project comes as one of the efforts to enhance reliance on sustainable energy sources and achieve Bahrain's renewable energy goals, in accordance with the objectives announced in the \*National Renewable Energy Plan\*, which aims to increase reliance on renewable energy sources by \*20% by 2035\*, and with the Kingdom's goal of achieving carbon neutrality by 2060.

The project occupies an area of approximately 280,000 square meters and utilizes the latest technologies for materials, such as photovoltaic panels. It includes the installation of 64,606 photovoltaic solar panels distributed across parking areas (with a capacity of 24.7 megawatts) and on the ground (with a capacity of 21.5 megawatts), bringing the total system capacity to 46.2 megawatts. The system's annual production is expected to approach 70 gigawatt hours, enhancing spending efficiency and directly benefiting the academic institution.

The system will contribute to reducing the University of Bahrain's total electricity bills by approximately one-third annually. It will also contribute to an annual reduction in carbon emissions estimated at 35,000 tons of carbon dioxide, equivalent to the environmental impact of planting thousands of trees annually. An automated solar panel cleaning system has been adopted to ensure continuous efficiency and efficient operation.

When the system is operational in the third quarter of 2026, the university will be able to meet its entire daytime electricity needs through direct consumption of solar-generated electricity, while exporting the surplus to the national electricity grid. This will contribute to reducing reliance on conventional energy sources and enhancing energy efficiency on campus.

#### FUTURE PROJECTS

### University of Bahrain Solar System Through PPA Scheme

Establishment of a 46.2-megawatt photovoltaic (PV) field on the University of Bahrain (UOB) campus, in alignment with the Power Purchase Agreement (PPA). EWA will serve as the sole investor in this initiative, which involves the Build, Own, Operate, and Maintain (BOOM) model for the solar PV system.

**46.2 MWp**

Capacity



KINGDOM OF BAHRAIN  
Tender Board

[ABOUT](#)

[LEGISLATION](#)

[TENDERS](#)

## Establishment of a 44 MWp Solar Photovoltaic (SPV) Power Plant Under the Capex Model at UOB Campus

Tender Number: 912/2024/BTB (4604/2024/3100)

PA Ref Number: 4604/2024/3100

### Tender Description

The Electricity and Water Authority (EWA) has intended to establish a Minimum of 44 MWp solar power plant in the Campus of University of Bahrain for generating approximately 75 GWh per year. The tender for construction works of the Project will be implemented on Turnkey basis which includes Engineering, Design, Manufacturing, Supply of materials, Installation, Testing & commissioning and Civil & Electromechanical works.

Issued by	Electricity and Water Authority (Planning and Studies)
Internal/External	External
Invitation Method	Public (INTERNATIONAL)

***Electricity and Water Authority (EWA) plans for establishing a solar power plant with a minimum capacity of 44 MWp on the University of Bahrain campus.***

## Environmental education measures

The University of Bahrain is committed to spreading awareness and knowledge on climate change issues. This includes introducing the scientific causes and effects of climate change to the public and national organizations, as well as mitigation and adoption solutions, mainly energy efficiency and renewable resources. This has been achieved through a set of channels that are described below:

### 1. Renewable Energy Labs: workshops and training

Renewable energy labs in the University of Bahrain were established in 2018 and aim to achieve quality research collaboration as well as spread awareness to the public and offer advice to national organizations about renewable resources and energy efficiency.

As a part of the renewable energy labs' strategy to spread awareness to the young generation, visits are arranged targeting school students. During these visits, simple experiments and theoretical materials are delivered to school students to encourage them to be involved in climate change actions and renewable energy resources in the future.

#### • Key Responsibilities:

- Enhance national capabilities by developing research and innovation expertise in sustainable energy and water technologies.
- Conduct comprehensive studies of Bahrain's energy network to evaluate its capacity, readiness for renewable energy integration, and opportunities for energy diversification.
- Provide technical consultations and guidance on the design of climate-friendly and fully integrated energy and water systems for Bahrain and the wider region.

- Build public and institutional confidence in solar, wind, and biomass as viable alternatives to conventional fossil fuels.

- Support Bahrain's vision of becoming a regional model for a low-carbon, sustainable economy.

#### • Services

##### 1. Solar PV Testing Lab

- Tests solar panels and provides clients with comprehensive performance reports.
- Offers researchers and organizations access to solar radiation intensity and weather data in Bahrain.
- Facilitates high-quality solar energy research and innovation projects.
- Organizes workshops and training programs on renewable energy system installation and operation.
- Documents: PV Testing Sample Report, Request Form for Solar and Weather Data.

##### 2. The Biomass Lab

- Tests anaerobic digestion (AD) bacteria tolerance for different types of waste provided by local and private organizations.
- Conducts detailed waste composition analyses for research and industry partners.
- Supports biomass and bioenergy research for M.Sc. and Ph.D. students at the University of Bahrain.
- Documents: Request Form for Sample Testing and Data Analysis at the Biomass Lab.

[Renewable Energy Labs website](#)



*Renewable Energy Labs*

## 2. Environmental education collaborate with NGO

The University of Bahrain (UOB), in partnership with the United Nations Development Programme (UNDP), launched the Sustainable Development Goals (SDGs) Academic Program on September 25, 2024—the first initiative of its kind among regional universities. The program integrates the Sustainable Development Goals (SDGs) into the University's academic framework by embedding sustainability-focused content within English language courses and introducing two specialized courses in environmental science and law.

The launch event was attended by Dr. Mohammed Redha Qader, Vice President for Academic Programs and Graduate Studies, and Ms. Jehan Al-

Murbati, Development Program Officer at UNDP. This collaboration reflects UOB's commitment to enhancing environmental education and fostering a culture of sustainability through partnership with global organizations.

As part of the initiative, 20% of English course content is dedicated to SDG-related themes, ensuring that all first-year students engage with sustainability education. Upon completion, participants receive a dual certification from both the University of Bahrain and UNDP, signifying their foundational understanding of sustainability and climate issues.



### 3.Collaboration Between Industry and Academia to Advance Energy Transformation

The College of Engineering at the University of Bahrain (UoB) organized a panel discussion on “Industry-Academia Cooperation to Advance the Energy Transition”, in collaboration with the U.S. Embassy in Bahrain and the Bahrain Center for Strategic, International and Energy Studies.

Several specialists and academics in the fields of unconventional gas and sustainable energy participated in the seminar, which was held on Thursday, May 2, 2024, at the Media Center, and the discussion was moderated by Dr. Muhammad Ali bin Shams, Head of the Chemical Engineering Department at the University.

The discussion emphasized the critical role of collaborative networks between industry and academia in achieving Bahrain’s energy transition goals. Participants shared insights on innovative approaches to address challenges in renewable and sustainable energy systems, fostering applied research that aligns with national sustainability strategies. The initiative strengthens UoB’s leadership in driving partnerships that connect academic research with industrial application, supporting knowledge transfer and innovation ecosystems.



*The College of Engineering at the University of Bahrain organized a discussion panel on “Collaboration Between Industry and Academia to Advance Energy Transformation,” in cooperation with the U.S. Embassy in Bahrain and the Bahrain Center for Strategic, International, and Energy Studies (May 2, 2024)*

#### 4. Sustainable Energy Educational Programs – College of Engineering

The College of Engineering has launched two M.Sc. programs, one in Renewable Energy Engineering and the other in Sustainable Energy Transition Systems. Such educational programs aim to create a human resources infrastructure in society and industry that is ready for climate action through renewable energy transfer. There are three courses in the First Semester and three courses in the second semester in both programs. During the second year, the students work on their thesis.

[M.Sc. in Renewable Energy Engineering](#)

[M.Sc. in Sustainable Energy Transition Systems](#)

##### • Program Objectives and Structure:

- Both programs aim to build human resource capacity in renewable and sustainable energy sectors, preparing professionals to contribute to national and regional climate action.
- The curriculum includes three courses per semester in the first year, focusing on renewable technologies, energy systems, and climate-responsive design, followed by a research thesis in the second year.
- Students undertake research projects addressing real-world sustainability challenges, contributing to Bahrain's transition toward clean energy and emission reduction.



*Examples of graduate students' thesis topics in the College of Engineering in the past year*



*The EE Department organized a visit to the solar car parking facility at Dragon City, Bahrain, as part of the Master of Renewable Energy students' thesis work.*

## 5. Sustainable Environment and Sustainable Development Educational Programs – College of Science

The College of Science at the University of Bahrain (UoB) offers advanced graduate programs that directly contribute to climate education and research. These include the M.Sc. and Ph.D. in Environment and Sustainable Development, and the recently launched M.Sc. in Environmental Chemistry. The programs aim to develop scientific expertise and practical competencies in understanding, mitigating, and managing the environmental impacts of climate change.

### • Master's Program in Environment and Sustainable Development (ESD):

This master's program at the University of Bahrain directly supports SDG 13.3.1 by strengthening education, awareness, and professional capacity in climate change mitigation, adaptation, and sustainability practices. Established in 2002 with UNESCO's support and redeveloped in 2017 in collaboration with the Prince's Foundation (UK), the program offers two specialized streams: Environmental Science and Development and Sustainable Urbanism.

#### The program's objectives are to:

prepare graduates for successful careers in the environment and sustainable development fields. It also qualifies students for advanced graduate studies in related disciplines. In addition, it aims to empower graduates to serve the community in protecting the environment and advancing sustainability principles.

Through an interdisciplinary and practice-oriented curriculum, the program cultivates the following learning outcomes:

- Application of advanced environmental and sustainability knowledge.
- Critical analysis and comparison of complex environmental challenges and their solutions.
- Integration of emerging sustainability issues through interdisciplinary methods.
- Mastery of professional research, communication, and ethical academic standards.
- Development of intellectual independence for lifelong learning and continued professional growth.

Courses are delivered by faculty from across the University of Bahrain and experts from the Prince's Foundation, supported by collaborations with governmental and non-governmental organizations. The program combines lectures, case studies, field visits, and research projects focused on real-world issues such as energy, water, waste, and pollution. This approach ensures that graduates are equipped with the knowledge, skills, and leadership capacity to advance Bahrain's and the region's transition toward a sustainable and climate-resilient future.

### [Master's Program in Environment and Sustainable Development \(ESD\)](#)

### • Doctor of Philosophy (Ph.D.) in Environment and Sustainable Development (ESD)

The Doctor of Philosophy program at the University of Bahrain plays a pivotal role in advancing SDG 13.3.1 by fostering high-level expertise, research, and leadership in climate action and sustainability. The program emphasizes the development of sustainable systems that promote environmentally responsible, energy-efficient, and economically viable practices that safeguard human and ecological well-being. Anchored in an interdisciplinary framework, the Ph.D. program engages nearly all colleges within the University of Bahrain and collaborates with international partners such as the United Nations University (UNU), the United Nations Development Programme (UNDP), and the United Nations Environment Program (UNEP). This broad collaboration ensures that graduates are equipped to address the most pressing environmental and developmental challenges locally, regionally, and globally.

#### The program's core objectives are to

prepare qualified decision-makers, academics, and environmental managers in sustainable development fields. It advances national and international research and knowledge in sustainability. In addition to contributing effectively to the social, economic, and environmental well-being of communities.

Through a rigorous, research-driven curriculum aligned with the UN Sustainable Development Goals 2030, the program enables students to:

- Apply advanced, up-to-date knowledge in environmental and sustainability sciences.
- Critically analyze and propose solutions to complex global and regional sustainability issues.

- Conduct integrated assessments addressing national, regional, and international environmental challenges.
- Examine emerging developments linked to the 2030 Agenda for Sustainable Development.
- Employ advanced qualitative and quantitative research methodologies.
- Design and execute original, high-impact research in environmental and sustainability fields.
- Communicate research findings effectively through professional academic and policy channels.

By combining interdisciplinary instruction, global partnerships, and applied research, the Ph.D. in ESD prepares graduates to become influential leaders driving sustainable transformation and climate resilience in Bahrain and beyond.

### [Doctor of Philosophy \(Ph.D.\) in Environment and Sustainable Development \(ESD\)](#)

### • Master of Science in Environmental Chemistry

The College of Science has recently introduced a master's program in Environmental Chemistry designed to equip society and industry with skilled graduates. This interdisciplinary curriculum is designed to advance SDG 13.3.1 by preparing leaders capable of addressing environmental challenges through scientific innovation, sustainable practices, and research-based solutions. As global awareness of environmental and chemical safety increases, this program responds to the growing need for professionals who can balance industrial progress with ecological responsibility.

Developed in collaboration with industry experts, the program provides a two-year interdisciplinary curriculum that equips students with advanced theoretical knowledge and hands-on laboratory experience in environmental chemistry. Students engage in applied research across five key areas: Water Purification and Wastewater Treatment, Air Pollution and Its Control, Treatment of Organic Waste, Environmental Corrosion Monitoring Systems, and Environmentally Friendly and Green Products. The program emphasizes real-world problem solving and industry relevance, ensuring graduates are well-prepared to meet the sustainability and innovation needs of the Kingdom of Bahrain and beyond.

#### The program's objectives are to:

- Equip graduates with the scientific and analytical skills to address environmental problems.
- Provide advanced laboratory competencies aligned with industrial and organizational demands.
- Foster independent and applied research capabilities.
- Strengthen the ability to translate innovative research ideas into practical market solutions.

#### Upon completion, graduates will be able to:

- Critically analyze the chemical principles underlying environmental systems.
- Evaluate and apply emerging developments in environmental chemistry.
- Communicate complex scientific concepts effectively to peers and stakeholders.
- Reflect on their skills and progress to support lifelong professional development.
- Develop creative solutions to new environmental challenges through methodological adaptation.
- Systematically assess and synthesize scientific literature to inform sustainable practices.

Through its integration of advanced research, industrial collaboration, and sustainability-driven education, the Master's in Environmental Chemistry empowers graduates to contribute meaningfully to national and global efforts in environmental protection, sustainable industry, and climate action.

#### [Master of Science in Environmental Chemistry](#)



*A research and teaching assistant from the College of Science at the University of Bahrain participated in the Third Gulf Chemists Union Symposium, held in UAE in May 2024, with a research paper that was a result of one of several studies he worked on within the M.Sc. program in Environmental chemistry.*

## 6. Undergraduate Academic Program Courses at the University of Bahrain:

In addition to the postgraduate programs, the University of Bahrain offers a variety of courses within the undergraduate academic programs in different colleges and disciplines that contribute to SDG 13:

### Bahrain Teachers College

- **Teaching Environmental & Earth Sciences2 (TC2SCT413):**

Introduction to environmental and Earth sciences and their link to sustainable development - Quality of air, climate change, and renewable energy - Water resources, biodiversity, and ecosystems - Waste management, food security, and sustainable consumption - Earth's structure and geological systems - The solar system and space - Environmental problem-solving and data analysis - The development of authentic assessment tools for teaching environmental and Earth sciences.

Since ecosystems are one of the main topics in the course. Students gain an understanding that ecosystems play a vital role in regulating the Earth's climate. By studying their structure and function, they realize how protecting and restoring ecosystems contributes to mitigating climate change. This knowledge empowers them to incorporate climate action strategies into their teaching and to inspire pupils toward environmental stewardship and proactive climate responsibility.

The course is also aligned with other SDGs such as: SDG 4, SDG 6, SDG 7, SDG 11, SDG 12, SDG 15, SDG 17.

- **Teaching Environmental & Earth Sciences1 (TC1SC348)**

Introduction to Environmental and Earth Sciences and their relation to Sustainable Development - Biodiversity, ecosystem changes, and scientific inquiry - Sustainable Development Goals and Education for Sustainability - Air quality, climate change, and renewable energy - Water resources, biodiversity, and ecosystems - Waste management, food security, and sustainable consumption - Environmental problem-solving and data analysis - Earth's structure, rocks, and geological phenomena - The solar system and space - Assessment strategies and addressing misconceptions in Environmental and Earth Sciences. Since ecosystems and climate change are central themes, students learn how ecosystems regulate the Earth's climate and how human actions influence these natural systems. They are trained to teach climate literacy and design lessons that inspire environmental stewardship, aligning education with proactive climate action strategies.

The course is also aligned with other SDGs such as: SDG 4, SDG 6, SDG 7, SDG 11, SDG 12, SDG 14, SDG 15, SDG 17

### • Health, Safety, and Nutrition for Children (TCHL418)

Introduction to child health, safety, and nutrition - Daily health checks and coordination with caregivers - Common health conditions among children and management procedures - Safety and first aid in school environments - Indoor, outdoor, and digital safety environments - Physical activity and balanced nutrition - Children's emotional and social wellbeing - Environmental hygiene and disease prevention - Emergency response and first aid procedures - Child protection and supporting students exposed to physical or emotional harm - Communication and collaboration with parents, educators, and health professionals - Designing activities promoting health awareness and wellness education.

The course incorporates awareness of how climate change impacts children's health, air quality, and food security. Students explore preventive measures, such as increasing green spaces, improving air circulation, and promoting eco-friendly school environments that support both planetary and human health.

The course is also aligned with other SDGs such as: SDG 2, SDG 3, SDG 4, SDG 5, SDG 6, SDG 10, SDG 12, SDG 16, SDG 17.

### • General Science (TCSC118)

Examining the importance of environmental conservation, ecosystems, energy and resources, pollution and recycling, biodiversity, the impact of human activities on the environment, and sustainable practices. The topic tackles how different human activities impact the environment, and it promotes sustainable practice to combat climate change.

The course is also aligned with other SDGs such as: SDG 12, SDG 14, SDG 15.

### • Fundamentals of Biology (TC2SC213)

Ecosystem: Biotic and Abiotic Factors, Ecological Levels of Organization, Niche and Habitat, and Types of Ecosystems. Since ecosystem is one of the topics, it provides understanding to students that ecosystems play a key role in regulating the Earth's climate, so understanding their structure and function supports climate action strategies.

The course is also aligned with other SDGs such as: SDG 13, SDG 14, SDG 15.

### • Teaching Environmental Literacy and 21st Century Learning Skills in Science (TCSC228)

The course focuses on developing environmental literacy and 21st-century skills.

Students create lesson plans and assignments centred on SDG themes found in school textbooks. A core theme for student assignments, promoting education on climate change mitigation and adaptation.

The course is also aligned with other SDGs such as: SDG 6, SDG 7, SDG 14, SDG 15.

## College of Business Administration

### • Sustainability Accounting & Reporting (ACC485)

Focuses on sustainability reporting, ESG disclosure, and accountability in business impact.

The course is also aligned with other SDGs such as: SDG 12.

### • Environmental Economics & Sustainable Development (ECON351)

Links environmental sustainability with economic policy for sustainable development.

The course is also aligned with other SDGs such as: SDG 15.

### • Sustainable Finance (FIN330)

Addresses green investment, ESG financing, and climate-related financial risk.

The course is also aligned with other SDGs such as: SDG 7.

## College of Engineering

### • Graduation Project I (ARCH 511)

Prepares students to develop a comprehensive architectural program that integrates functional, human, technical, and environmental considerations. Through this course, students engage in research, site analysis, and the application of sustainable design principles, directly linking to several SDGs: SDG 3 – Good Health and Well-Being: By assessing user needs and activities, students design spaces that promote physical, mental, and social well-being. The integration of renewable energy systems and passive environmental controls aligns student projects with climate-responsive and energy-efficient design practices.

The course is also aligned with other SDGs such as: SDG 3, SDG 4, SDG 9, SDG 11, SDG 12.

### • Graduation Project II – Design Stage (ARCG 520)

focuses on the design stage of the graduation project, enabling students to express creativity, architectural identity, and critical problem-solving skills while addressing complex design challenges. The course's emphasis on integrating environmental, technical, and social considerations connects to several SDGs: SDG 3 – Good Health and Well-Being: Students design spaces that consider user safety, accessibility, and comfort, promoting overall well-being. Environmental and technical integrations, such as passive design strategies and site-specific responses, address energy efficiency and climate resilience.

The course is also aligned with other SDGs such as: SDG 3, SDG 4, SDG 9, SDG 11, SDG 12.

#### • Architectural Design V (ARCG 410)

develops students' architectural design skills with a focus on housing, integrating technical knowledge, social awareness, and environmental considerations. Through site-responsive housing design, material selection, and building systems integration, students create functional, sustainable, and inclusive residential solutions that address diverse user needs. Integration of site orientation, climate responsiveness, and environmental systems encourages energy-efficient and climate-sensitive housing solutions.

The course is also aligned with other SDGs such as: SDG 3, SDG 4, SDG 9, SDG 11, SDG 12.

#### • Vernacular Heritage (ARCG 318)

Vernacular architecture, defined by its reliance on local resources, cultural context, and passive climate strategies, offers a powerful, time-tested model for sustainability. Studying this tradition moves beyond simple historical analysis; it serves as a foundation for designing modern, resilient, and equitable built environments, directly contributing to the achievement of the UN Sustainable Development Goals (SDGs).

The course is also aligned with other SDGs such as: SDG 4, SDG 9, SDG 11, SDG 12.

#### • Highway Engineering

The Highway Engineering course aligns with several United Nations Sustainable Development Goals (SDGs) by emphasizing the development of safe, efficient, and sustainable transport infrastructure. Furthermore, by incorporating economic and environmental considerations in highway planning and design, the course advances SDG 13 (Climate Action) by encouraging sustainable construction practices and minimizing the environmental impact of transportation systems.

The course is also aligned with other SDGs such as: SDG 9, SDG 11.

#### • Traffic Flow and Capacity Analysis

The Advanced Traffic Engineering course aligns with several United Nations Sustainable Development Goals (SDGs) by focusing on innovative, data-driven, and sustainable approaches to traffic management and system optimization. Furthermore, by promoting sustainable traffic operations and reducing vehicular emissions through efficient system design, the course advances SDG 13 (Climate Action) by contributing to the reduction of the environmental footprint of transportation systems.

The course is also aligned with other SDGs such as: SDG 9, SDG 11.

#### • Plant Design Project course (CHENG423)

Environmental impact assessments and sustainability considerations support climate-conscious engineering.

The course is also aligned with other SDGs such as: SDG 3, SDG 4, SDG 9, SDG 12.

#### • Graduation Project Design stage (INTD 411) and (INTD 420)

Both the Programming and Design Stage courses support the SDGs by encouraging students to apply sustainable design principles in their projects. Through researching sustainable materials and energy-efficient tools, students contribute to SDG 13 (Climate Action), fostering environmentally and socially responsible design practices.

The course is also contributes to other SDGs such as: SDG 4, SDG 7, SDG 11, and SDG 12.

#### • Building Construction I (INTA 212)

This course aligns with the UN Sustainable Development Goals (SDGs) by encouraging students to explore sustainable and eco-friendly materials, climate-responsive and energy-efficient techniques, and local construction practices. Through this learning, students contribute to SDG 13, promoting environmentally responsible and contextually appropriate building study.

The course is also contributes to other SDGs such as: SDG 4, SDG 11, and SDG 12.



*Students from the Electrical Engineering Department visited a government school in Bahrain to observe the rooftop solar PV systems as part of the EENG446 Solar and Wind Energy Systems course.*

## 7. Climate Change activities – Seminars

Researchers and faculty at the University of Bahrain are committed to organizing and delivering seminars open to both university students and the public as part of the university's efforts to spread knowledge on sustainability. The following figures present examples of seminars organized by the University of Bahrain and delivered by engineers and scientists from various organizations, including UOB faculty and alumni, to promote a culture of sustainability.



### • The Future of Electric Car in Bahrain (March, 2024)

This seminar explored the prospects and challenges of electric vehicles in Bahrain. Delivered as part of the Energy Conversion and Management Course Webinar Series, the session featured Dr. Bijan Majidi as the speaker and was coordinated by Prof. Ahmed Youssef. The seminar provided insights into technological advancements, market trends, and the potential impact of electric cars on regional sustainability and energy consumption.

**SDG 17 Alignment:** This workshop exemplifies cross-sector collaboration, bringing together university experts and industry leaders to advance sustainable mobility solutions in Bahrain.



### • Energy Efficiency Action Plan (March, 2024)

The seminar on energy efficiency was designed to inform participants about strategic approaches to reducing energy consumption and enhancing sustainability. Zainab Abbas, General Engineer from the Electricity Conservation Section at EWA, was the main speaker, coordinated by Prof. Ahmed Youssef. The session covered practical measures and policy frameworks for implementing energy efficiency across various sectors in Bahrain.

**SDG 17 Alignment:** This initiative highlights collaboration between academia and government agencies, fostering joint action for improved energy management and sustainability.



#### • Fuel Cell Electric Vehicles (March, 2024)

This seminar, part of the MENG 441: Energy Conversion and Management course, focused on the technology and sustainability of fuel cell electric vehicles. Dr. Shaker Haj from the Chemical Engineering Department at UOB was the speaker, with Prof. Ahmed Youssef as coordinator. The session highlighted the environmental benefits and engineering challenges of adopting fuel cell vehicles in Bahrain.

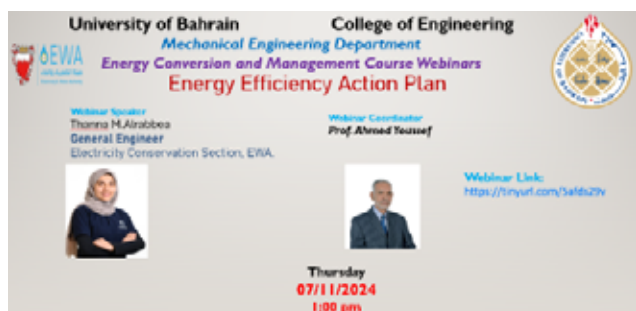
SDG 17 Alignment: The seminar demonstrates partnership between academic departments and external experts to accelerate the transition to clean transportation technologies.



#### • Nuclear Power Plants (April, 2024)

This workshop focused on the fundamentals and future of nuclear power plants, emphasizing their role in sustainable energy production. Dr. Bassam Abdullah Ayed Khuwalleh, Associate Professor at the University of Sharjah, led the session with coordination by Prof. Ahmed Youssef. The seminar addressed nuclear technology, safety considerations, and its relevance to Bahrain's energy strategy.

SDG 17 Alignment: The event demonstrates international academic partnership, with expertise shared between the University of Bahrain and the University of Sharjah to strengthen regional energy knowledge and policy.



#### • Energy Efficiency Action Plan (November, 2024)

Another session on energy efficiency featured Thanna M. Alrabbea, General Engineer at EWA, as the speaker. Coordinated by Prof. Ahmed Youssef, this seminar reinforced the importance of conservation strategies and provided updated approaches for energy management in Bahrain's public and private sectors.

**SDG 17 Alignment:** This workshop underscores the value of ongoing collaboration between the University of Bahrain and government entities to drive sustainable energy practices.



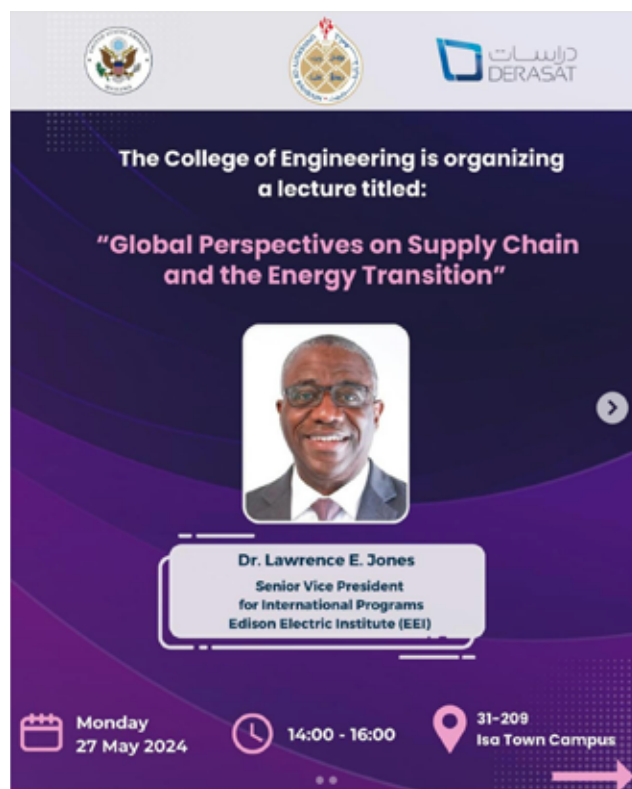
#### • Future of Wind Energy in Bahrain (November, 2024)

This workshop examined the potential for wind energy development in Bahrain. Dr. Hanan Mubarak Albufiase, Assistant Professor at the College of Science, presented the session, coordinated by Prof. Ahmed Youssef. The seminar discussed technological innovations, feasibility studies, and the integration of wind energy into Bahrain's renewable energy portfolio.

**SDG 17 Alignment:** The workshop showcases partnerships between university researchers and national stakeholders to promote renewable energy adoption and innovation.



*The College of Applied Studies at the University of Bahrain organized an introductory lecture on "Using Solar PV Technology in Electrical Design and Installation" in cooperation with Green Innova (Jun 13, 2024).*



*The College of Engineering at the University of Bahrain organized a lecture on "Global Perspective on Supply Chain and the Energy Transition" in cooperation with the U.S. Embassy in Bahrain and the Bahrain Center for Strategic, International, and Energy Studies (May 27, 2024).*



Faculty members from the Electrical Engineering Department attended the Bahrain Decarbonization Seminar 2024, where Eng. Ahmed Khalid Alqattan presented the 'Bahrain Plan to Reach Net-Zero' organized by the Supreme Council for Environment.



The Electrical Engineering Department organized Solar Appreciation Day 2023, showcasing various student solar energy projects and innovations. The event aimed to enhance student awareness of renewable energy technologies and promote practical learning in the field of solar power systems.



The Electrical Engineering Department organized a technical seminar titled “Real-Time Simulations: What It Is, Where It’s Used, and Why It Matters.” The session was presented by Dr. Abdulla Abbasi, Director of the Sustainable Energy Section at the Derasat Center, Bahrain. The seminar provided valuable insights into the concept and applications of real-time simulation technologies (RTDS) in energy systems, highlighting their importance in research, testing, and the development of advanced sustainable energy solutions.



EE Department faculty, Dr. Maamar, presented a research article at the 25th Gulf Engineering Forum

## 8. EE Department organized the technical seminar “Resource Optimization for Green AI Federated Learning for Next-Generation Wireless Networks”, presented by Prof. Naofal A-Shahir, Professor, ECE Department, University of Texas, USA.

The University of Bahrain (UoB) hosted the 7th IET Smart Cities Symposium in collaboration with the Institution of Engineering and Technology (IET), United Kingdom, bringing together experts, researchers, and decision-makers to explore the latest innovations and research in smart city development.

In his opening remarks, Dr. Fuad Mohammed Al-Ansari, President of the University of Bahrain, highlighted Bahrain’s advanced technological infrastructure, which positions the Kingdom to effectively embrace the concept of smart cities. He reaffirmed the University’s commitment to driving innovation and advancing research that supports sustainable and technology-driven urban development.



**RESOURCE OPTIMIZATION FOR GREEN AI  
FEDERATED LEARNING FOR NEXT-GEN WIRELESS  
NETWORKS**



**University of Bahrain**  
**S50**

**Monday 24th February**

**11:00AM - 12:00 PM**

**Prof. Naofal Al-Dhahir**  
*Professor*  
ECE Department Associate Head  
The University of Texas at Dallas



### • Research Significance:

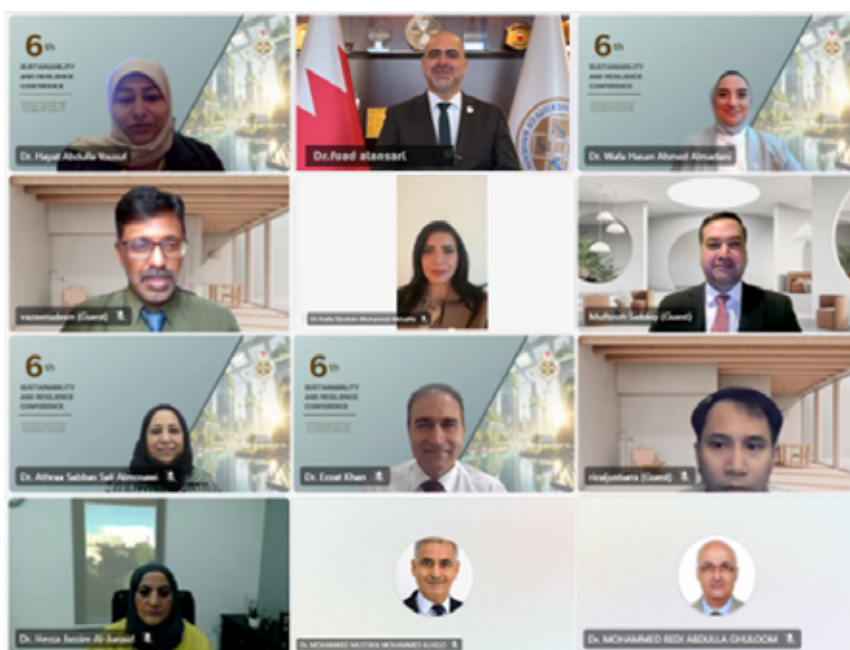
The symposium showcased 125 research papers, including six keynote presentations, addressing a wide range of topics such as sustainability, transportation, healthcare, education, urban design, robotics, and smart infrastructure.

Dr. Al-Ansari underscored UoB's pioneering role in digital twinning for smart cities, emphasizing its potential to enhance decision-making through data-driven urban planning and management.

The event fostered collaborative dialogue among

academia, government, and industry to promote research partnerships and innovative solutions that improve quality of life and support national development goals.

By creating a platform for knowledge exchange, the symposium strengthened UoB's local, regional, and global leadership in smart cities research and sustainable urban innovation.



[The 7th Smart Cities Symposium](#)

### Commitment to carbon-neutral university

The commitment to a carbon-neutral university is witnessed in the university’s initiation of a solar power purchase agreement, where the University of Bahrain will purchase the solar electricity produced by a private company that will build a 46.2 MW solar PV power plant. The University’s climate action plan is outlined in the Policy for Energy and Climate Change that establishes the University of Bahrain’s strategic approach to improving energy efficiency, reducing carbon emissions, and supporting Bahrain’s national vision for a low-carbon economy. It ensures that energy use and climate-related actions across all campuses are sustainable, efficient, and aligned with the principles of environmental stewardship and social responsibility.

### Research on climate action

Climate change and sustainability are two of the subjects that the UOB academics and students are actively researching. Examples of research publications in these fields that were published in 2024 are shown below. Compared to the previous year, there have been much more articles written about sustainability and climate change. The publications and contributions are on a global scale, as is evident.

No	Authors	Title	Year	Source title	Cited by	DOI
1	Islam, G.M.N.; Abrar-UI-Haq, M.; Sankar, J.P.	Social and spiritual factors in building community happiness and wellbeing: The moderating role of education	2024	International Journal of Advanced and Applied Sciences	0	10.21833/ijaas.2024.12.016
2	Al-Taei, S.; Abou Elseoud, M.; Alkhaldi, F.K.	Climate Change-GDP Nexus for GCC Countries: Environmental Kuznets Curve Hypothesis	2024	Sustainability and Climate Change	1	10.1089/scc.2024.0127
3	M. Ishtiaq et al.	Traditional ethnobotanical knowledge of important local plants in Sudhnoti, Azad Kashmir, Pakistan	2024	Scientific Reports	12	10.1038/s41598-024-73431-7
4	Imran, M.; Khan, M.K.; Alam, S.; Wahab, S.; Tufail, M.; Zhang, Z.	The implications of the ecological footprint and renewable energy usage on the financial stability of South Asian countries	2024	Financial Innovation	33	10.1186/s40854-024-00627-1

No	Authors	Title	Year	Source title	Cited by	DOI
5	A.D. Abousoliman et al.	Exploring the relationship between nursing students' knowledge and attitudes towards climate change and their psychological distress: a cross-national investigation	2024	BMC Nursing	9	10.1186/s12912-024-01927-8
6	Sheraz, M.; Sinha, A.; Qin, Q.; Mumtaz, M.Z.	The asymmetric nexus between energy transition and its drivers: New evidence from China	2024	Energy	3	10.1016/j.energy.2024.133236
7	Albalooshi, F.A.	Novel Approach in Vegetation Detection Using Multi-Scale Convolutional Neural Network	2024	Applied Sciences (Switzerland)	2	10.3390/app142210287
8	Permana, D.; Savad Salim, A.S.; Ramli, Y.; Shamansurova, Z.	Analyzing the Impact of Natural Resource Rents, Green Finance and Digital Finance on Environmental Quality: Evidence from Developing Countries	2024	International Journal of Energy Economics and Policy	1	10.32479/ijeep.17147
9	Kaur, C.; Al Ansari, M.S.; Rana, N.; Haralayya, B.; Rajkumari, Y.; Gayathri, K.C.	A study analyzing the major determinants of implementing Internet of Things (IoT) tools in delivering better healthcare services using regression analysis	2024	Bentham Science Publishers	5	10.2174/9789815256680124010022

No	Authors	Title	Year	Source title	Cited by	DOI
11	Saeed, J.; Mehmood, N.; Aftab, S.; Irum, S.; Ashfaq, A.	Unlocking sustainability: the dynamic nexus of organizational support, identification, and green HRM practices in cultivating pro-environmental excellence	2024	Foresight	1	10.1108/FS-03-2023-0037
12	Al Khalifa, F.	Environmental Social Governance Integration in the Gulf Cooperation Council Capital Markets: A Catalyst for Urban Sustainability	2024	Sustainability and Climate Change	0	10.1089/scc.2024.0024
13	Sheraz, M.; Qin, Q.; Mumtaz, M.Z.; Khan, M.H.	Moving toward sustainable goals 7 and 13: An inclusive mechanism to achieve environmental sustainability through digitalization and energy transition in OECD countries	2024	Journal of Environmental Management	10	10.1016/j.jenvman.2024.122288
14	Kosar, N.; Ayub, K.; Gilani, M.A.; Arshad, M.; Imran, M.; Mahmood, T.	Harnessing halides: Comparative study of oxide fullerene modifications for sodium ion secondary battery efficiency	2024	Materials Science in Semiconductor Processing	3	10.1016/j.mssp.2024.108646
15	Alam, S.; Dinçer, H.; Kisswani, K.M.; Khan, M.A.I.; Yüksel, S.; Alsharif, M.	Analysis of green energy-oriented sustainable development goals for emerging economies	2024	Journal of Open Innovation: Technology, Market, and Complexity	8	10.1016/j.joitmc.2024.100368
16	MUNIR, Q.; Lean, H.H.; Teplova, T.; Nazeer, N.	The threshold effect of energy intensity on the emission-growth nexus in Malaysia	2024	Environment, Development and Sustainability	2	10.1007/s10668-023-03600-7

No	Authors	Title	Year	Source title	Cited by	DOI
17	Eweida, R.S.; Najeeb, F.; Khonji, L.M.; Shalhoub, A.A.B.; El-Sayed Mohamed, M.A.; Ibrahim, N.	Looking Back and Moving Forward: A Spatial-Based Pilot Study of Psychological Security and Social Cohesion Among Maldivian Academics amid Climate Change	2024	Sustainability and Climate Change	0	10.1089/scc.2024.0092
18	Bakhsh, S.; Alam, S.; Zhang, W.	Green finance and Sustainable Development Goals: is there a role for geopolitical uncertainty?	2024	Economic Change and Restructuring	11	10.1007/s10644-024-09719-5
19	Ali, M.I.; Dost, S.; Khattak, K.S.; Khan, M.I.; Muhammad, R.	Harnessing the Cloud: A Novel Approach to Smart Solar Plant Monitoring	2024	Future Internet	2	10.3390/fi16060191
20	S. Carlucci et al.	Characteristics of the built environment in the Eastern Mediterranean and Middle East and related energy and climate policies	2024	Energy Efficiency	8	10.1007/s12053-024-10217-w
21	Al-Omran, K.; Khan, E.	Predicting medical waste generation and associated factors using machine learning in the Kingdom of Bahrain	2024	Environmental Science and Pollution Research	5	10.1007/s11356-024-33773-1
22	Alalaiwat, D.; Khan, E.	Post-combustion carbon capture process modeling, simulation, and assessment of synergistic effect of solvents	2024	International Journal of Greenhouse Gas Control	6	10.1016/j.ijggc.2024.104145
23	Hasan, N.; Rizk, C.; AlKhaja, M.; Babikir, E.	Optimisation toward sustainable computed tomography imaging practices	2024	Sustainable Futures	4	10.1016/j.sftr.2024.100176

No	Authors	Title	Year	Source title	Cited by	DOI
24	Hamid, I.; Alam, S.; Baig, I.A.; Jena, P.K.	Nexus Between Institutional Quality and Foreign Direct Investment Inflows: Panel Data Analysis of SAARC Countries	2024	Journal of the Knowledge Economy	7	10.1007/s13132-023-01252-6
26	Ahmed, M.; Alosan, M.A.; Mohammed, W.; Mesbah, E.; Abdulrahman Alsaleh, N.A.; Ghonaimy, I.	Characterizing Land Surface Temperature (LST) through Remote Sensing Data for Small-Scale Urban Development Projects in the Gulf Cooperation Council (GCC)	2024	Sustainability (Switzerland)	5	10.3390/su16093873
25	Al Moray, N.A.	The Integration of 21st-Century Skills in Grade Eight Mathematics Curriculum	2024	Journal of Curriculum and Teaching	0	10.5430/jct.v13n2p271
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36	Irfan, M.; Naga Manikanta, C.H.; Gochhait, S.; Allam, Z.	Green and Renewable Energy Impact on Sustainable Indices: Empirical Study on Selected Indian Stocks	2024	2024 International Conference on Sustainable Islamic Business and Finance (SIBF)	0	10.1109/SIBF63788.2024.10883882
37	Rahim, R.; Rathore, H.S.; Rabbani, M.R.; Alam, M.N.	Maqasid Al-Shariah and Green Finance: A Theoretical Framework on Islamic Finance with Sustainable Development Goals for a Greener Future	2024	2024 International Conference on Sustainable Islamic Business and Finance (SIBF)	0	10.1109/SIBF63788.2024.10883847
38	Sultan, M.; Panigrahi, S.	Critical Review of Embedded Insurance: Opportunities, Challenges and Sustainability in the GCC	2024	2024 International Conference on Sustainable Islamic Business and Finance (SIBF)	0	10.1109/SIBF63788.2024.10883872
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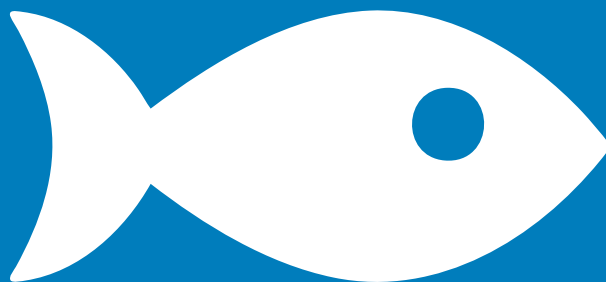
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70	Al-Romaihi, M.A.; Ismail Alalawi, A.	Environmental, Social, and Governance Score: A Predictive Analysis of GCC Countries using Machine Learning	2024	2024 International Conference on Open Innovation and Digital Transformation (OIDT)	0	10.1109/OIDT59407.2024.11082698
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74	Shukla, S.H.	INTEGRATION OF RENEWABLE ENERGY IN SMART CITIES	2024	IET Conference Proceedings	0	10.1049/icp.2025.0939
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77	Abid, N.; Sareen, S.; Haque, M.	Smart Cities and Public Space: The Role of Smart Technologies in Enhancing Public Spaces	2024	IET Conference Proceedings	2	10.1049/icp.2025.0916
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# 14 LIFE BELOW WATER





## LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

As an island nation, the marine environment maintains exceptional ecological, cultural, and economic importance for the Kingdom of Bahrain. Seawaters around Bahrain support diverse marine ecosystems, including coral reefs, mangroves, and seagrass beds. These ecosystems support fisheries, protect shorelines, and contribute to climate resilience. Recognizing these vital roles, the University of Bahrain actively contributes to the conservation and sustainable management of marine resources through education, research, and community engagement. The University's initiatives encompass marine biodiversity studies, awareness campaigns, mangrove restoration projects, and student-led innovations addressing marine pollution and sustainable aquaculture. Through these integrated efforts, the University of Bahrain reinforces its commitment to advancing SDG 14 and safeguarding the nation's marine heritage for future generations.

### 1. Research on Life Below Water

#### Advancing marine and coastal ecosystem science

UOB conducts extensive research in marine and environmental sciences through programs in marine biology, oceanography, fisheries management, and marine pollution studies. These programs equip students with the knowledge and skills to address environmental challenges in the Arabian Gulf.

During the 2024, the College of Science showcased 48 research and applied projects focusing on coastal ecosystem protection, pollution reduction, water quality management, and innovative eco-technologies. A notable project addressed the identification and management of fungal pathogens in mangrove ecosystems, supporting the restoration of these vital habitats.

In addition, UOB integrates cultural and ecological research through seminars such as [‘The Biography of Bahraini Pearls: Cultural History and Sustainability Pathways’](#) (April 2024). The seminar emphasized the interdependence between Bahrain's natural marine resources and its cultural heritage, promoting sustainable management approaches inspired by traditional practices.



[UOB Science Students' Projects Address Environmental and Health Challenges Using New Technologies](#)

## 2. Supporting Aquatic Ecosystems through Education

### Embedding sustainability into curriculum and community learning

The University of Bahrain integrates marine sustainability into formal educational programs and university initiatives to build awareness and responsibility among students and the wider community.

The ‘Sadaf Initiative’ combines marine sustainability with creative recycling by transforming seashell waste into handmade accessories. It engaged students, faculty, and orphaned children in hands-on workshops, promoting environmental awareness, volunteerism, and social inclusion. From October to

December 2024, the initiative reached more than 480 participants through exhibitions and social media outreach.

The Bahrain Teachers College hosted ‘Sustainability Day’ on March 28, 2024, focusing on reducing single-use plastics. Through interactive booths and competitions, the event achieved a 58% reduction in plastic bottle waste over five months, encouraging refillable alternatives and reducing marine litter.



[BTC Students Promote Environmental Awareness on Sustainability Day](#)

### 3. Supporting and Stewarding Aquatic Ecosystems

#### Restoration, conservation, and community partnerships

UOB actively participates in national and community-based environmental restoration programs. In partnership with Clean Up Bahrain, UOB faculty and students joined the Mangrove Tree Planting Campaign (September 2023) supporting the Bahrain Mangroves Initiative. The campaign involved around 100 volunteers and emphasized mangroves' ecological importance in carbon sequestration, shoreline protection, and biodiversity.

Additionally, UOB's wastewater treatment plant at Sakhir Campus treats and reuses 98% of wastewater for irrigation, preventing effluent discharge into marine environments. These practices highlight the University's commitment to ecosystem protection and water management excellence.

### 4. Water-Sensitive Waste Disposal

#### Preventing marine pollution through responsible waste management

UOB prioritizes the prevention of marine pollution through efficient waste and water management systems. The University's zero marine discharge policy, coupled with high wastewater recycling rates, demonstrates sustainable resource use and environmental protection. Solid waste from wastewater treatment is safely managed and disposed through municipal facilities, while awareness campaigns like 'Stop Single-Use Plastic' reinforce sustainable consumption.



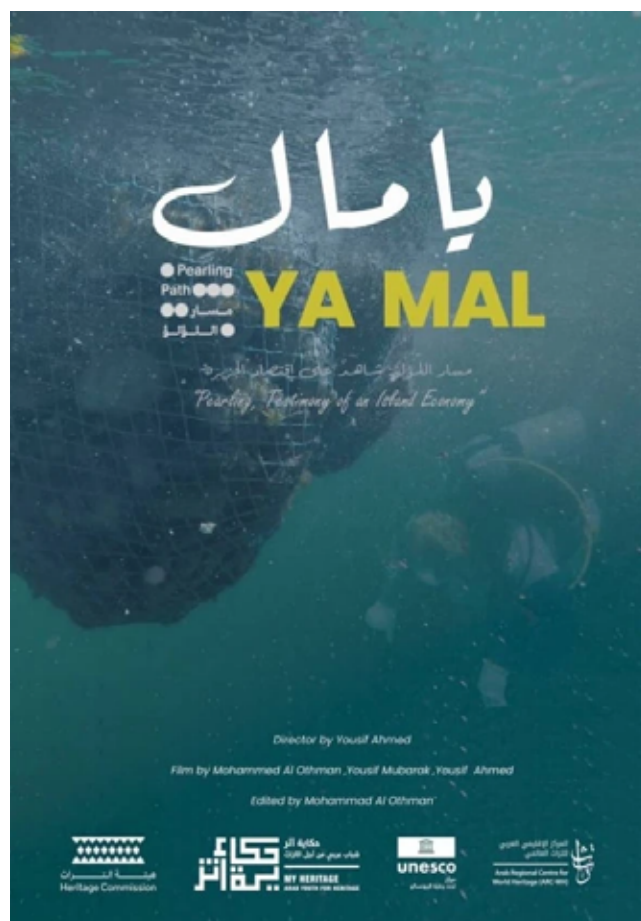
## 5. Promoting Marine Cultural Heritage and Public Awareness

### Bridging cultural identity and marine sustainability

The University of Bahrain extends its marine conservation efforts to include the preservation of marine cultural heritage. The award-winning student documentary 'Ya Mal', selected among 35 films across the Arab world and screened during the 45th UNESCO World Heritage Committee Session (Riyadh, 2024),

highlights Bahrain's Pearling Path World Heritage Site and pearl diving culture. By documenting the environmental and socio-economic challenges facing modern divers, the documentary raises awareness of the need to safeguard both marine ecosystems and coastal livelihoods. This project illustrates UOB's integration of cultural education, creative media, and sustainability advocacy, enhancing its regional and international recognition for marine-related impact.

Through its research, education, community engagement, and sustainable operations, the University of Bahrain demonstrates a comprehensive commitment to SDG 14 – Life Below Water. These initiatives enhance scientific understanding, promote innovation, and safeguard Bahrain's coastal and marine environments.



# 15 LIFE ON LAND





## LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.

The University of Bahrain recognizes the critical importance of conserving terrestrial ecosystems and promoting sustainable land management. As an institution committed to environmental stewardship, UOB contributes to biodiversity conservation, campus greening, agricultural innovation, and national environmental initiatives that collectively enhance Bahrain's ecological resilience.

### 1. Protecting and Restoring Terrestrial Ecosystems

#### Biodiversity in Landscaping

In recent years, UOB has transformed its campus environment into a model of ecological restoration and biodiversity-friendly landscaping. In 2024, more than 52,000 m<sup>2</sup> of land were rehabilitated and landscaped, incorporating sustainable design principles that prioritize water-efficient irrigation, native and drought-tolerant plant species, and habitat creation for local fauna.

#### Sustainable Landscape Management

The university follows a systematic approach to long-term campus greening with resilient plant species to ensure adaptation to climate change while strengthening ecological connectivity across the university landscape. This supports ecosystem stability, enhances carbon sequestration, and contributes to Bahrain's commitment to net-zero carbon neutrality by 2060.



## 2. Supporting, Protecting, and Maintaining Biodiversity

### Tree Planting Campaigns and Greening Initiatives

The University of Bahrain has undertaken a strategic approach to long-term campus greening. The University planted more than 4,405 ornamental trees across various locations during 2024 to date. This initiative aligns with national efforts to mitigate climate change and strengthen Bahrain's green cover.

Additionally, several tree planting campaigns are initiated at the university. The University celebrates National Tree Week annually, engaging students, faculty, and staff in planting campaigns that reinforce the values of sustainability and environmental stewardship.



[Celebrating National Tree Week](#)



[UOB President: Achieving Afforestation Plan Goals Requires the Combined Efforts of all Institutions and Individuals](#)

## International and Local Collaboration

The University strengthens biodiversity conservation through partnerships, such as the UOB–Embassy of Thailand Agricultural Initiative, which aims to expand green areas and exchange sustainable horticultural practices.



<https://www.uob.edu.bh/43219/>

### 3. Promoting Sustainable Land Use and Awareness

#### Participation in the Bahrain International Garden Show

The University of Bahrain has demonstrated a longstanding and distinguished commitment to environmental awareness and sustainable land management through its continuous participation in the Bahrain International Garden Show (BIGS). Over the years, the University has received multiple recognitions, including the Best Pavilion for Educational Institutions (In the 2023/2024 academic year). Each participation highlights the University's

leadership in promoting sustainable landscaping, biodiversity conservation, and water-efficient gardening practices. Through these sustained efforts, the University of Bahrain actively advances the objectives of SDG 15 by fostering ecological resilience, supporting biodiversity preservation, and enhancing public awareness on sustainable land use and ecosystem protection.



[UOB Wins First Place in Garden Show's Educational Category](#)

## 4. Supporting Sustainable Agriculture and Food Systems

### Contribution to the King Hamad Prize for Agricultural Development

The University of Bahrain plays an important role in advancing Bahrain's agricultural and environmental sustainability agenda. Through its academic expertise and national engagement, UOB contributes to the King Hamad Prize for Agricultural Development, under the auspices of Her Royal Highness Princess Sabeeka Bint Ibrahim Al Khalifa, President of the Consultative Council of the National Initiative for

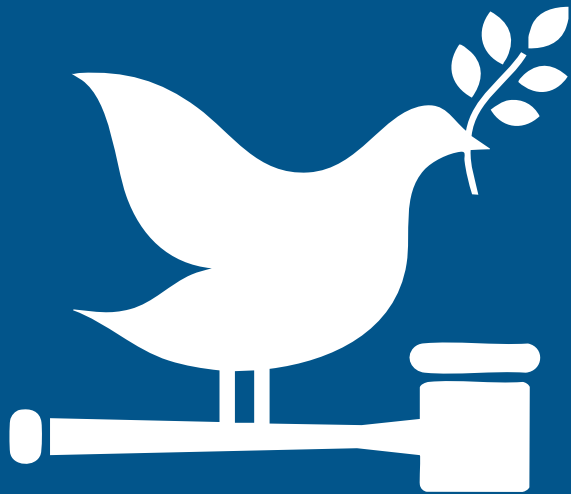
Agricultural Development (NIAD). Faculty members from UOB serve as referees and evaluators for the Prize, supporting innovation, sustainability, and competitiveness in Bahrain's agricultural sector. This initiative promotes the integration of modern agricultural technologies, strengthens food security, and enhances ecosystem restoration.

Through its integrated initiatives in biodiversity conservation, sustainable landscaping, and agricultural innovation, the University of Bahrain exemplifies institutional commitment to SDG 15 – Life on Land. Its academic, operational, and community-driven programs reflect the University's broader mission to protect terrestrial ecosystems, promote environmental awareness, and foster partnerships for sustainability at both the national and international levels.



[Link](#)

# 16 PEACE, JUSTICE AND STRONG INSTITUTIONS





# PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

## 1. Advancing the Rule of Law and Governance through Academic Research

The University of Bahrain continues to strengthen national and regional understanding of justice, institutional accountability, and the rule of law through impactful academic scholarship produced by its College of Law.

During the academic year of 2023-2024, faculty members published over a dozen textbooks and peer-reviewed studies addressing core legal themes including [judicial transparency](#), [anti-corruption](#), human rights, [intellectual property](#), and [digital governance](#).

Among the Arabic-language publications are [Intellectual Property Rights and Their Contemporary Applications](#) (2023), [The Human Rights Framework in International, Regional, and National Contexts](#) (2024), [Criminology and Punishment](#) (2023), [Commentary on the Bahraini Law of Evidence](#) (2023), and A Compendium on the General Theory of Obligation: [Sources of Obligation in Light of the Bahraini Civil Code](#) (2023). These works have become foundational references in Bahraini legal education and practice.

Such scholarship directly contributes to legal education reform, judicial development, and evidence-based policymaking. The textbooks authored by faculty members are used as core study materials at the University of Bahrain for up to six academic years, serving as primary references across multiple cohorts of law students and as trusted resources for legal professionals and decision-makers in Bahrain and the wider region. Notably, [Human Rights and Their Applications in the Kingdom of Bahrain](#) (2023), originally authored in Arabic, was later translated into English to broaden accessibility and academic exchange.

Through this body of research, the University demonstrates its commitment to advancing universal access to justice and strengthening the rule of law. Covering subjects such as human rights, equality, intergenerational justice, evidentiary standards, and AI governance, these publications reflect the University's integral role in fostering accountable, inclusive, and effective institutions.



## 2. Building Institutional Capacity and Supporting Policymakers

Through the College of Law, the University of Bahrain regularly partners with national institutions to enhance legal literacy and institutional governance. Notable contributions to this extent include:

- In partnership with the [Legislation and Legal Opinion Commission](#), the University's faculty delivered a series of lectures as part of the Commission's "Legal Insights" online training program during the academic year 2023/2024. Targeting public-sector professionals and students in Bahrain, the program aimed to strengthen knowledge on legal, economic, and governance issues.

- [Dr. Abduljabbar Al Tayeb](#), Assistant Professor of Public Finance Law, highlighted [the role of financial derivatives in stabilizing market prices and supporting economic growth](#). His lecture explained the legal, financial, and economic dimensions of these instruments, fostering dialogue on law and economics, raising awareness of market risks, and informing evidence-based policy discussions in Bahrain's financial sector.

- [Dr. Arwa Abdullatif Al-Sheikh](#), Assistant Professor of Civil Law, examined [legislative gaps in Bahrain regarding gift contracts](#), clarifying their types, legal principles, and obligations. Her session promoted discussion on civil law modernization, encouraged policymakers to consider codification, and strengthened institutional integrity by highlighting areas where legal protections could be improved.

- [Dr. Sh. Lulwa Ahmed Al-Khalifa](#), Assistant Professor of International Human Rights Law, [explored civil and political rights in the digital age](#), focusing on privacy, freedom of expression, and access to information. The lecture raised awareness of the challenges and opportunities of digital transformation, emphasized the need for legal frameworks that protect fundamental rights, and contributed to informed policy discussions on governance and digital rights in Bahrain.

- In collaboration with the [Bahrain Institute for Political Development \(BIPD\)](#), the University of Bahrain participated in a series of awareness-raising events as part of BIPD's [National Awareness Program](#), targeting students, youth, and broader community groups to strengthen knowledge of political, legal, and human rights issues.



The University co-organized a [seminar on national and international mechanisms for protecting community rights](#), bringing together experts from the Shura (Consultative) Council, the Ministry of Interior, and the University to discuss legal frameworks and institutional safeguards. The event enhanced understanding of constitutional and political rights, fostered dialogue on civic engagement, and promoted strategies to strengthen human rights protections at national and regional levels.



- In collaboration with the Ministry of Industry and Commerce (MOIC), the University of Bahrain contributed to the development of the National Industrial Property Strategy of the Kingdom of Bahrain, aimed at strengthening the national intellectual property framework and promoting innovation and industrial development.

As part of this initiative, [Dr. Hanan Mohamed Almawla](#), Associate Professor of Intellectual Property Law, was appointed in 2023 as the [University's focal point for coordination with MOIC](#). Through this partnership, the University of Bahrain supports national policymaking efforts to enhance the protection of intellectual property rights, advance research and innovation, and reinforce institutional capacity in line with Bahrain's sustainable development priorities.

- The University of Bahrain and the Shura Council maintain an ongoing [Memorandum of Understanding \(MoU\)](#) that strengthens collaboration in education, research, and policymaking. The agreement provides a framework for University faculty to contribute expertise to conferences, workshops, studies, and research initiatives organized by the Shura Council, thereby supporting the Council's legislative and research functions.

- Under this partnership, students gain opportunities to observe Council sessions, attend seminars, and participate in practical training programs. The University also provides the Council with academic research, studies, and digital resources, while outstanding graduates may be recommended for internships or employment opportunities.

- As part of this collaboration, [Dr. Marwan Mohammed AlModers](#), Associate Professor of Constitutional Law, delivered a workshop on "[Skills for Identifying Constitutional Defects in Legal Texts](#)" for legal professionals and advisors. The session enhanced participants' ability to analyze legislation and other legal documents from a constitutional perspective, supporting the development of sound, evidence-based policymaking and constitutionally compliant legislation.



- The University of Bahrain, through its College of Law, contributes academic expertise to the judiciary to strengthen institutional capacity and support policy development. [Dr. Basem Mohammed Al Sharji](#), Assistant Professor of Criminal Law, serves as [Judicial Planning and Development Advisor at the Supreme Judicial Council](#), where he provides legal and academic input to advance judicial planning, development initiatives, and policy implementation.

This appointment reflects the University's commitment to reinforcing the link between academia and the justice sector, promoting evidence-based judicial reform, and supporting the continuous development of Bahrain's legal and institutional frameworks.

- The University of Bahrain and Sultan Qaboos University in Oman, represented by their respective Colleges of Law, maintain a [Memorandum of Understanding \(MoU\)](#) establishing a framework for academic cooperation, research collaboration, and the exchange of expertise. The agreement promotes joint research and academic publishing, consultation on quality assurance and accreditation, and coordination on student training and development initiatives.

This partnership reflects both institutions' shared commitment to advancing legal education, fostering regional academic cooperation, and promoting knowledge exchange in support of high-quality teaching and research in the Arab region.

- As part of the long-standing partnership between the [Judicial and Legal Studies Institute and the College of Law](#), the institutions launched a lecture series on career development for law students. The series, which includes panels and interactive sessions with leading practitioners, is designed to bridge academic knowledge with the evolving demands of the legal profession.

This initiative enhances student readiness for the legal sector, provides practical insights into career pathways, and strengthens the link between academia and professional legal institutions in Bahrain.

Through such initiatives, the University has helped train policymakers, strengthen institutional capacities, and promote accountable governance at the national and regional levels.



### 3. Hosting Multi-Stakeholder Legal Forums and Dialogues

During 2023–2024, the University hosted several legal and policy forums engaging government officials, international partners, and civil society on issues of justice, human rights, and institutional reform, some of which are outlined below:

- The College of Law at the University of Bahrain hosted a seminar titled “[Law and the Sports Industry](#)”, emphasizing the need for comprehensive legislation to protect athletes and sports institutions in the Kingdom.

The seminar brought together legal, governmental, and sports sector stakeholders to discuss the economic impact of sports, the resolution of international sports disputes, and policy measures to enhance the professionalization of sports.



- The College of Law at the University of Bahrain, in cooperation with the French Embassy in the Kingdom of Bahrain, organized a lecture by Emilie Désormière, Justice & Legal Cooperation Attachée for the Middle East, on “[The French Judicial System and its Amendments](#).” The lecture reviewed key developments in the French judicial system and emphasized the role of alternative dispute resolution mechanisms.

The event fostered dialogue on comparative legal frameworks, enhanced knowledge of judicial reforms, and strengthened professional and academic engagement with international legal practices.



- The College of Law at the University of Bahrain, in collaboration with the United Nations Commission on International Trade Law (UNCITRAL), organized a seminar titled “[UNCITRAL Efforts and Their Impact on Bahraini Bankruptcy Law: Current Status and Future Vision](#)”, bringing together faculty from the University and professors from other universities. The seminar examined the role of UNCITRAL’s insolvency texts, including the Model Law on Cross-Border Insolvency, the Model Law on Enterprise Group Insolvency, and the Model Law on Recognition and Enforcement of Insolvency-Related Judgments, and discussed their positive impact on Arab States and potential use in reforming Bahrain’s bankruptcy system.

The event promoted dialogue on aligning national legislation with international standards, strengthened understanding of commercial law reforms, and fostered collaboration among academic and international experts, through multi-institutional and international engagement.



- The College of Law at the University of Bahrain hosted [a lecture by Mr. Yves Gounin, legal adviser to the French Conseil d’Etat](#), on climate justice, highlighting the significant challenges posed by global climate change. He emphasized that developing countries are increasingly affected and have begun formulating international strategies and agendas, calling for urgent and coordinated action with developed countries to reduce carbon emissions, the primary driver of climate change.

The lecture fostered dialogue on environmental responsibility, legal frameworks for climate action, and international cooperation, supporting SDG 13 (Climate Action) by promoting awareness of climate change mitigation and adaptation strategies, SDG 16 (Peace, Justice and Strong Institutions) by emphasizing governance and legal frameworks for climate action, and SDG 17 (Partnerships for the Goals) through collaborative approaches between developing and developed countries to address global environmental challenges.



#### 4. Legal Clinic and Human Rights Center

During the 2023–2024 academic year, the [Legal Clinic and Human Rights Center](#) (the “Clinic”) at the College of Law, focused on raising awareness and providing practical training in climate change and environmental rights, reflecting its commitment to addressing pressing societal and legal challenges.



- Academic Programs and Teaching (SDG 4: Quality Education)

The Clinic regularly oversees two [key courses](#):

- **HRLC107: Principles of Human Rights** – a mandatory course for all students across all colleges and majors, taught in Arabic and English. The course reached 5,371 students throughout the 2023-2024 academic year. Pre-recorded lectures are available on the University’s Blackboard e-learning platform, ensuring continuous and flexible access to high-quality human rights education.

- **LAW408: Legal Clinic** – a highly competitive elective course for senior law students, carrying 6 credit hours, designed to integrate students into practical

legal work. During the academic year, 93 students were enrolled in this course. The course comprises three phases:

**1. Preparatory Phase:** Lectures and personal development workshops delivered by Legal Clinic staff, covering skills such as legislative drafting, legal interpretation, advocacy, communication, teamwork, and professional planning.

**2. Practical Training Phase:** Students are grouped and assigned to partner organizations, including government institutions and renowned Bahraini law firms. They participate twice-weekly as fully integrated interns, gaining hands-on experience while being assessed by these organizations, which contributes directly to their grade.

**3. Community Engagement Phase:** Students complete a graded project aligned with the semester’s designated theme. During the 2023–2024 academic year, the Clinic’s work focused on climate change, the right to a healthy environment, and the rights of future generations. As part of this project, students conducted workshops for school students and participated in various public awareness initiatives. This structure ensures students gain a comprehensive educational experience that combines academic instruction, professional development, and societal impact.

### • Experiential Learning and Community Impact

- Legal Clinic students organized [awareness workshops in public and private schools](#) across Bahrain, focusing on environmental rights, sustainable practices, and the importance of national legislation to protect natural resources. These sessions reached a minimum of 250 students and emphasized the shared responsibility of government, private sector, and civil society in safeguarding the environment for present and future generations.



- The Clinic coordinated closely with the Ministry of Education to ensure workshops align with educational objectives and integrate broader societal messages on climate action and sustainability.

### • Collaborations and Partnerships

The Clinic leveraged partnerships with national institutions to support practical training and community engagement:

- **Governmental bodies:** The Ministry of Education, the Public Prosecution, and the Southern Governorate Police Department.

- **Human rights and environmental institutions:** National Institution for Human Rights.

- **Law firms and private sector actors:** Local law firms such as Al-Bahar and Al-Eid law firms.

Through these collaborations, students gain hands-on training, engage in field visits, and conduct community awareness activities, strengthening multi-stakeholder engagement while supporting the development of informed, active citizens.



### • Impact

The Clinic's human rights and climate-focused activities for the academic year 2023-2024:

- Equipped students with practical skills in legal analysis, advocacy, and civic engagement.
- Increased awareness among youth and the broader community about environmental rights and sustainability.
- Strengthened partnerships between the University, national institutions, and civil society, contributing to effective, rights-based responses to climate change.

By integrating teaching, practical training, and community engagement, the Legal Clinic demonstrates the University's commitment to preparing future legal professionals who can contribute to national development while advancing the Sustainable Development Goals.

## 5. Curriculum Innovation for Sustainable and Just Institutions

As part of a university-wide curriculum reform initiative, the College of Law undertook a comprehensive review of all its academic programs — the [Bachelor in Law](#), the [Master of Public Law](#), the [Master of Private Law](#), the [Doctor of Philosophy in Private Law](#), and the [Doctor of Philosophy in Public Law](#) — beginning in 2023–2024.

The reform aimed to strengthen the integration of sustainability, ethics, and institutional integrity into legal education, ensuring that graduates are equipped to promote justice, environmental stewardship, and responsible governance in line with SDG 4 (Quality Education) and SDG 16 (Peace, Justice, and Strong Institutions).

In the revised Bachelor of Law program, five new courses were introduced to connect legal learning with emerging global challenges and sustainable development priorities:

- LAW 470 Environmental Legislation and Sustainable Development
- LAW 478 Business and Human Rights
- LAW 494 Space Law
- LAW 495 Artificial Intelligence and the Law
- LAW 498 Law and the Internet

At the postgraduate level, sustainability and

governance themes were similarly mainstreamed:

- In the Master in Public Law, Environmental Legislation and Sustainable Development was added as an elective.
- In the Master in Private Law, International Investment Law was introduced to enhance understanding of sustainable economic practices.
- For the Doctor of Philosophy in Public Law, new electives include advanced studies in International Criminal Law, Environmental Legislation, Artificial Intelligence, and Transnational Crimes.
- For the Doctor of Philosophy in Private Law, electives such as Communications and Technology Law, Professional Responsibility, and Technology Transfer Contracts were introduced.

Collectively, these curricular innovations reinforce the principles of transparency, accountability, and justice, while equipping students to address complex intersections between law, governance, technology, and sustainability.

# **17** PARTNERSHIPS FOR THE GOALS





## PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalise the global partnership for sustainable development.

The University of Bahrain (UOB) places collaboration at the heart of its mission to advance sustainable development. Guided by Bahrain's Economic Vision 2030 and the UN 2030 Agenda for Sustainable Development, the University builds strong, multi-stakeholder partnerships that connect education, research, and innovation with societal needs.

UOB has established cooperative frameworks with a range of international and national partners, including United Nations Development Programme (UNDP) and other UN bodies, as well as global professional associations such as the Association of Chartered Certified Accountants (ACCA – UK). These partnerships expand opportunities for joint projects, policy dialogue, and knowledge exchange that support social, economic, and environmental progress across Bahrain and the wider region.

Through sustained collaboration with government institutions, industry, NGOs, organizations, and international agencies, the University promotes inclusive education, capacity-building, and innovation aligned with the principles of sustainable development. UOB's approach ensures that research and academic expertise are translated into meaningful community impact, while empowering students and professionals to participate in addressing global challenges.

By actively fostering cooperation at both the national and international levels, the University of Bahrain demonstrates its role as a dynamic hub of partnership, learning, and shared responsibility — contributing to the realization of SDG 17: Partnerships for the Goals, and advancing Bahrain's leadership in global knowledge and sustainable growth.

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## University of Bahrain & NGOs

The University of Bahrain actively advances SDG 17 – Partnerships for the Goals by fostering strong cross-sectoral dialogue, multi-stakeholder collaboration, and international cooperation with NGOs, professional bodies, UN agencies, and global institutions. Through strategic partnerships, the university promotes knowledge sharing, capacity-building, and sustainable development, ensuring that academic expertise, industry innovation, and community needs are aligned with the United Nations Sustainable Development Goals.

Across the academic year 2023–2024, UoB engaged in a diverse set of collaborative initiatives—spanning professional education, technical cooperation, quality education, economic development, environmental sustainability, public health, and youth empowerment. These partnerships integrate skills development, research innovation, and community engagement, strengthening Bahrain’s role within regional and international sustainability networks.

Through Memoranda of Understanding, joint programs, international workshops, expert exchange, and student development opportunities, the University of Bahrain enhances institutional

capacity, supports global knowledge partnerships, and promotes sustainable growth. Each initiative contributes directly to SDG 17.2.2, which emphasizes the importance of cooperative action between academia, civil society, government entities, and professional organizations to advance shared sustainability goals.

By creating platforms for dialogue, professional training, and cross-sectoral engagement, the University of Bahrain reinforces its commitment to building a collaborative, innovative, and sustainability-driven ecosystem, both locally and globally.

This report highlights international collaborations and cross-sectoral partnerships between the University of Bahrain and various NGOs, professional bodies, and associations. Each initiative aligns with Indicator 17.2.2 by fostering dialogue and cooperation across sectors for sustainable development.

## 1. ACCA – Professional Education MoU

The Association of Chartered Certified Accountants (ACCA–UK) and the University of Bahrain have established a strategic international partnership through the ACCA Professional Education Memorandum of Understanding, strengthening cross-sectoral collaboration between academia and a leading global professional body. This cooperation supports Bahrain’s national drive to expand access to internationally recognized qualifications and advance the country’s accounting and finance profession.

Through this partnership, UOB and ACCA work jointly to align academic and professional standards, co-develop training pathways, and provide skills development programs, capacity-building workshops, and opportunities for professional development. The agreement enhances access to ACCA learning resources and expert engagement, enabling students and professionals to achieve world-class certification aligned with global sustainability benchmarks.

By linking higher education with an international professional association, this initiative promotes knowledge sharing, industry engagement, and international cooperation, all core elements of SDG 17 – Partnerships for the Goals. It directly supports Target 17.2.2, which emphasizes fostering multi-stakeholder dialogue, strengthening institutional partnerships, and enabling sustainable skills development and innovation across sectors.

The UOB–ACCA collaboration reinforces Bahrain’s commitment to sustainable economic growth, education-to-employment integration, and the development of a competitive, future-ready workforce. It serves as a model for effective cooperation between universities, industry leaders, and global professional networks to advance the Sustainable Development Goals.



[College of Business Administration at UoB Introduces Its Students to The Benefits of ACCA Certification](#)

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## 2. Gulf Society for Maintenance & Reliability – Technical Cooperation

The University of Bahrain has established a strategic international partnership with the Gulf Society for Maintenance & Reliability through the Technical Cooperation Agreement. This collaboration strengthens cross-sectoral dialogue, connects academia with a leading regional professional society, and promotes knowledge sharing, capacity-building, and technical innovation in the field of maintenance and reliability engineering.

The partnership supports joint research, professional training, and regional conferences, enabling students, faculty, and industry professionals to engage in skills development, technical excellence, and multi-stakeholder cooperation. By integrating academic expertise with industry practice, the initiative enhances national and regional capabilities in engineering reliability, operational sustainability, and applied research.

This cooperation directly advances SDG 17 – Partnerships for the Goals, particularly Target 17.2.2, which emphasizes collaboration between educational institutions, NGOs, and industry sectors to drive sustainable development, innovation, and professional growth.

The University of Bahrain's engagement with the Gulf Society for Maintenance & Reliability demonstrates its commitment to building strong international partnerships, fostering sustainable industrial development, and strengthening regional networks that support long-term economic and technical resilience.

### 3. AAOIFI – Islamic Finance Education MoU

The University of Bahrain has established a strategic international partnership with the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) through the Islamic Finance Education MoU. This collaboration strengthens cross-sectoral dialogue, connects academia with a leading global standard-setting body, and promotes knowledge sharing, capacity-building, and professional development in the field of Islamic finance.

Through this partnership, UOB and AAOIFI jointly co-develop academic and professional programs, facilitate expert exchange, and advance competencies in Sharia-compliant financial practices. The initiative enhances national and regional capabilities by integrating industry expertise, academic innovation, and skills development aligned with international standards.

This cooperation directly supports SDG 17 – Partnerships for the Goals, particularly Target 17.2.2, which emphasizes developing strong partnerships between educational institutions and professional organizations to advance sustainable development, economic resilience, and institutional excellence.

This collaboration aligns with several Sustainable Development Goals (SDGs), including SDG 4 – Quality Education, SDG 8 – Decent Work and Economic Growth, SDG 16 – Peace, Justice, and Strong Institutions, and SDG 17 – Partnerships for the Goals. By working together, UOB and AAOIFI aim to strengthen the framework for Islamic financial education and practices, contributing to the growth, integrity, and sustainability of the financial sector.



[University of Bahrain and the \(AAOIFI\) sign a MOU](#)

#### 4. Bahrain Society of Engineers – Engineering Development MoU

The University of Bahrain has established a strategic international partnership with the Bahrain Society of Engineers (BSE) through the Engineering Development MoU. This collaboration strengthens cross-sectoral dialogue, enhances knowledge sharing, and promotes capacity-building between academia and a leading national professional engineering organization.

Through this cooperation, UOB and BSE work together to expand training opportunities, advance engineering research, support innovation, and strengthen professional development pathways for students and practitioners. The partnership integrates academic expertise with industry needs, fostering skills development, technical excellence, and

workforce readiness aligned with global engineering standards.

This initiative directly contributes to SDG 17 – Partnerships for the Goals, particularly Target 17.2.2, which emphasizes cooperation between educational institutions and professional bodies to drive sustainable development, industry engagement, and multi-stakeholder collaboration.

By partnering with the Bahrain Society of Engineers, the University of Bahrain reinforces its commitment to advancing engineering education, supporting national innovation ecosystems, and enhancing the quality and impact of STEM-related learning and research.



[UOB & BSE Sign A MOU to Enhance Cooperation in Several Fields](#)

## 5. Royal Humanitarian Foundation – Community Programs MoU

The University of Bahrain has formed a strategic international partnership with the Royal Humanitarian Foundation (RHF) through the Community Programs MoU. This collaboration strengthens cross-sectoral dialogue, enhances knowledge sharing, and promotes capacity-building between academia and a leading national humanitarian organization.

Through this partnership, UOB and RHF work jointly to support community development initiatives, expand humanitarian programs, and empower vulnerable groups through targeted education, training, and skills development. The initiative integrates academic resources with community needs, fostering social inclusion, equitable access to opportunities, and sustainable community resilience.

This cooperation directly advances SDG 17 – Partnerships for the Goals, particularly Target 17.2.2, which emphasizes multi-stakeholder collaboration to address societal challenges and strengthen sustainable development efforts.

Additionally, the agreement supports SDG 4 – Quality Education, demonstrating the University of Bahrain's commitment to building a knowledge-based society, promoting lifelong learning, and expanding opportunities for marginalized groups through meaningful community engagement.



[Royal Humanitarian Foundation Signs Cooperation Agreement with University of Bahrain](#)

## 6. Fostering Cross-Sectoral Dialogue on Sustainable Energy Solutions Through IPTC Education Week

Mariam Taj, a member of the SPE Bahrain Student Chapter at the University of Bahrain (UOB), strengthened cross-sectoral dialogue on sustainable energy and industry best practices through her participation in the IPTC Education Week 2024, held from February 10–14 at the Dhahran Expo in Saudi Arabia. The program brought together approximately 100 top undergraduate students from 39 countries, along with executives, technical experts, and professional committees from leading energy companies, including Saudi Aramco, TotalEnergies, and ExxonMobil.

During the week, Mariam engaged in the “Unlock Reserves” project, a collaborative initiative where international, multidisciplinary student teams applied technical, economic, and sustainability considerations to propose innovative solutions for hydrocarbon resource development. This platform facilitated meaningful dialogue between academia, industry, and professional organizations on challenges such as sustainable resource recovery, advanced reservoir technologies, and energy sector innovation. By contributing to this cross-sectoral knowledge exchange, Mariam not only enhanced her own expertise but also represented UOB in shaping discussions on SDG-aligned engineering solutions within a global energy context.



[Mariam Taj, an SPE UOB member joining in the IPTC event](#)

## 7. UOB Advances Regional Cross-Sector Dialogue on Sustainable Engineering Through MEPEC 2024 Achievements

UOB strengthened regional cross-sectoral dialogue on sustainable development through the award-winning participation of its Chemical Engineering students—who are active members of the SPE Bahrain Student Chapter—in the MEPEC 2024 Chem-E-Car and Chem-E Jeopardy Competitions. MEPEC functions as a major regional platform that connects academia, including UOB and other universities, with the private sector such as leading oil and gas companies like Aramco, alongside professional and technical organizations including AIChE and SPE. Within this multi-stakeholder environment, students, engineers, and industry specialists engage in SDG-oriented conversations on innovation, safety, and sustainable

engineering practices.

The UOB Chem-E-Car, designed to operate through controlled and safe chemical reactions, served as a tangible demonstration of sustainable engineering in practice. By securing second place in the regional Chem-E-Car Competition, the UOB team directly contributed to discussions on green chemistry, alternative energy pathways, reaction safety, and technology-driven SDG solutions. Their participation positioned the SPE Bahrain Student Chapter members as active contributors to meaningful cross-sector engagement on how engineering can advance the Sustainable Development Goals.



[https://www.instagram.com/p/C6v\\_aMrqkl/?img\\_index=10&igsh=NzRnY3U5emtmNWE2](https://www.instagram.com/p/C6v_aMrqkl/?img_index=10&igsh=NzRnY3U5emtmNWE2)

## 8. Empowering Future Leaders: UNDP Bahrain and UoB Workshop on Business and Human Rights

In 2024, the University of Bahrain (UoB), in collaboration with the United Nations Development Programme (UNDP Bahrain), organized an international workshop on Business and Human Rights (BHR) on May 21, 2024. The workshop brought together faculty from law, business, and other departments to integrate BHR principles into academic curricula, explore frameworks grounded in the UN Guiding Principles on Business and Human Rights, and promote interdisciplinary, ethical, and leadership skills among students.

This initiative advances SDG 17, Target 17.2.2 by fostering cross-sectoral dialogue, partnerships, and collaboration between educational institutions, civil society, and international organizations. By embedding BHR into curricula, UoB strengthens knowledge sharing, capacity building, professional development, research collaboration, and multistakeholder engagement, supporting sustainable development, ethical business practices, and human rights promotion in line with global SDG priorities.



[Empowering Future Leaders: UNDP Bahrain and UoB Workshop on Business and Human Rights](#)

## 9. University of Bahrain partners with IEEE

The University of Bahrain (UoB), in collaboration with IEEE Bahrain Branch, has established an international partnership to advance SDG 17.2.2. This partnership provides students from the Colleges of Engineering and Information Technology with training, scholarships, and access to IEEE resources, events, and professional development programs, equipping them with skills in technology, engineering, digital innovation, and STEM fields.

Through programming competitions, collaborative projects, and nationwide hackathons, UoB addresses sustainability challenges, including climate action, renewable energy, environmental protection, and green technology, while promoting cross-sectoral dialogue, partnerships, mentorship, and capacity building between academia, industry, and professional organizations.

This partnership is helping shape Bahrain's innovation landscape by enabling the IEEE Student Branch to thrive across the university, organizing high-impact events such as [insert example conference], and empowering students to develop collaboration, creativity, and future-ready technical skills. The initiative strengthens multistakeholder cooperation, research collaboration, knowledge sharing, and practical solutions to global sustainability issues, preparing students for a rapidly evolving technological landscape. To date, the partnership has supported many students, organized several events/competitions, and facilitated ongoing collaboration across sectors, demonstrating measurable impact in education, innovation, and professional development aligned with SDG 17.



[University of Bahrain partners with IEEE](#)

## 10. United Nations Environment Programme (UNEP) Partners with University of Bahrain

The University of Bahrain (UoB) established a strategic partnership with the United Nations Environment Programme (UNEP) to advance youth education, environmental awareness, and sustainable development, formalized through a Memorandum of Understanding (MoU) signed on May 20, 2019. This collaboration supports the Future Leaders Programme, providing students with opportunities in training, workshops, seminars, and research on regional and global sustainability challenges.

Since December 2019, UoB has actively contributed to the “Development of National Implementation Plan (NIP)” project, approved by the Global Environment Facility (GEF) under the Stockholm Convention, engaging stakeholders to develop a national action plan aligned with Article 7 of the Convention.

As part of the partnership, UoB hosts initiatives addressing SDG 14 – Life Below Water, raising awareness on marine conservation, biodiversity, and sustainable use of resources among academic, governmental, and civil society stakeholders. This collaboration strengthens cross-sectoral dialogue, partnerships, capacity building, knowledge sharing, and multistakeholder cooperation, demonstrating measurable impact in education, research, environmental management, and sustainability practices, in alignment with SDG 17, Target 17.2.2.



[United Nations Environment Programme \(UNEP\) and University of Bahrain Sign an Agreement to Support Youth in Education](#)

## 11. Approval of 30 Arab Universities to Join the Union

In 2024, the University of Bahrain (UoB) proudly participated in the General Conference of the Association of Arab Universities held in Baghdad, Iraq, where membership of 30 new Arab universities was approved. Dr. Fuad Mohammed Al-Ansari, President of UoB, attended both the General Conference and the Executive Council meeting, which provided a platform for discussions on international cooperation, academic collaboration, and the Arab university classification project.

Dr. Al-Ansari emphasized the importance of the Association of Arab Universities as a framework for enhancing cooperation, communication, and sharing of experiences among member institutions. The Union supports scientific research and innovation by

providing resources and financial aid to researchers, promoting partnerships, and deepening regional and international cooperation in higher education.

This initiative aligns with SDG 17, Target 17.2.2, fostering cross-sectoral dialogue among educational institutions, strengthening knowledge sharing, collaborative research, capacity building, and professional development, and reinforcing the role of multistakeholder engagement in advancing the quality of higher education across the Arab region. The Association operates as an independent, non-governmental organization headquartered in Amman, Jordan, continuing to elevate academic standards and cooperation across Arab universities.



[Dr. Al-Ansari Participates in the Association of Arab Universities conference and the Executive Council Meeting](#)

## 12. Academic at UoB Elected Head of Publication in MEFOMP

In 2023, Dr. Habib Ibrahim Ashoor, Associate Professor in the Department of Physics, College of Science, University of Bahrain (UoB), was elected to the Board of Directors of the Middle East Federation of Medical Physics (MEFOMP) and appointed Head of its Publication Committee. This election marks a significant milestone as Dr. Ashoor becomes the first Bahraini to hold this position, which spans a five-year term.

Under his leadership, the Publication Committee aims to enhance the field of medical physics in the region, promoting research, education, and professional programs, while facilitating knowledge dissemination through publications and collaborative initiatives. Dr. Ashoor, also head of the Bahraini Society for Medical Physics and Bioengineering (BSMPB), actively engages with a network of specialists across 12 Arab countries, fostering multistakeholder collaboration, capacity building, and professional development in medical physics.

MEFOMP, a non-governmental, non-profit organization with international recognition, supports scientific advancement, knowledge exchange, and community awareness in medical physics. Dr. Ashoor's participation in the Middle East Medical Physics Conference in Oman, alongside 40 international speakers, further underscores UoB's commitment to cross-sectoral dialogue, partnerships, and international collaboration.

This achievement aligns with SDG 17, Target 17.2.2, highlighting the University's efforts in strengthening collaboration between educational institutions and professional organizations, and advancing regional and global scientific networks.



[Academic at UoB Elected Head of Publication in MEFOMP](#)

### 13. Injaz Bahrain Programs for UOB Students

In 2024, the University of Bahrain (UoB) collaborated with Injaz Bahrain, continuing a partnership of over 16 years, to deliver a series of programs aimed at empowering Bahraini youth for success in the global economy, fostering entrepreneurship, leadership, and workforce readiness.

This long-standing collaboration advances SDG 17, Target 17.2.2 by promoting cross-sectoral dialogue, multistakeholder collaboration, knowledge

sharing, and capacity building between educational institutions and professional organizations. Through workshops, mentorship, and practical training, students gain hands-on experience, professional skills, and entrepreneurial mindset, contributing to sustainable economic growth and youth development in Bahrain.



[Company Program](#)

### A. The Injaz Bahrain Company Program

engages high school and university students over 12 consecutive sessions, guiding them to establish entrepreneurial companies while developing research, communication, organization, and critical thinking skills. Participants gain practical experience, supported by volunteer consultants from the local business community, learning the intricacies of business operations and understanding the economic impact of entrepreneurship in the MENA region.

**B. The Innovation Camp (ICAMP)**, a one-day workshop, challenges students to design innovative solutions to real business problems, fostering teamwork, leadership, problem-solving, and presentation skills under professional guidance.

**C. The Head Start:** Boost Your Employability program addresses university students' work-readiness needs, providing immersive sessions on resume building,

interview preparation, and internship acquisition, thereby enhancing employability and career readiness.

Through these initiatives, UoB strengthens partnerships, knowledge sharing, mentorship, and experiential learning, contributing to sustainable economic growth, professional development, and entrepreneurial capacity across Bahrain and the region.



[Head Start: Boost Your Employability](#)



[Innovation Camp \(ICAMP\)](#)

#### 14. UOB Students Win First Place in Telecommunications Regulatory Authority Hackathon

In 2023, a team of students from the University of Bahrain (UoB) achieved first place in the Bahrain Hackathon organized by the Telecommunications Regulatory Authority (TRA), competing against 12 teams from universities across the Kingdom. The team presented an innovative electronic project focused on Arabized domain names, providing monthly subscription services for Arabic Internet site names, Arabic email addresses, and training for effective usage, thereby enhancing digital accessibility for Arabic-speaking users.

The hackathon, coordinated with the Internet Corporation for Assigned Names and Numbers (ICANN), included evaluation by ICANN

representatives and communication specialists, highlighting the importance of multilingual Internet names and localized digital solutions.

This achievement aligns with SDG 17, Target 17.2.2, promoting cross-sectoral dialogue, partnerships, and collaboration among educational institutions, industry, and international organizations. By participating in this competition, UoB students advance innovation, entrepreneurship, knowledge sharing, and the development of regionally relevant technological solutions, strengthening Bahrain's ecosystem for digital innovation and professional capacity building.



[Presenting Website Names in the Arabized Domain UOB Students Win First Place in “Telecommunications Regulatory Authority Hackathon”](#)

## 15. University of Bahrain and “HOPALE” Discuss Cooperation in Rehabilitation and Sports Medicine

In 2023, the University of Bahrain (UoB) hosted a delegation from the HOPALE Foundation, a French organization specializing in orthopedic surgery and sports medicine, to discuss potential cooperation in rehabilitation and sports medicine. Dr. Jawaher bint Shaheen Al-Mudhahka, President of UoB, emphasized the university’s research capabilities in these fields and expressed strong interest in partnership opportunities.

The delegation presented their scientific and specialized services, exploring areas of common interest and the potential to offer rehabilitation services in Bahrain. The meeting included representatives from the Bahrain Economic Development Board alongside UoB

officials, fostering dialogue on regional healthcare innovation, knowledge exchange, and collaborative research.

This initiative aligns with SDG 17, Target 17.2.2, promoting cross-sectoral dialogue, partnerships, and collaboration between educational institutions and professional organizations. By engaging with HOPALE, UoB enhances its capacity in rehabilitation and sports medicine, contributing to improved health outcomes, professional development, and the sharing of expertise in the region.



[University of Bahrain and “HOPALE” Discuss Cooperation in Rehabilitation and Sports Medicine](#)

## 16. Collaboration with Healthcare and Sports Institutions at the University of Bahrain

In 2024, the University of Bahrain (UoB) established strategic partnerships with multiple healthcare and sports institutions to enhance practical training, health education, and youth development. Formal Memoranda of Understanding (MoUs) with the Ministry of Health, Primary Health Care Centers, and Governmental Hospitals ensure that nursing students gain hands-on clinical experience, emphasizing professional ethics, health regulations, and patient safety standards, thereby strengthening competencies and improving healthcare outcomes.

UoB's collaboration with the General Sports Authority advances sports sciences, athletic training, and evidence-based practices in sports management, aligning academic programs with Bahrain's national sports vision. Additionally, partnership with the Bahrain Pharmacists Society promotes safe healthcare practices through community outreach, enhancing students' professional skills and health literacy. These initiatives contribute to SDG 3 – Good Health and Well-Being and align with SDG 17, Target 17.2.2,

fostering cross-sectoral dialogue, partnerships, knowledge sharing, and collaborative innovation between educational institutions and healthcare and sports organizations, thereby strengthening public health, professional capacity, and community engagement in Bahrain.



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### **Initiatives under Current Collaborations with Health Institutions:**

1. Developing and Implementing a Capacity Building Educational Package for Midwives in Regional Community Settings
2. Participation in WHO Baby-Friendly Hospital Initiative in Bahrain
3. UoB Contribution to Global Network and LINKS Magazine: Nursing and Midwifery Links
4. WHO AWaRe Antibiotic Resistance (for prescribers)
5. World No Tobacco Day – Call to Action Poster Campaign
6. Strategic Partnerships with Healthcare Institutions in Bahrain
7. Occupational Health, Safety, and Environment (HSE) Initiatives
8. Multiple Sclerosis Awareness Event
9. Participation in the Advancing Preventive Health and Genomic Awareness Program
10. College of Health and Sport Sciences International Training Center for Life Support Courses.

## 17. Collaboration with the American Heart Association

In 2024, the College of Health and Sport Sciences (CHSS) at the University of Bahrain (UoB) established a strategic partnership with the **American Heart Association (AHA)**, serving as an **International Training Center (ITC)**. This collaboration provides accredited life support courses, including Basic Life Support (BLS) and advanced emergency care programs, to healthcare professionals, students, and community members, equipping participants with essential life-saving skills, such as CPR and emergency response techniques.

By enhancing the quality and accessibility of health education, this initiative strengthens community capacity in critical care and emergency preparedness,

improves survival rates during cardiac and medical emergencies, and supports continuous professional development in life support education.

The partnership aligns with SDG 3 – Good Health and Well-Being and SDG 17, Target 17.2.2, fostering cross-sectoral dialogue, partnerships, and knowledge sharing between educational institutions and international organizations. Through this collaboration, UoB contributes to public health resilience, workforce training, and community well-being, establishing a sustainable model for health education and emergency readiness.



## 18. University of Bahrain Seminar Explores Preserving Bahraini Identity and Citizenship in Academic Curricula

On December 26, 2024, the College of Arts at the University of Bahrain organized a seminar addressing the importance of preserving Bahraini identity and citizenship values, and exploring effective ways to integrate these concepts into academic curricula. The seminar featured several faculty members and experts from the College of Arts, in collaboration with the Executive Office of the National Plan for Enhancing National Belonging and Citizenship Values ("Bahrainna").

The event brought together faculty members, government representatives, and civic experts to discuss frameworks that promote unity, heritage, and civic values in alignment with Bahrain's Vision 2030. Participants reviewed strategies for encouraging national participation and social responsibility among students, alumni, and the wider community.

This initiative fulfills THE Indicators 17.2.2 and 17.2.4, as it represents a direct collaboration between a national academic institution and a government

body working jointly toward sustainable social development and education goals. It also supports Indicator 17.4.1 by providing a structured platform for capacity building and knowledge exchange on SDG-aligned values in education and community engagement.

Under SDG 4 (Quality Education), the seminar served as a public learning opportunity that extended beyond the university. By engaging alumni, students, and community participants in national discussions on civic identity and belonging, the event promoted lifelong learning, community cohesion, and shared cultural awareness.

Through this partnership, the University of Bahrain strengthened its role as a bridge between higher education and society, advancing both inclusive citizenship education and sustainable community development in alignment with the UN Sustainable Development Goals.



[UOB College of Arts Reviews Integrating Bahraini Identity into Curricula](#)

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## 19. University of Bahrain College of Arts – “A Tour of Bahraini Heritage” Traveling Exhibition

The University of Bahrain, through its College of Arts, partnered with the Bahrain Authority for Culture and Antiquities (BACA) to present “A Tour of Bahraini Heritage,” a national traveling exhibition combining education, culture, and technology. The exhibition featured rare archaeological artifacts from the Dilmun and Tylos civilizations—some previously showcased at the Louvre Museum in Paris—and employed virtual reality technology to create an immersive public learning experience.

This initiative exemplified SDG 17 in action, uniting academia, government, and technology specialists in a cross-sectoral collaboration that promoted heritage education, cultural awareness, and digital innovation. Faculty experts and cultural policymakers jointly curated the exhibition, transforming heritage into an

interactive classroom for students, educators, and the wider community.

By offering open, public access to Bahrain’s archaeological history, the exhibition advanced Education for the SDGs (Indicator 17.4.1)—using experiential learning to strengthen identity, civic engagement, and sustainable cultural understanding. The project established a replicable model for national partnerships that integrate academic research with cultural policy and digital technologies, thereby reinforcing Bahrain’s leadership in sustainable education and cultural preservation.

## 20. University of Bahrain Advances Cultural Sustainability through National Translation Dialogue

The University of Bahrain (UOB) convened a national dialogue on translation and cultural sustainability through its event “Translation, Cultural Sustainability, and Promoting Cultural Diversity,” coinciding with the UN World Day for Cultural Diversity. The session brought together leading translators, writers, and representatives from the Bahrain Authority for Culture and Antiquities (BACA) to explore ways of preserving identity, cultural heritage, and linguistic diversity through translation.

Through open discussions, participants examined how translation acts as a tool for intercultural understanding and sustainable knowledge exchange, while showcasing national initiatives such as the Knowledge Transfer Project, which translated 50 books to stimulate cultural dialogue.

This initiative demonstrates the University of Bahrain’s leadership in fostering cross-sectoral

collaboration, fulfilling THE Indicator 17.2.2 by creating dialogue among academia, government, and cultural organizations around SDG-related themes. It also aligns with Indicator 17.2.4, through formal collaboration with BACA, a national entity advancing Bahrain’s cultural policies and sustainable development agenda.

Under SDG 4 (Quality Education), the dialogue extended educational outreach to students, alumni, and community members, enhancing public awareness of translation’s role in cultural sustainability and social inclusion.

By facilitating collaboration between scholars, government representatives, and creative practitioners, the University of Bahrain reaffirmed its commitment to embedding cultural sustainability within education and promoting inclusive dialogue that advances the UN Sustainable Development Goals.



[College of Arts discusses “Translation, Cultural Sustainability and Promoting Cultural Diversity”](#)

## 21. University of Bahrain College of Arts Organizes “Documentary Filmmaking and Cultural Innovation” Seminar

The University of Bahrain, through its College of Arts, convened a high-level forum titled “Documentary Filmmaking and Cultural Innovation” to advance dialogue between higher education and Bahrain’s creative-media industry. The event featured prominent national and academic voices, including pioneering Bahraini film director and producer Bassam Al-Thawadi, documentary filmmaker Dr. Eva Dawood, Dr. Mohammed Othman Al-Sayed from the American University of Bahrain, and Dr. Abdalnasser Fattah Allah from UOB’s Department of Media, Tourism, and Arts.

The seminar explored how documentary film serves as a platform for cultural preservation, social truth-telling, and creative innovation, demonstrating its potential to connect national identity with global creative practices. Speakers emphasized the value of authentic storytelling, cultural responsibility in media production, and the need for innovative approaches that allow Bahraini filmmakers to reach international audiences.

By uniting academic researchers, educators, and leading industry professionals, this initiative fulfilled the Indicator 17.2.2 (Cross-Sectoral Dialogue about

the SDGs) through a partnership between the University of Bahrain and representatives of the film and media industry. The exchange bridged theoretical learning and professional practice, enabling students to understand how creative industries contribute to sustainable social development and cultural diplomacy.

The event also advanced THE Indicator 17.4.1 (Education for the SDGs) by serving as a public educational experience that cultivated creative thinking, professional readiness, and awareness of the arts as tools for sustainability. Under SDG 4 (Quality Education), it strengthened capacity building in media and cultural studies through experiential learning. Under SDG 9 (Industry, Innovation and Infrastructure), it promoted technological and artistic innovation in filmmaking as part of Bahrain’s growing creative economy.

Through this initiative, the University of Bahrain positioned itself as a driver of creative partnership and cultural sustainability, connecting education, artistic practice, and industry collaboration to advance the UN Sustainable Development Goals.



College of Arts Organizes “Documentary Filmmaking and Cultural Innovation” Seminar

## 22. University of Bahrain Students Present “Effective Social Marketing Campaigns Foreseeing the Future of Sustainable Cities”

The University of Bahrain organized “Effective Social Marketing Campaigns Foreseeing the Future of Sustainable Cities,” an interdisciplinary exhibition highlighting how communication and marketing strategies can promote environmentally sustainable urban living. Developed collaboratively with members of Bahrain’s creative, tourism, and business sectors, the initiative served as a cross-sectoral platform for exploring how behavioral insights and design thinking can advance both Bahrain’s Vision 2030 and the UN Sustainable Development Goals.

By bringing together experts from design, media, hospitality, and environmental industries, the exhibition exemplified Indicator 17.2.2, showcasing effective dialogue between academia, industry, and civil society to address sustainability challenges.

It also fulfilled THE Indicator 17.4.1, offering an open educational event that enabled students, professionals, and the public to engage with practical models of sustainable communication and urban awareness.

Aligned with SDG 11 (Sustainable Cities and Communities), the event presented forward-looking campaign prototypes promoting responsible consumption, eco-friendly behavior, and community resilience. Through this collaboration, the University of Bahrain demonstrated how education, creative industries, and civic engagement can work together to inspire sustainable lifestyles and build inclusive, future-ready cities.



[Effective Social Marketing Campaigns Foresee the Future of Sustainable Cities](#)

### 23. University of Bahrain College of Arts Organizes Cultural Program Featuring Seven Scientific Seminars

During the second semester of 2023/2024, the College of Arts at the University of Bahrain implemented a comprehensive cultural program comprising seven scientific seminars designed to promote cultural sustainability, creative innovation, and inter-institutional collaboration. The program served as a national platform for dialogue connecting academia, cultural institutions, and creative-industry professionals, aligning cultural practice with Bahrain's Vision 2030 and the UN Sustainable Development Goals.

The seminars addressed themes such as Arabic Language and Cultural Sustainability, The Bahraini-British Treaties (1820–1971), The Biography of Bahraini Pearls: Cultural History and Sustainability Pathways, Documentary Filmmaking and Cultural Innovation, The Creative Legacy of Prof. Alawi Al-Hashemi, Psychology and Cultural Sustainability in Shaping the Future, and Translation and Cultural Diversity, which coincided with the UN World Day for Cultural Diversity.

This initiative embodied SDG 17 (Partnerships for the Goals) by establishing cross-sectoral cooperation between universities, cultural organizations, and community partners. It demonstrated the implementation of THE Indicator 17.2.2, creating ongoing dialogue between academia, government, and creative sectors, and THE Indicator 17.4.1, transforming university expertise into open, public learning opportunities accessible to students, artists, and the broader community.

By linking education, culture, and sustainability, the University of Bahrain showcased how higher-education institutions can act as catalysts for cultural partnership and lifelong learning, strengthening Bahrain's leadership in sustainable cultural development and contributing to the realization of the UN 2030 Agenda.



[College of Arts at UOB organizes a cultural program with 7 scientific seminars](#)

## 24. Cross-Sectoral Dialogue on Sports Law and Sustainable Development

The College of Law at the University of Bahrain hosted a public seminar titled “Law and the Sports Industry”, bringing together legal experts, government authorities, and representatives from the sports sector to discuss the legal and policy dimensions of Bahrain’s evolving sports ecosystem. The seminar served as a platform for cross-sectoral dialogue, supporting national efforts to align sports governance with sustainable development priorities.

### Purpose and Focus

The event addressed the need for comprehensive legislation that protects athletes and sports institutions, while strengthening the governance and professionalization of the sports sector. Discussions explored

- the economic impact of sports in national development,
- international sports dispute resolution mechanisms, and

- policy considerations that enhance institutional resilience and integrity.

### Cross-Sector Engagement

The seminar facilitated structured dialogue between academia, government bodies, sports institutions, and the wider community. The open-access format enabled broad participation, promoting transparent conversation on legal reforms and the regulatory frameworks needed to support sustainable sectoral growth.

### Contribution to SDG 17

By engaging multiple stakeholders in evidence-based discussion, the initiative strengthened national collaboration on policy development and highlighted the role of the sports industry in supporting social, economic, and institutional sustainability. The dialogue reinforced the University of Bahrain’s commitment to advancing SDG 17 through partnerships that inform legislative development, improve dispute-resolution systems, and enhance governance across sectors.



[University of Bahrain Hosts Seminar on Law and the Sports Industry](#)

## 25. Cross-Sectoral Dialogue on Political Awareness and Human Rights

[The University of Bahrain partnered with the Bahrain Institute for Political Development \(BIPD\)](#) to support a series of awareness-raising activities under BIPD's National Awareness Program. These initiatives targeted students, youth, and wider community groups, strengthening public understanding of political, legal, and human rights issues in line with national development priorities.

### Purpose and Focus

The collaboration aimed to enhance civic knowledge, build community awareness of rights and responsibilities, and promote informed participation in national governance.

### Activities highlighted:

- political and constitutional rights,
- legal protections and institutional accountability, and

- national and international mechanisms for safeguarding human rights.

### Cross-Sector Engagement

As part of the partnership, the University co-organized a seminar on mechanisms for protecting community rights, bringing together speakers and experts from:

- the Shura (Consultative) Council,
- the Ministry of Interior, and
- the University of Bahrain.

This multi-stakeholder dialogue examined legal frameworks, institutional safeguards, and policy measures that support civic engagement and the protection of rights at the national and regional levels



[Seminar on National and International Mechanisms for Protecting Community Rights at the University of Bahrain](#)

## 26. University of Bahrain and Tamkeen – Cross-Sectoral Partnership for Skills, Innovation, and National Capacity Development (2023)

The University of Bahrain collaborates with the Labour Fund (Tamkeen) to expand opportunities for student development and sector-focused training. Through Tamkeen’s sponsorship and capacity-building support, UoB students participate in practical, industry-aligned programs—such as international automotive engineering training delivered with Tamkeen and Mumtalakat—that enhance technical competencies and workforce preparedness.

Tamkeen’s engagement in the Youth Entrepreneurship Forum “Micro Shabab” further strengthens UoB’s ecosystem for enterprise education by

offering students direct access to guidance on entrepreneurship pathways and national support mechanisms. The partnership also contributes to the Cloud Innovation Center (CIC), which promotes digital skills, innovation readiness, and technology-driven problem solving.

This long-standing cooperation reinforces cross-sectoral collaboration, institutional capacity building, and multi-stakeholder engagement, aligning directly with SDG 17.2.2 by supporting national development priorities and strengthening UoB’s partnerships for sustainable development.



### Key outcomes include:

- **International training and applied learning:** Tamkeen-sponsored programs such as the Global Automotive Engineering Training at Prodrive (UK) enabled students to gain practical experience in high-technology environments, enhancing technical and professional competencies.
- **Knowledge exchange and innovation promotion:** Workshops, entrepreneurship forums, and industry mentorships fostered collaboration among students, experts, and employers to drive innovation and future-ready skills.
- **Policy-aligned capacity-building:** The partnership supported Bahrain's economic diversification and digital transformation agenda through joint initiatives that enhance youth employability and sectoral competitiveness.

This collaboration exemplifies THE Indicator 17.2.2 by fostering sustained dialogue among academia, semi-government entities, and industry on the integration of education, innovation, and policy. It demonstrates



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## 27. University of Bahrain and Amazon Web Services (AWS): Strategic Partnership for Digital Transformation and Innovation

The University of Bahrain (UOB) strengthened its global partnerships by signing an amendment to its Memorandum of Understanding (MoU) with Amazon Web Services (AWS) to expand cooperation in cloud computing, digital transformation, and workforce development. Through this collaboration, UOB became the largest university in the Middle East to migrate its entire IT infrastructure—including its student information system, correspondence management system, and digital platforms—to AWS Cloud, achieving a 40–50 percent performance improvement in service delivery.

This strategic partnership fosters cross-sectoral dialogue between academia, government, and the private sector, advancing digital innovation, data-driven research, and educational modernization in

alignment with Bahrain’s Vision 2030 and the UN Sustainable Development Goals (SDGs 4, 9, and 17). It supports capacity building and human capital development through AWS Academy training, certification programs, and the region’s first Cloud Innovation Center (CIC), jointly established by UOB, Tamkeen, and AWS to accelerate digital solutions for societal challenges.

By integrating cloud-based research, AI, and high-performance computing (HPC) into academic and administrative operations, UOB promotes innovation ecosystems and collaborative problem-solving that enhance national resilience, knowledge exchange, and sustainable economic growth.

## 28. University of Bahrain and Amakin Sign Campus Development Agreement to Advance Sustainable Infrastructure

The University of Bahrain (UOB) signed a strategic development agreement with Amakin Company, one of Bahrain's leading private-sector enterprises in parking management and real estate leasing, to enhance the University's research and laboratory infrastructure. This collaboration represents a model of cross-sectoral partnership that integrates private-sector expertise with public higher-education priorities in support of sustainable infrastructure and capacity development.

Under the agreement, Amakin will partially develop key laboratories within UOB's College of Engineering, providing high-performance devices, smart screens, and technical systems that strengthen the University's research capabilities and improve students' practical training environments. The initiative directly contributes to SDG 9 (Industry, Innovation, and Infrastructure) by improving the quality of research facilities and advancing sustainable campus development.

The partnership further reinforces SDG 17.2.2 (Cross-Sectoral Dialogue about the SDGs) by promoting structured engagement between academia and the private sector, fostering mutual knowledge exchange, and aligning corporate social responsibility with national education goals. Both parties also discussed student training, research collaboration, and innovation projects, reflecting Amakin's commitment to social responsibility and youth empowerment.

Through this agreement, the University of Bahrain demonstrates its proactive approach to building strategic partnerships that link education, industry, and innovation, contributing to Bahrain's Vision 2030 and the UN Sustainable Development Goals.



## 29. University of Bahrain–KPMG Fakhro Partnership: Advancing Cross-Sectoral Collaboration for SDG-Aligned Skills Development

The University of Bahrain (UoB) actively advances SDG 17.2.2 by fostering cross-sectoral dialogue and strategic collaboration with KPMG Fakhro, strengthening partnerships between higher education and the private sector to support sustainable development objectives. The memorandum of understanding, signed by Dr. Jawaher bint Shaheen Al-Mudhahka, President of UoB, and Mr. Jamal Fakhro, Executive Partner of KPMG in Bahrain, provides a structured framework for professional development, skills training, internships, capacity building, and knowledge sharing.

This partnership facilitates mutual engagement between academia and industry, enabling students and faculty to participate in training workshops, practical internships, joint research, and the development of educational materials, fostering experiential learning, workforce readiness, and professional mentorship. Programs are aligned with national initiatives, including the Hussain Qassim vocational training program, promoting the preparation of Bahraini graduates for the labor market and encouraging

entrepreneurship, employability, and community impact.

Through ongoing cross-sector engagement, UoB and KPMG Fakhro enhance institutional capacity, curriculum relevance, and policy alignment, ensuring that collaborative initiatives are evidence-based, impactful, and sustainable. Senior representatives from both organizations participate in strategic planning, knowledge mobilization, and quality assurance, strengthening multi-stakeholder partnerships and enabling measurable contributions to professional competency, skills development, and long-term national human capital growth.

This partnership exemplifies a model of effective cross-sectoral collaboration, where higher education, private industry, and national workforce development priorities converge to advance SDG-aligned outcomes, capacity building, and inclusive professional development, supporting Bahrain's broader sustainable development objectives.

### 30. University of Bahrain–Lancaster University Partnership Strengthens Global Dialogue on SDG Integration and Academic Innovation

On 22 March 2024, the University of Bahrain (UOB) and Lancaster University (UK) established a strategic international partnership that advances SDG 17.2.2 by promoting cross-sectoral dialogue, mutual learning, and knowledge exchange on the Sustainable Development Goals (SDGs). The collaboration creates a structured platform for policy dialogue, capacity building, and shared research initiatives linking academia, government, and industry in pursuit of global educational excellence and sustainable impact.

Through joint academic programs, international conferences, and faculty exchanges, both universities foster active discussion on quality education, global

citizenship, and institutional alignment with SDG priorities. This partnership embeds inclusive practices, evidence-based policymaking, and multi-stakeholder engagement into teaching and research, reinforcing the role of higher education as a driver of sustainable transformation.

By integrating SDG literacy, innovation, and cross-border collaboration into curriculum design and governance, UOB and Lancaster University demonstrate how strategic academic alliances can operationalize SDG 17 (Partnerships for the Goals) through effective dialogue, global engagement, and systemic capacity development.



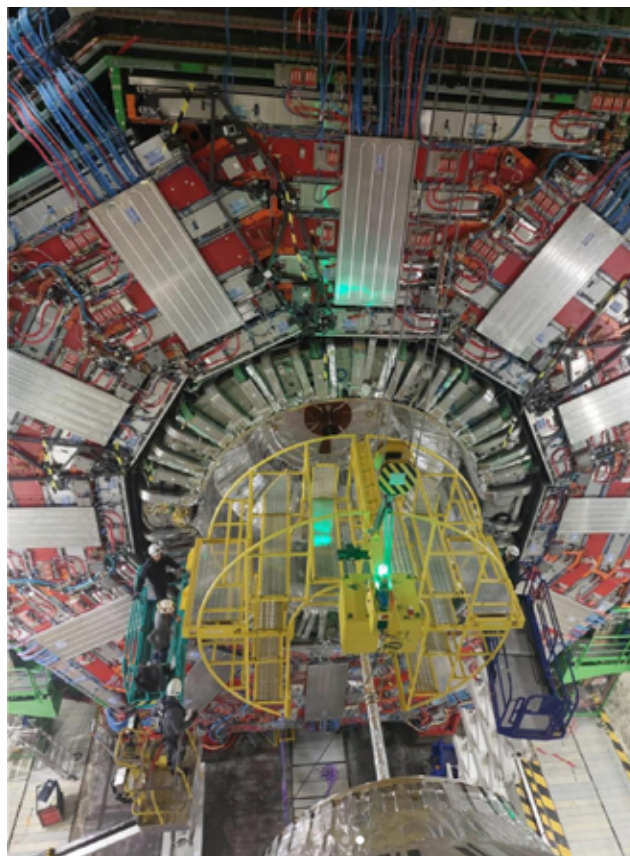
[University of Bahrain Signs a Memorandum of Understanding with Lancaster University](#)

### 31. University of Bahrain and CERN Partnership Fostering Global Dialogue on Science, Innovation, and Sustainable Development

The University of Bahrain (UOB) and the European Organization for Nuclear Research (CERN) actively advance SDG 17.2.2 by initiating and participating in cross-sectoral dialogue on the Sustainable Development Goals (SDGs). Through the International Cooperation Agreement signed on 22 June 2023, UOB represents the Kingdom of Bahrain in CERN's global scientific network, linking academia, government, and industry in structured dialogue on innovation and sustainable research governance.

This collaboration hosts joint workshops, scientific forums, and public exhibitions that connect students, educators, and researchers with international experts on the role of science and technology in achieving the SDGs. Such initiatives promote knowledge exchange, STEM capacity building, and inclusive participation in sustainability-focused research. UOB also extends this dialogue to schools and the community through interactive sessions on physics and computational science, empowering youth and educators to engage in global sustainability discourses.

By embedding UN SDG principles in research communication and science policy dialogue, the UOB–CERN partnership demonstrates how academic collaboration can catalyze multi-stakeholder engagement, global dialogue, and evidence-based policy exchange for sustainable development.



Through this collaboration, multiple joint projects have been conducted that integrate cutting edge research and technology with sustainability principles and capacity building. Examples include:

- **Project 1: Design of Tooling B** (Endcap Removal Platform for the HGCal Upgrade) and Manufacture an Automated Jig using an Aluminum Scaffolds in Bahrain: The project aims to design and build an automated jig to handle work platforms allowing personnel to access the most inner parts of the CMS detector. The platforms is manufactured in Bahrain using Aluminum and then shipped and to be installed at CERN and now it is in full operation. The automated platform is made from Aluminum which is a lighter material and has less corrosion than iron and more efficient in performing the Compact Muon Solenoid (CMS) detector maintenance.

- **Project 2: Performance Auto-tuning Framework for GPU Applications Using Parameters Optimisation:** The project aims to Investigate how to automatically configure the CMS Software works (CMSSW) to get near optimal performance on different set of hardware, with focus on Graphical Processing Units (GPUs) applications. This work successfully speeds up the data selection process by improving the algorithms which save more computer time.

- **Project 4: Fluid Mechanics project: CO<sub>2</sub> Cooling System:** The project aims to design and integration studies of CO<sub>2</sub> cooling equipment and services and supporting R&D on future detector infrastructure. The project involves work on the Risk Assessment for the future CO<sub>2</sub> cooling plants. The Two-Phase Accumulator Controlled Loop (2PACL) plants are used to cool CMS detector components to reduce the radiation damage on them. This project is an ongoing project to use CO<sub>2</sub> gas in cooling the detector and recover and use the heat generated .

- **Project 5: Minimum Ionizing particle Timing Detector project:** The project aims to development a framework which will collect monitoring data from MTD front-end systems through an MTD DAQ board and store it in a database. So, the project involves the development of the next generation control system for this novel CMS detector. This monitoring provides notification to take actions before any system failure which increases the sustainability of the experiment work environment.

## 32. University of Bahrain Conferences Strengthening Cross-Sectoral Dialogue and Global SDG Partnerships

The University of Bahrain (UOB) advances SDG 17.2.2 by serving as a leading regional hub for cross-sectoral dialogue, bringing together academia, industry, government, and international organizations to advance the UN Sustainable Development Goals (SDGs) through major conferences and collaborative platforms.

In 2023–2024, UOB organized several high-impact international conferences with technical sponsorship from the Institute of Electrical and Electronics Engineers (IEEE) and the Institution of Engineering and Technology (IET), attracting over 670 peer-reviewed IEEE papers across multiple Scopus-indexed proceedings. These conferences—including the Sustainability and Resilience Conference Series (2023–2024), the International Conference on Data Analytics for Business and Industry (DABAI), the International Conference on Sustainable Islamic Business and Finance (SIBF), and the International Conference on Sustaining Heritage (ICSH 2024)—provided structured platforms for policy dialogue, knowledge sharing,

and multi-stakeholder engagement aligned with SDG principles.

Collaborations extended beyond academia to include key partners such as AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions), Inform–Bahrain, and leading industry and policy institutions. International keynote speakers from the UK, Saudi Arabia, Sweden, Pakistan, and Poland contributed to discussions on sustainability transitions, industry innovation, and Islamic finance for sustainable development, promoting inclusive global exchange and thought leadership.

Through these initiatives, UOB promotes capacity building, research dissemination, and international cooperation, strengthening Bahrain’s position as a center for knowledge-driven cross-sectoral dialogue and advancing global understanding of the SDGs in higher education, technology, and sustainable finance.

### 33. University of Bahrain – International SDG Dialogue Platforms (2024)

In 2024, the University of Bahrain significantly advanced SDG 17.2.2 by initiating and participating in major cross-sectoral and cross-regional dialogues focused on the Sustainable Development Goals. Through four large-scale international conferences, the University convened academics, government agencies, industry leaders, civil-society organizations, financial institutions, and global research communities to exchange SDG-aligned knowledge and co-develop practical solutions.

Collectively, these events accepted 152 peer-reviewed papers, including 70 authored by UoB researchers, and attracted over 700 participants representing Asia, Europe, the Middle East, Africa, and North America. Asia accounted for more than half of all contributors with strong engagement from India, Indonesia, Malaysia, Taiwan, and Vietnam, demonstrating UoB's role in strengthening South–South and triangular cooperation. The conferences served as powerful platforms for dialogue across

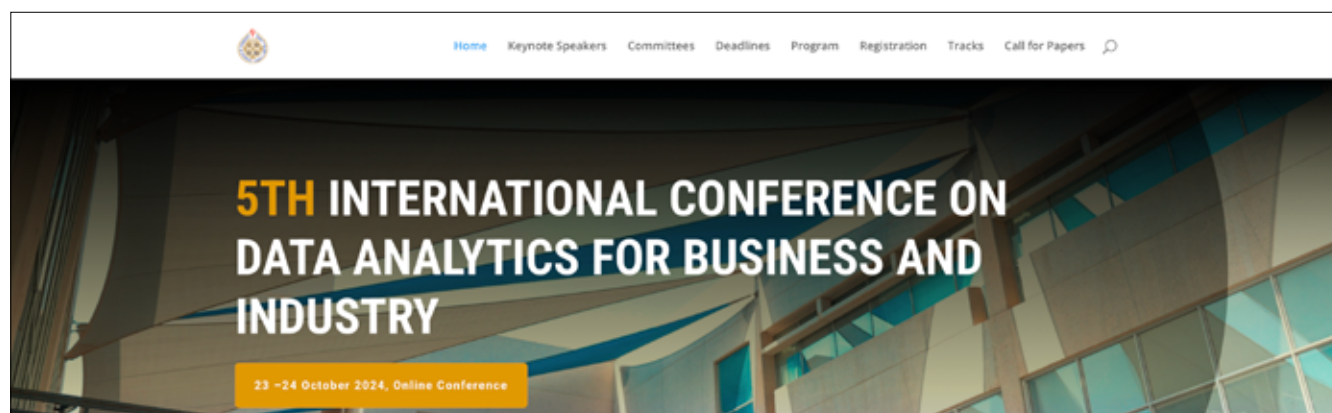
sectors such as data science, Islamic finance, climate resilience, sustainability, industry, cultural heritage, creative industries, and government partnerships—directly addressing multiple SDGs through shared global expertise.

By ensuring that sessions were publicly accessible and designed to facilitate interdisciplinary, multi-stakeholder dialogue, the University of Bahrain reinforced SDG 17 by expanding opportunities for joint SDG problem-solving, fostering cross-regional collaboration, and promoting shared SDG learning ecosystems. These platforms strengthened national and international partnerships for sustainable development and amplified UoB's contribution to the global SDG conversation.

### 33.1. ICDABI 2024 – Cross-Sector Dialogue on Data-Driven Innovation for SDG Solutions

ICDABI 2024 convened researchers, private-sector innovators, policymakers, and students to exchange SDG-relevant insights on AI, predictive modelling, and digital transformation. The conference facilitated cross-sector dialogue on how data science supports sustainable economic development, operational efficiency, and evidence-based decision-making. Discussions connected academia with industry and public-sector stakeholders, strengthening SDG 17 partnerships for knowledge transfer and digital-capacity building.

- **Participants:** 200
- **Accepted Papers:** 38 (20 from UoB)
- **Regions Represented:** Asia, Middle East & Africa, Europe, North America



<https://icdabi.uob.edu.bh/2024/>

### 33.2. SIBF 2024 – Multi-Stakeholder Dialogue on Sustainable Islamic Finance Systems

SIBF 2024 provided a global platform for academics, financial institutions, fintech developers, policymakers, and civil-society organizations to jointly explore the role of Islamic finance in advancing the SDGs, particularly inclusive growth, ethical governance, and poverty reduction. The conference strengthened SDG 17 by connecting public, private, and academic sectors through shared discussions on risk-sharing, social-impact financing, and sustainability-aligned economic models.

- **Participants:** 400
- **Accepted Papers:** 61 (33 from UoB)
- **Regions Represented:** Asia, Middle East & Africa, Europe, North America



<https://icsibf.uob.edu.bh/2024/>

### 33.3. ICSH 2024 – Cross-Cultural Partnership Dialogue on Digital Heritage and SDG Preservation

ICSH 2024 united heritage institutions, policymakers, digital-technology experts, creative industries, cultural practitioners, and academics to discuss how AI, 3D modelling, and immersive environments can support sustainable preservation. The event strengthened SDG 17 partnerships by enabling cross-sector collaboration on cultural sustainability, knowledge-sharing between nations, and interdisciplinary exchange across tourism, education, and cultural-policy sectors.

- **Participants:** 46
- **Accepted Papers:** 28 (6 from UoB)
- **Regions Represented:** Asia, Middle East & Africa, Europe, North America



<https://icsh.uob.edu.bh/2024/>

### 33.4. SRC 2024 – Multi-Stakeholder Dialogue on Nature-Based Solutions for Climate Resilience

SRC 2024 facilitated cross-regional and cross-sectoral dialogue on integrating Nature-Based Solutions into industrial and developmental systems. The conference brought together policymakers, researchers, environmental NGOs, climate-technology industries, and community leaders to discuss NBS applications that support SDG 13, SDG 11, and SDG 7. Through open sessions and technical tracks, participants exchanged practical strategies for climate adaptation, biodiversity protection, and green transitions, reinforcing SDG 17 partnerships for environmental resilience.

- **Participants:** 127
- **Accepted Papers:** 25 (11 from UoB)
- **Regions Represented:** Asia, Middle East & Africa, Europe, North America



<https://srcdi.uob.edu.bh/2024/>

## 34. University of Bahrain, in partnership with The Institution of Engineering and Technology (IET)

### 8th IET Smart Cities Symposium (1–3 December 2024)

The University of Bahrain (UoB), in formal partnership with the Institution of Engineering and Technology (IET), organized and hosted the 8th IET Smart Cities Symposium from 1–3 December 2024. This annual international forum brings together global stakeholders to discuss smart and sustainable urban development, with a direct focus on SDG-aligned innovation, digital transformation, and low-carbon city strategies.

The 8th IET Smart Cities Symposium, facilitated structured, cross-sector dialogue that brought together government bodies, policymakers, professional engineering organizations, industry and private-sector leaders, academic researchers, and civil-society stakeholders. Participants included urban planning authorities, national ministries, regulatory agencies, global professional networks, smart-technology firms, ICT providers, engineering companies, researchers, faculty, postgraduate students, urban practitioners, infrastructure specialists, and sustainability experts.

The symposium delivered SDG-focused dialogue through keynote addresses from international experts, panel discussions on smart-city resilience, low-carbon innovation, energy transitions, and AI-enabled urban systems, as well as technical research sessions that enabled the exchange of global best practices. Open learning and publicly accessible discussions allowed students, graduates, and community members to engage directly with emerging knowledge. The event examined global smart-city strategies and reflected on future-ready solutions for sustainable, intelligent, and climate-responsive urban development, directly linking to the SDGs.

Through cross-sector knowledge exchange, the symposium advanced SDG 17 by strengthening partnerships with the IET and global technology networks. It also contributed to SDG 11 by promoting sustainable and resilient urban development, SDG 9 through industry innovation, digital transformation, and infrastructure, and SDG 13 by supporting low-carbon planning and climate adaptation initiatives.

The 2024 symposium achieved significant international and cross-regional reach, with participants from the GCC and Middle East including government agencies, industry, and academia; Europe, through IET networks and affiliated experts; and Asia, including ICT specialists, engineers, and researchers. This broad engagement highlights the symposium's role as a sustained platform for cross-sectoral, cross-regional collaboration, knowledge exchange, and partnership building in support of the global SDG agenda.

### Public Availability

Details of the symposium—including objectives, speakers, themes, and sessions—are publicly accessible on the official event website.

**Literature Review**

Table 1: Review of related works

Ref	Dataset	Accuracy	Model	Data split	Classification	Tool	Contribution
[1], 2024	[1]MCSH	92.80%	MobileNetV2Large	N/A	2-class	N/A	Detection of monkeypox using mobile images
[3], 2022	[4]AcXy [5]MSLID	89%	M-VGG16 model	80:20:00	2-class	LIME	Diagnosis of monkeypox
[3], 2022	[4]AcXy [5]MSLID	89%	M-ResNet50	80:20:00	4-class	LIME	Diagnosis of monkeypox
[6], 2023	[7]MSID	87%	CNN-LSTM hybrid model	80:10:10	4-class	LSTM	Detection of monkeypox
[8], 2023	[7]MSID	91.19%	ResNet18	80:20:00	4-class	LIME	Classification of monkeypox
[9], 2024	Web data	92.96%	ResNet50	70:20:10	2-class	---	Diagnosis of monkeypox

8th IET Smart Cities Symposium - University of Bahrain, IET Digital

### Long-Term Impact: IET Indexing of UoB Smart-City Research

The impact of the Smart Cities Symposium extends beyond annual dialogue and contributes to sustained international collaboration, a key criterion for SDG 17.2.2.

On 3 May 2023, the IET formally indexed the research papers of the 6th Smart Cities Forum (Dec 2022) organized by the University of Bahrain. This independent, third-party validation demonstrates the global quality, relevance, and visibility of UoB's smart-city research outputs.



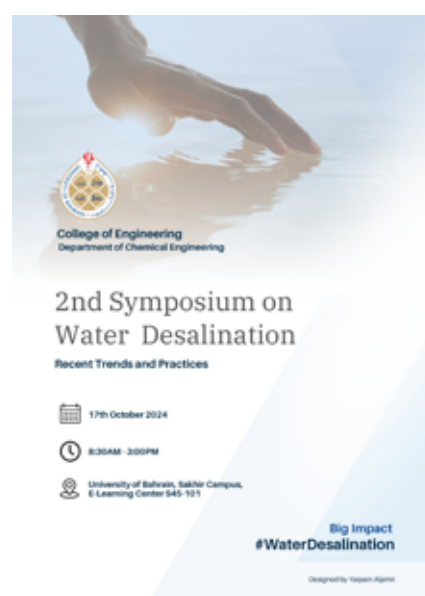
### 35. University of Bahrain | Micro Water Desalination Forum: Modern Trends and Practices

In 2024, the University of Bahrain (UoB) reinforced its regional leadership in advancing scientific research and innovation in water desalination and treatment technologies, addressing the pressing challenges of water scarcity in arid environments such as Bahrain. As part of this effort, UoB organized the second edition of the Micro Water Desalination Forum: Modern Trends and Practices, providing an open, cross-sector platform for knowledge exchange among government agencies, industry practitioners, academic researchers, and professional associations. The forum created opportunities for multi-stakeholder dialogue on sustainable water management, policy development, technological innovation, and regional collaboration, directly supporting SDG 17 on partnerships while advancing SDG 6 on clean water and sanitation and SDG 9 on industry, innovation, and infrastructure.

The event brought together participants from across Bahrain and the Gulf region, including water authorities, environmental regulators, desalination plant operators, technology providers, and academic researchers, enabling dialogue on cutting-edge desalination technologies, energy-efficient water treatment processes, and process optimization

strategies. Through panel discussions, presentations, and open sessions, the forum facilitated cross-disciplinary collaboration, sharing of best practices, and co-development of solutions for sustainable water use. By promoting inclusive participation from government, industry, and academia, the forum strengthened regional networks, enhanced the visibility of UoB research, and advanced practical solutions that can be implemented in arid regions.

The University of Bahrain's leadership in hosting this forum demonstrates a sustained commitment to fostering innovation, building cross-sector partnerships, and promoting regional capacity in water management technologies. The Micro Water Desalination Forum not only strengthens collaborative research and professional networks but also accelerates knowledge transfer, supports lifelong learning, and contributes to the development of sustainable, resilient solutions to water scarcity challenges in Bahrain and the broader Gulf region.



### 36. University of Bahrain and Shanghai University Strengthen International Research Collaboration and Data Sharing

The University of Bahrain (UoB) advances SDG 17.2.3 by fostering international research collaboration and data-driven knowledge exchange through its strategic partnership with Shanghai University (SHU) under the Confucius Institute framework. This long-term collaboration promotes joint research, innovation, data gathering, capacity building, institutional strengthening, and evidence-based outcomes across disciplines including business administration, chemistry, education technology, and applied sciences.

Since the establishment of the partnership in October 2023, UoB and SHU have conducted joint academic meetings, faculty exchange visits, collaborative research proposals, co-authored publications, and high-impact workshops, all supporting cross-border collaboration, policy-aligned research, and knowledge mobilization. A Joint Steering Committee provides governance and strategic oversight, ensuring sustainable collaboration, resource sharing, and measurable research outputs.

Since the signing, both universities have:

- Held over 10 joint academic meetings and exchange visits, including high-level delegations and faculty workshops.
- Initiated 8 joint research proposals in business administration, chemistry, and education technology.
- Organized over 30 co-hosted academic and cultural events supporting university-community engagement and regional cooperation.
- Established a Joint Steering Committee, meeting annually to review progress and plan future initiatives.

This collaboration actively fosters knowledge sharing, resource mobilization, and institutional capacity building—key indicators of effective SDG 17 implementation.

In April 2024, Shanghai University was selected as a Chinese member university of the “China–Arab Universities 10+10 Cooperation Plan”, jointly coordinated by China’s Ministry of Education and ALECSO, with the UoB–SHU partnership recognized as one of the model cases of educational cooperation under this initiative.

The partnership engages students and faculty in co-supervised research projects, innovation-driven studies, professional training, and capacity-building programs, strengthening UoB’s international research networks and reinforcing its commitment to data gathering, evidence-based research, and global knowledge production. This cooperation exemplifies a structured approach to multi-stakeholder, international collaboration that advances Bahrain’s sustainable development priorities and SDG 17 implementation.



[The University of Bahrain and Shanghai University Sign a Memorandum of Understanding in Scientific and Cultural Fields](#)

### 37. University of Bahrain–UAE University Partnership

The University of Bahrain (UoB) and the United Arab Emirates University (UAEU) signed a Memorandum of Understanding (MoU) on 22 November 2023 during the 11th Joint Committee Meeting between Bahrain and the UAE in Abu Dhabi. The agreement, signed by Prof. Fuad Mohammed Al-Ansari and H.E. Dr. Zaki Anwar, establishes a framework for joint research, academic cooperation, and sustainable data exchange.

The partnership enhances regional capacity-building through collaborative research projects, faculty and student mobility, and knowledge-sharing mechanisms

that support evidence-based policymaking and SDG monitoring. By integrating research, innovation, and data collaboration, the MoU strengthens the regional academic ecosystem and contributes to international scientific cooperation for sustainable development.

This initiative directly supports SDG 17.2.3 – International collaboration data gathering for the SDGs, advancing global partnerships, data transparency, and cross-border cooperation in achieving the United Nations Sustainable Development Goals.



[University of Bahrain News – UoB and UAE University sign MoU \(Nov 2023\)](#)

### 38. University of Bahrain and Boston University

The University of Bahrain (UoB) and Boston University (BU) established an international academic partnership in April 2022, aimed at advancing research collaboration, innovation, and data exchange in education and sustainable development. The agreement enables joint academic programs, faculty engagement, and collaborative research that support evidence-based policymaking and capacity-building in higher education.

Through the partnership, BU's Wheelock College of Education and Human Development and UoB's Bahrain Teachers College (BTC) jointly offer a Master's program in Educational Leadership and Policy Studies,

designed to strengthen school leadership, improve educational outcomes, and foster sustainable learning ecosystems.

This collaboration enhances international knowledge-sharing and contributes to data-driven SDG implementation, particularly in education quality, innovation, and institutional partnerships. It supports SDG 4 (Quality Education), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 17 (Partnerships for the Goals) through



[University of Bahrain News – UoB and Boston University strengthen collaboration \(2022\)](#)

### 39. Nanotechnology Research for Breast Cancer

The University of Bahrain (UOB) actively advances SDG 17.2.3 by participating in international research collaboration and shared data generation that contribute to global monitoring of SDG 3 (Good Health and Well-being). Through a strategic partnership with Alexandria University (Egypt), the Cancer Nanotechnology Research Laboratory, and the Harvard Wyss Institute, UOB engages in the systematic collection, exchange, and analysis of biomedical and nanomaterial data to accelerate innovation in cancer nanomedicine and strengthen evidence-based approaches to sustainable health research.

The collaboration integrates joint databases, shared experimental datasets, and computational modeling outputs to advance open scientific inquiry and improve reproducibility across laboratories. Led by Professor Adnan Bekhit, the initiative unites medicinal chemistry, nanotechnology, and targeted drug-delivery research, producing robust, comparable datasets on nanoparticle design, pharmacokinetics, and biocompatibility relevant to the SDG data ecosystem.

- **Project 1:** Development of Biocompatible Nanoparticles for Breast Cancer Therapy – focuses on synthesizing and testing nanocarriers capable of targeted drug delivery, with systematic data collection on physicochemical parameters and cytotoxicity profiles.

- **Project 2:** Nanomicelle Formulation and Computational Modeling – generates simulation data on micellar stability, drug-loading efficiency, and interaction mechanisms, contributing to cross-institutional data repositories that inform policy and innovation.

- **Project 3:** Translational Research and Toxicity Profiling – gathers and harmonizes toxicity and efficacy datasets under standardized reporting frameworks, supporting reproducibility and alignment with international data-sharing standards.

In addition to laboratory collaboration, the initiative provides training for emerging researchers in data management, open science protocols, and SDG-linked reporting methodologies, ensuring long-term institutional capacity for evidence-informed research.

By embedding data-driven collaboration within its research and education strategy, the University of Bahrain contributes directly to the international collection, measurement, and application of SDG data, while advancing regional knowledge transfer and innovation in sustainable biomedical technologies.



[How the University of Bahrain is building a strong local team to boost nanotechnology research](#)



#### 41. International Collaboration through Student Innovation – Arab IoT and AI Challenge, University of Bahrain

The University of Bahrain (UoB) actively advanced SDG 17.2.3 – International research collaboration and partnerships by participating in the Arab Internet of Things and Artificial Intelligence Challenge, held alongside GITEX Week in Dubai, UAE. The competition involved participants from 13 Arab countries, fostering cross-border engagement, international collaboration, and regional knowledge exchange in emerging technologies.

UoB students distinguished themselves by topping the Bahrain IoT and AI Challenge, qualifying for the Arab-level competition in both graduation projects and startup categories. Innovative projects included an AI-powered smart glove translating sign language into

sound, a child incubator startup, a smart refrigerator using IoT, and a cyber-attack resistant transportation system. These projects highlight the University's commitment to applied research, innovation, and capacity building, while providing students with practical experience in emerging technological fields. The competition was organized in collaboration with multiple institutions and organizations, including the Telecommunications Society-Bahrain Branch of IEEE, Bahrain Polytechnic, and national governmental agencies, and involved a jury of experts, academics, and industry professionals from across the Arab region. This demonstrates multi-stakeholder, cross-border partnerships that strengthen the region's research ecosystem.



[Topping University Competitions in the Category of Graduation Projects and Start-Up Projects UoB Students Qualify for the Arab IoT and AI Challenge Dr. Al-Jowder: Scientific competitions develop students' skills and stimulate creativity](#)

## 42. University of Bahrain Strengthens International Collaboration through Huawei ICT Competition

The University of Bahrain (UoB) advanced SDG 17.2.3 – International collaboration data gathering for SDG by hosting the regional finals of the Huawei ICT Championship and Competition for the Middle East and Central Asia under the patronage of His Highness Sheikh Nasser bin Hamad Al Khalifa.

The competition brought together 22 teams from 11 countries, including Bahrain, Pakistan, Iraq, Saudi Arabia, Lebanon, Jordan, Kazakhstan, Qatar, Kuwait, the United Arab Emirates, and Oman. UoB's students excelled, winning the Best Educational Academy Award, while the Bahrain team secured second place

in the computer networks competition, supervised by Dr. Alauddin Al-Omary from the Department of Computer Engineering.

Through collaboration with Huawei, Amazon, UNESCO, and regional educational authorities, the competition provided students with hands-on training in advanced ICT technologies, exposure to international trends, and applied skills development, bridging the gap between classroom learning and workplace readiness.



### 43. Sustained NGO–University Partnership Advancing Youth Empowerment: Rayat Scholarship Program with Al Mabarrah Al Khalifia Foundation

The University of Bahrain (UoB) demonstrates a strong and sustained commitment to SDG 17.2.5 – Collaboration with NGOs for SDGs through its long-standing partnership with Al Mabarrah Al Khalifia Foundation (MKF), a national non-profit organization dedicated to youth empowerment and educational development.

Since the launch of the Rayaat Scholarship Program in 2011, UoB has served as MKF’s primary academic partner, supporting the program’s mission to ensure equitable access to higher education and comprehensive personal development for Bahraini youth. This collaboration was formally renewed in March 2021, reaffirming UoB’s commitment to expanding learning pathways and providing continued scholarship opportunities for undergraduate students—an initiative that remains active today.

As of the latest cycle, MKF has awarded 302 scholarships, including 225 to UoB students, underscoring the University’s central role in amplifying the program’s social and educational impact. The Rayaat Scholarship provides full tuition coverage, developmental workshops, skills-building courses, and practical training opportunities across government and private sectors. It also cultivates values of volunteering, social responsibility, and civic engagement, complemented by the Rayat Card, which offers academic and social benefits that enhance students’ university experience.

In its September 2024 announcement, MKF confirmed that the University of Bahrain remains a key partner in the program, with scholarships again allocated for UoB bachelor’s degree students. This continuation reflects ongoing national demand for the program

and the University’s enduring role in supporting the Foundation’s vision. Students are selected based on academic merit, interviews, personal achievements, and community volunteerism—strengthening SDG-aligned pathways for equitable education and youth empowerment.

The UoB–MKF collaboration strengthens Bahrain’s SDG ecosystem by integrating NGO-led capacity building, university academic support, and industry/government training pathways. Her Highness Shaikha Zain bint Khalid Al Khalifa, Chairperson of MKF, emphasized that this partnership helps develop an aware, skilled, and socially responsible generation capable of contributing meaningfully to national development.

Overall, UoB’s continuous and active cooperation with MKF exemplifies effective, long-term NGO–university collaboration that delivers measurable social impact and advances national progress toward the Sustainable Development Goals.



مؤسسة  
المبرة الخليفة  
AlMabarrah  
AlKhalifia  
Foundation

[Al Mabarrah Al Khalifia Foundation Renews Agreement with University of Bahrain for Rayat Scholarship Program](#)

#### 44. Women Empowerment and Academic Collaboration – University of Bahrain and Royal University for Women

The University of Bahrain (UoB) and the Royal University for Women (RUW) signed a collaboration agreement in 2024 to strengthen academic cooperation, women's empowerment, and professional training across Bahrain's higher education sector. The agreement, endorsed by Prof. Fuad Mohammed Al-Ansari and Dr. Riyadh Yousef Hamzah, promotes faculty exchange, joint teaching, and shared academic expertise that advance gender equity and institutional capacity-building.

The partnership supports training programs, workshops, and professional-development courses

for faculty and administrative staff, and fosters joint research, conferences, and student-engagement activities that enhance learning in sustainability, leadership, and equality. By integrating gender empowerment and lifelong-learning principles into academic collaboration, the initiative contributes to education for the SDGs, aligning with national priorities for inclusive growth and quality education.

This initiative directly supports SDG 4 (Quality Education), SDG 5 (Gender Equality), and SDG 17 (Partnerships for the Goals).



[The University of Bahrain and the Royal University for Women Sign a Collaboration Agreement](#)

#### 45. University of Bahrain and Gulf Society for Maintenance and Reliability (GSMR) Partner to Promote Engineering Excellence and SDG Best Practices

The University of Bahrain (UOB) and the Gulf Society for Maintenance and Reliability (GSMR) signed a Memorandum of Understanding (MoU) to strengthen cooperation in maintenance, reliability, and asset management, advancing education, research, and professional training aligned with the UN Sustainable Development Goals (SDGs). The agreement, signed by Dr. Jawaher bint Shaheen Al-Mudhahka, President of UOB, and Eng. Saad bin Ibrahim Al-Tuhaifan Al-Shamrani, Chairman of GSMR, reflects a shared commitment to implementing regional best practices in engineering education and sustainable technical development.

Through this collaboration, UOB and GSMR will exchange expertise, co-host regional conferences, workshops, and training programs, and jointly develop initiatives that connect academic research with industrial innovation. The partnership emphasizes continuous improvement and knowledge transfer, fostering a culture of quality, safety, and sustainability across the engineering sector in the Gulf region.

By aligning academic programs with professional standards and real-world applications, the initiative contributes to SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure) while exemplifying SDG 17.2.4 (Collaboration for SDG Best Practice). The partnership serves as a model of cross-sectoral cooperation, demonstrating how universities and professional societies can jointly advance technical excellence, workforce development, and sustainable industrial growth through the exchange of best practices.

[University of Bahrain – UOB and GSMR Sign Cooperation Agreement \(2023\)](#)

## 46. Promoting International Collaboration and SDG-Aligned Best Practices Through SPE PetroBowl Competitions”

The University of Bahrain (UOB) reinforced international collaboration and the exchange of SDG-aligned best practices through the exceptional performance of its SPE Student Chapter in the SPE PetroBowl regional qualifiers and subsequent global championship. The team, comprising Jamal, Mohamed, Mariam, Salman, and Hannah, secured second place in the highly competitive Middle East and North Africa (MENA) regional qualifiers held in Al-Khobar, Saudi Arabia, earning a spot at the prestigious SPE Annual Technical Conference & Exhibition (ATCE) PetroBowl Championship in New Orleans, USA.

During the competition, the team engaged in rapid-fire quiz challenges spanning core petroleum engineering disciplines—including drilling, reservoir, production, and formation evaluation—while integrating industry knowledge, economic understanding, and sustainable engineering considerations. This rigorous environment required cross-institutional collaboration, critical

thinking, and application of global best practices in energy engineering. By competing alongside top international peers, UOB students contributed to a knowledge exchange that promotes SDG-relevant innovation, technical excellence, and professional standards within the energy sector. The SPE Bahrain Student Chapter’s achievement reflects UOB’s active role in fostering regional and global partnerships that advance sustainable practices in petroleum engineering education.



## 47. UNDP-UoB Academic Program on Integrating SDGs into Curricula

In 2024, UNDP Bahrain and the University of Bahrain (UoB) launched a pioneering academic program to integrate Sustainable Development Goals (SDGs) into university curricula, providing a structured platform for students to engage with global sustainability challenges. This collaboration exemplifies SDG 17.2.5, demonstrating effective partnerships between an international NGO and academia to mainstream SDG knowledge and skills in higher education.

The program introduces SDG-focused content into first-year English courses, complemented by specialized courses in sciences and law. Students completing the program receive dual certification from UoB and UNDP, equipping them with both theoretical understanding and practical competencies to address pressing sustainability issues, including climate change, social inequalities, and responsible governance.

At the launch event, Mrs. Jehan AlMurbati, UNDP Bahrain Head of Office a.i., highlighted the program's role in empowering youth as agents of change and underscored the importance of academic-NGO collaboration in translating the SDGs into actionable knowledge. Dr. Fuad Mohammed Alansari, President of UoB, emphasized that the initiative strengthens human capital development, fosters innovation, and prepares students to design solutions aligned with the SDGs.

This program reflects Bahrain's broader commitment to sustainable development and positions the University of Bahrain as a regional leader in SDG-focused higher education. By embedding the SDGs across disciplines and partnering with UNDP, UoB is setting a benchmark for universities in the Gulf, fostering a new generation of leaders capable of driving transformative action on global sustainability challenges.



[UNDP and University of Bahrain Launch Groundbreaking SDGs Academic Program](#)

#### 48. UNIDO–UoB Entrepreneurship and Innovation Partnership (April–May 2024)

Within the framework of collaboration between the Investment and Technology Promotion Office (ITPO) – United Nations Industrial Development Organization (UNIDO) and the University of Bahrain (UoB), a graduation ceremony was held on 23 April 2024 at UoB.

The ceremony recognized more than 40 professors and lecturers who participated in Training-of-Trainers courses on entrepreneurship development and investment promotion using the Bahraini Entrepreneurship and Innovation Model. The event was attended by Dr. Fuad Mohammed Al-Ansari, President of UoB, and Dr. Hashim Hussein, Head of ITPO–UNIDO Bahrain.

The Bahraini model, launched in 2000, has been applied in 52 countries worldwide as an integrated

framework to support entrepreneurs and establish micro, small, and medium enterprises (MSMEs). This initiative reflects UNIDO’s commitment to integrating entrepreneurship and innovation programs into formal education curricula at various levels, contributing to economic and social development and advancing the Sustainable Development Goals (SDGs).

On 29 May 2024, UoB hosted a delegation from the University of Trieste (UniTS), Italy, led by Prof. Franca Dore, officer-in-charge of business incubators, intellectual property, and business accelerators, and accompanied by Ms. Martina Di Piazza from UNIDO Italy.



[Graduation Ceremony for Training the Trainers in Entrepreneurship Development and Investment Promotion through the Bahraini Model](#)

The delegation engaged with UoB's business incubators, business accelerators, and intellectual property practices, and toured the Cloud Innovation Center and Business Incubation Center to explore joint student projects, research initiatives, and innovation collaboration.

UoB emphasized the importance of fostering cooperation with Italian higher education institutions in research, innovation, and entrepreneurship. UniTS highlighted its interest in enhancing international

cooperation, developing joint research activities, and collaborating on projects of mutual interest.

These initiatives demonstrate cross-sector and cross-border collaboration between UoB, UNIDO, and international academic partners, advancing SDG 17.2.5 by fostering knowledge exchange, capacity-building, and applied entrepreneurship education.



[UOB Shares Its Experience in Business Incubators and Accelerators with UniTS](#)

## 49. 2nd International Conference on Sustaining Heritage (UoB, 2024)

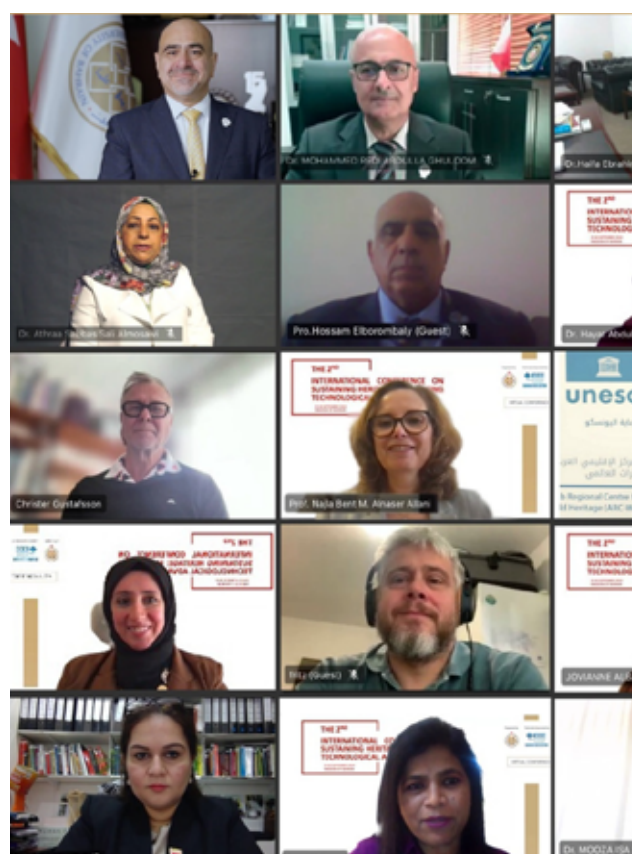
The University of Bahrain (UoB) hosted the 2nd International Conference on Sustaining Heritage to advance cross-sectoral collaboration and knowledge exchange in heritage preservation, demonstrating a concrete contribution to SDG 17.2.5 – Collaboration with NGOs for the SDGs. The conference emphasized the adoption of innovative digital solutions to safeguard both tangible and intangible cultural heritage.

The conference reviewed 23 scientific papers and engaged experts dedicated to the protection, promotion, and management of cultural and humanitarian heritage. Held online under the theme “Embracing Technological Advancements,” the event explored four strategic areas: reimagining urban heritage through digital interventions, advancements in digital archaeology and heritage conservation, digital methods to represent intangible heritage, and sustainable solutions for cultural heritage management.

Notable speakers included Prof. Christer Gustafsson (Uppsala University, Sweden) presenting on the implications of cultural heritage for regional development and circular economy, Prof. Hossam Elborombaly (Ain Shams University, Egypt) on smart predictive maintenance of heritage construction, and Dr. Mounir Bouchnaki (Arab Regional Centre for World Heritage) on heritage conservation concepts, development, and typologies.

The conference was organized by the Deanship of Postgraduate Studies and Scientific Research, in collaboration with UoB’s College of Engineering, and supported by IEEE Bahrain, bringing together academic, professional, and technical stakeholders.

This initiative demonstrates cross-sector collaboration between academia, professional bodies, and heritage institutions, strengthening SDG-focused partnerships and fostering capacity-building, public knowledge exchange, and sustainable heritage practices. By integrating digital technologies and innovative methods, the conference advanced regional and global dialogue on heritage preservation, contributing to SDG 4 (Quality Education), SDG 11 (Sustainable Cities and Communities), and SDG 17 (Partnerships for the Goals).



[The 2nd International Conference on Sustaining Heritage discussed 23 research papers UOB Conference Calls for the Adoption of Innovative Digital Solutions to Preserve Cultural Heritage](#)

## 50. Virtual International Conference on Data Analytics for Economy and Industry (UoB, 5 December 2023)

The University of Bahrain (UoB), in collaboration with Informs Bahrain International Group and technically supported by the Institute of Electrical and Electronics Engineers (IEEE), hosted the fourth edition of the Virtual International Conference on Data Analytics for Economy and Industry. The conference served as a multidisciplinary platform for cross-sector dialogue, connecting academic researchers, industry professionals, government representatives, and graduate students to address challenges and opportunities in data-driven innovation and decision-making.

The conference reviewed a total of 120 scientific papers covering topics such as data analytics, data science, artificial intelligence applications for business and industry, cloud computing, business analysis, risk analysis, financial modeling, project management, energy systems, bioinformatics, and health policy decision-making. Participants engaged in technical sessions and workshops that explored the practical application of analytics and AI tools for improving operational efficiency, strategic planning, and evidence-based policymaking.

The event enabled broad participation from both national and international stakeholders, fostering knowledge exchange and collaborative learning across government, academia, industry, and professional networks. The conference reinforced the role of data analytics in supporting sustainable economic growth and promoting cross-sector innovation, directly contributing to SDG 17 through strengthened partnerships and applied research dissemination.

- **Participants:** Large number of academics, graduate students, and industry specialists from Bahrain and internationally.
- **Research Outputs:** 120 scientific papers reviewed and presented.
- **Topics Covered:** Big data analytics, AI applications, cloud computing, business and financial analysis, risk management, energy efficiency, statistics, bioinformatics, and health policy analytics.



## 51. Academia Joins Forces with Government to Shape National AI Law

The University of Bahrain has strengthened national cross-sector collaboration by contributing academic expertise to the government-led initiative to develop Bahrain's first National Artificial Intelligence Law. Three leading AI scholars — Prof. Nabeel Mahmoud hewahi (Computer Science), Dr. Fatma Abdulqader Al-Balushi (Computer Engineering), and Dr. Abdullah Ibrahim Sabah (Computer Science) were appointed to the public committee responsible for drafting the legislation.

This partnership demonstrates a strong model of multi-stakeholder cooperation and knowledge sharing between academia and government institutions. By integrating cutting-edge research, global best practices, and evidence-based insights, the academic experts will support the Judicial and Legal Studies Institute in shaping a law that promotes responsible innovation, ethical AI governance, and sustainable digital transformation.

The initiative reinforces national capacity for policy development, ensuring that emerging technologies are regulated through transparent, inclusive, and forward-looking frameworks. It also aligns with SDG 17.2.1, which highlights the importance of

collaborative governance systems that leverage academic expertise to advance institutional effectiveness, innovation ecosystems, and sustainable national development.



[Academia Joins Forces with Government to Shape National AI Law](#)

## 52. UoB and Water Resources Management Partnerships

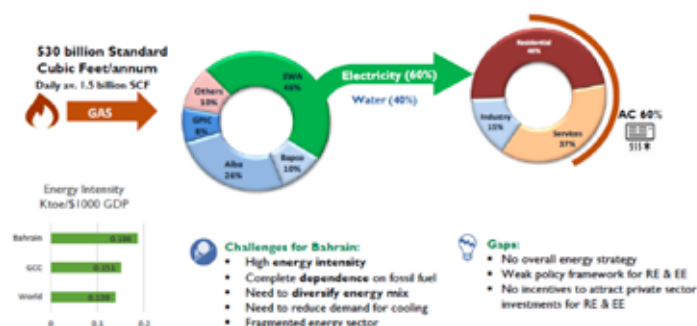
The University of Bahrain (UoB) advances SDG 17.2.1 through strategic, government-linked partnerships that strengthen national capacity for sustainable resource management, climate resilience, and evidence informed policy development. In collaboration with the Water Resources Council (WRC), the UNEP–Green Climate Fund (GCF) program, and national entities including the National Oil and Gas Authority, Tatweer Petroleum, the Ministry of Works, Municipalities Affairs and Urban Planning, and the Electricity and Water Authority, UoB contributes to a coordinated national framework for water and energy governance.

Under this collaboration, UoB supports the Kingdom of Bahrain’s climate and water-security agenda by conducting research on water demand management, institutional readiness, and sectoral climate adaptation. The partnership includes joint assessment activities, knowledge sharing with government stakeholders, and capacity building to enhance policy design and implementation aligned with SDG 6, SDG 13, and SDG 17.

Parallel to its water-focused collaboration, UoB plays a central role in a multi-agency initiative aimed at developing a national Energy Service Company (ESCO) market based on international best practices. The university leads analytical work to identify, quantify, and model the economic, environmental, and social value of ESCO development across Bahrain’s key sectors, including manufacturing, real estate, and public infrastructure. This research informs government policy and supports national strategies for energy efficiency, low-carbon development, and innovation-led growth.

The partnership also delivers long-term capacity building by enabling new academic specializations in energy systems, expanding professional certification programs, and strengthening national expertise across the energy and water value chains. This multi-stakeholder model underscores UoB’s role as a key national partner in supporting integrated climate policy, cross-sector collaboration, and sustainable development planning.

### Energy Situation



Courtesy SEU Presentation

[University of Bahrain Partners with National Oil and Gas Authority, Tatweer Petroleum, Ministry of Works, Municipalities Affairs and Urban Planning and Electricity and Water Authority](#)

### 53. National Cyber Security Center (NCSC) – Cybersecurity Cooperation

In 2023, the University of Bahrain strengthened its strategic partnership with the National Cyber Security Center (NCSC) through a national cooperation framework focused on policy coordination, research collaboration, and capacity-building in cybersecurity. The partnership reinforces Bahrain's digital resilience while advancing SDG-aligned institutional cooperation between government and higher education.

#### Key Activities & Cross-Sectoral Engagement

- **Joint policy dialogue** between NCSC's Cyber Policy Department and UoB's College of Information Technology leadership to align national cybersecurity priorities with academic research agendas.
- **Collaborative research development**, supporting innovation, knowledge exchange, and researcher empowerment in high-priority cybersecurity fields.
- **Capacity-building** efforts through skills development, mentoring, and enhancement of scientific research competencies for university researchers.
- **Continuous coordination mechanisms** between both institutions to ensure monitoring, follow-up, and policy relevance in cybersecurity initiatives.

- **Promotion of participation** in academic cybersecurity conferences, supporting evidence-based policymaking and expanding national research contributions.

#### This government–university partnership advances SDG 17.2.1 by:

- fostering multi-stakeholder cooperation with a national governmental body;
- integrating policy coherence, knowledge-sharing, and technical collaboration into cybersecurity development;
- supporting inclusive, cross-sectoral engagement that strengthens national digital security ecosystems;
- enabling joint planning and institutional alignment that advances Bahrain's cybersecurity policy framework.

## 54. UoB Judicial Capacity Building Partnership

The University of Bahrain (UoB) strengthens national governance systems and advances SDG 17.2.1 through formal collaboration with the Kingdom's judiciary to enhance institutional capacity, policy development, and evidence based decision making. Through the College of Law, UoB provides specialized academic expertise to the Supreme Judicial Council, reinforcing cross sector cooperation between higher education and government.

Dr. Basem Mohammed Al Sharji, Assistant Professor of Criminal Law, serves as Judicial Planning and Development Advisor at the Supreme Judicial Council, where he contributes legal expertise, research insights, and academic analysis to support judicial planning, institutional development initiatives, and policy implementation. His work facilitates knowledge sharing between academia and the justice sector, ensuring that policy reforms and judicial programs are informed by current legal research and international best practices.

This partnership advances national development by supporting effective, transparent, and accountable judicial institutions and by strengthening Bahrain's legal and institutional frameworks. The collaboration promotes continuous capacity building, fosters innovation in judicial processes, and embeds a sustainable model of cooperation between UoB and national governance bodies.

Through this engagement, UoB contributes meaningfully to SDG 16 and SDG 17 by supporting evidence informed judicial reform, enhancing institutional performance, and expanding the role of academia in shaping national policy agendas.



[UOB Faculty Appointed as Judicial Planning and Development Advisor](#)

## 55. UoB–MOIC Collaboration on National Industrial Property Strategy

The University of Bahrain (UoB) contributes to national policy development and institutional capacity building through its collaboration with the Ministry of Industry and Commerce (MOIC) on the formulation of the Kingdom of Bahrain's National Industrial Property Strategy. This partnership strengthens the national intellectual property (IP) framework, supports innovation-driven economic growth, and aligns with Bahrain's long-term industrial development priorities.

As part of this initiative, Dr. Hanan Mohamed Almwala, Associate Professor of Intellectual Property Law, was appointed in 2023 as UoB's focal point for coordination with MOIC. Through this role, the University provides academic expertise, legal analysis, and research support to inform evidence based policy design and enhance the protection and enforcement of intellectual property rights. The collaboration also facilitates knowledge sharing between academia and government, reinforcing institutional capacity in IP governance and innovation management.

This partnership advances SDG 9 by fostering an enabling environment for industrial development, stimulating creativity, and supporting national innovation ecosystems. It also contributes to SDG 16 by strengthening legal institutions, supporting the rule of law, and enhancing policy frameworks that safeguard intellectual property rights.

Through this sustained engagement, UoB reinforces its role as a strategic partner in national development, supporting effective cross-sector collaboration and contributing to Bahrain's broader SDG policy agenda.



[University of Bahrain Contributes to the Development of Bahrain's National Industrial Property Strategy](#)

## 56. UoB–Shura Council Academic and Legislative Collaboration

The University of Bahrain (UoB) advances SDG 17.2.1 through its longstanding Memorandum of Understanding (MoU) with the Shura Council, which provides an institutional framework for collaboration in education, research, and public policy development. This partnership strengthens national governance systems by integrating academic expertise into legislative processes and enabling structured knowledge sharing between higher education and government.

Through this MoU, UoB faculty contribute to conferences, workshops, specialized studies, and analytical research initiated by the Shura Council, supporting evidence-based policymaking and the Council’s legislative and research functions. The collaboration also creates experiential learning pathways for students, including attendance at Council sessions, participation in seminars, and engagement in practical training programs. UoB further supports the Council by providing academic resources, digital materials, and research findings,

while outstanding graduates may be recommended for internship or employment opportunities.

As part of the partnership’s capacity-building activities, Dr. Marwan Mohammed AlModers, Associate Professor of Constitutional Law, delivered a workshop titled “Skills for Identifying Constitutional Defects in Legal Texts.” The session strengthened the competencies of legal professionals and advisors by enhancing their ability to analyze draft laws and legal documents from a constitutional perspective, contributing to the development of sound, constitutionally compliant legislation.

This initiative reinforces UoB’s role in advancing sustainable development by supporting transparent, effective, and accountable governance systems, enhancing legislative quality, and promoting continuous collaboration between academic institutions and national policymaking bodies.

## 57. University of Bahrain and Shanghai University: Strategic Partnership Advancing Education, Research, and Innovation

The University of Bahrain (UoB) and Shanghai University (SHU) have established a long-term strategic partnership that strengthens global cooperation, promotes sustainable development, and enhances cross-border research, education, and innovation ecosystems. This collaboration advances the goals of SDG 17 – Partnerships for the Goals, specifically Target 17.2.1 (international research collaboration) and Target 17.3.1 (cross-sector partnerships for SDG implementation).

In October 2023, UoB and SHU signed a Strategic Framework Agreement along with a Tripartite Agreement on the Confucius Institute, formalizing a comprehensive partnership across research, innovation, cultural diplomacy, and academic mobility. Senior leaders, including UoB President Dr. Fuad Mohammed Al-Ansari and SHU Vice President Dr. Ouyang Hua, presided over the agreements.

Advancing Global Partnerships for Sustainable Development (SDG 17)



[University News-press: “University of Bahrain Signs Strategic Cooperation Agreement with Shanghai University”](#)

## Key Achievements Since 2023:



Held **over 10** joint academic meetings and exchange visits, including high-level delegations and faculty workshops.



Initiated **8** joint research proposals in business administration, chemistry, and education technology.



Organized **over 30** co-hosted academic and cultural events supporting university-community engagement and regional cooperation.



Established a Joint Steering Committee, meeting annually to review progress and plan future initiatives.

These milestones demonstrate strong knowledge sharing, resource mobilization, and capacity-building that directly support SDG 17.

In 2024, SHU was selected as a member of the China–Arab Universities 10+10 Cooperation Plan, coordinated by China’s Ministry of Education and ALECSO. The UoB–SHU partnership was recognized as a model case of international educational cooperation under this initiative.

This partnership extends beyond academia and is supported by key government and diplomatic institutions:

- Bahrain’s Ministry of Education
- Center for Language Education and Cooperation (CLEC), Ministry of Education of China
- Embassy of the People’s Republic of China in Bahrain

These entities contribute to policy alignment, program sustainability, and multi-stakeholder coordination, advancing SDG Targets 17.16 (global multi-stakeholder partnerships) and 17.17 (public, private, and civil society partnerships).

## Promoting SDG 4: Quality Education and Lifelong Learning

The Confucius Institute at UoB, jointly operated by UoB, SHU, and CLEC, serves as a national platform for inclusive access to language and cultural education.

## Impact Highlights



Each year it offers credit-bearing Chinese language courses to **more than 1,400** university students and conducts outreach programs at five local international schools, reaching **over 2,700** learners annually.



It supports teacher training, HSK/YCT testing, and community workshops that foster intercultural understanding and lifelong learning.

These initiatives promote intercultural competence, lifelong learning, and inclusive education pathways.

## Institutionalization of Educational Cooperation

Chinese language education is formally integrated into UoB’s undergraduate curriculum through CHL 101 and CHL 102, open to students across multiple colleges.

### Additional institutional outcomes include:

- Embedded faculty development programs
- Annual evaluation through the UoB Internationalization Policy and SDG Progress Report
- Structured curriculum-sharing mechanisms between UoB and SHU faculties

### Strengthening SDG 9: Innovation, Research, and Industry Collaboration

The partnership drives innovation-oriented cooperation that supports Bahrain's Economic Vision 2030.

### Innovation and Research Achievements

- Joint symposiums on sustainable technology and digital transformation
- Faculty mobility and co-supervision frameworks in science, engineering, and management
- Collaborative research initiatives in renewable energy, AI, applied sciences, and sustainable technology systems

These efforts promote research excellence, industry linkages, and technology-driven development aligned with SDG 9.

### Measurable Outcomes and Ongoing Impact



Joint outputs: **9** co-authored research papers, **5** seminars, **4** exchange visits and **10** training programs.



Beneficiaries: **Over 1,600** students and **50** faculty members have participated since 2023.



Cross-sector engagement: **3** governmental and diplomatic partners (MOE, CLEC, Chinese Embassy) actively support joint projects.



Future plans: A UoB–SHU Collaborative Research Fund will be launched in 2026 to support projects on AI education and sustainability.

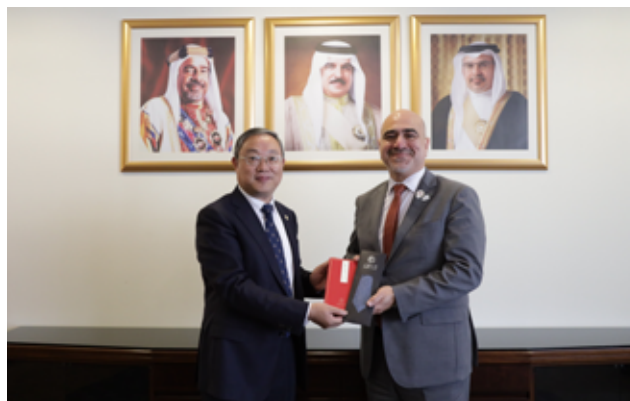


Social impact: More than **5,000** community participants benefited (**2,000** in 2023 and **3,000** in 2024) from language and cultural outreach programs such as the Chinese Bridge Competition, Confucius Institute Opening Day and International Chinese Language Day, which promoted SDG awareness and cross-cultural understanding.

By 2026, UoB and SHU will launch a Collaborative Research Fund focused on AI in education and sustainability research, reinforcing long-term impact.



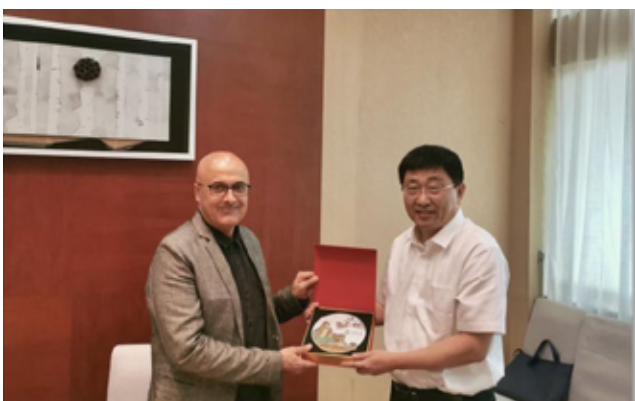
*Chairman of Shanghai University visits UoB (Dec 2024)*



*Signing ceremony of the Strategic Framework Agreement and Tripartite Agreement on the Confucius Institute (Oct 2023)*



*Chairman of Shanghai University visits UoB (Dec 2024)*



*Vice President of UoB visits Shanghai University (June-July 2023)*

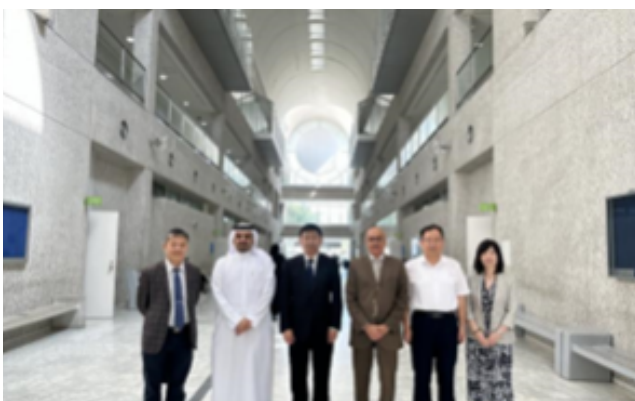




*Faculty Delegation from UoB visits Shanghai University (July 2024)*



*Hybrid Meeting on Joint Development of International Chinese Education (July 2023)*



*Academic Exchange between the School of Economics at SHU and the College of Business Administration at UoB (Oct 2023)*



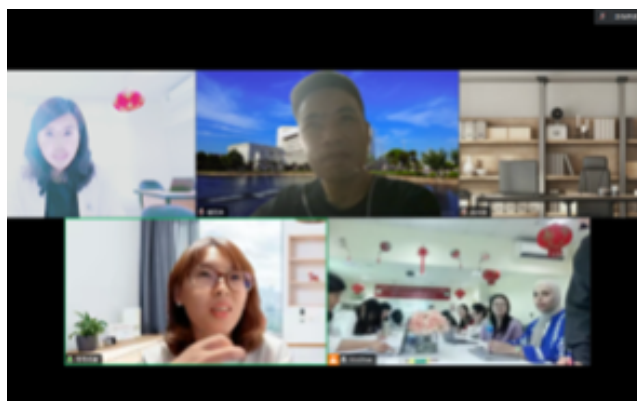
*Online Academic Exchange Meeting between SHU and UoB (Jan 2024)*



*Online Academic Exchange Meeting between SHU and UoB (Jan 2024)*



*UoB Students Visiting Shanghai University for Academic Exchange (Apr 2024)*



*Virtual Teaching and Research Seminars of the Confucius Institute (Sep–Dec 2024)*



*First Arabian Region International Chinese Education Symposium (Dec 2024)*

## 58. Partnerships with Regional and International Health Policy Bodies

Since 2020, the University of Bahrain (UOB) has maintained active membership in the Regional Committee of Nursing Experts within the WHO Collaborating Centers Network for the Eastern Mediterranean Region, reinforcing institutional alignment with SDG 3 (Good Health and Well-Being) and SDG 17 (Partnerships for the Goals).

Through this collaboration, UOB contributes to regional and global health policy development, capacity-building, and evidence-based workforce planning.

### Key Policy Engagements (2021 – Ongoing):

- Regional Consultative Meeting on the Interim Recommendations of the Expert Advisory Group (EAG) regarding the WHO Global Code of Practice on the International Recruitment of Health Personnel

Contribution: Defined regional challenges and co-developed strategies promoting ethical recruitment and sustainable workforce mobility.

- Expert Consultative Meeting on Postgraduate Education for Health Professions.
- Contribution: Supported policy design for advanced health-profession education aligned with WHO regional standards.
- Regional Roundtable for the WHO Regional Director's Flagship Initiative on Investing in a Resilient Health Workforce.
- Contribution: Identified national priorities and informed integrated policy approaches to workforce resilience.
- Submission of the Kingdom of Bahrain's National

Input to the WHO Strategic Directions for Nursing and Midwifery 2021–Ongoing (September 2021).

- Contribution: Led national review and evidence submission to shape the global nursing and midwifery strategy.

### Impact and Alignment:

- Strengthened multi-level partnerships with WHO, regional health ministries, and intergovernmental agencies.
- Contributed directly to regional SDG policy frameworks focused on health workforce sustainability and gender-responsive health systems.
- Advanced evidence-informed policymaking and capacity development through continuous participation in WHO technical consultations.

## 59. Global Committee for WHO Collaborating Centers on Nursing and Midwifery

Since 2020, the University of Bahrain (UOB) has served as a member of the Global Network of WHO Collaborating Centers for Nursing and Midwifery (GNWHOCCNM) — a global advisory committee headquartered at the University of Technology Sydney (UTS), Australia.

Through this network, UOB contributes to global health policy dialogue, implementation of WHO-led initiatives, and technical consultation on nursing and midwifery workforce development, in alignment with SDG 3 (Good Health and Well-Being) and SDG 17 (Partnerships for the Goals).

### Nature of Participation:

- Implementation of joint global initiatives advancing nursing and midwifery education, leadership, and research capacity.
- Provision of expert consultations to support WHO strategic directions, health systems strengthening, and sustainable workforce development.

### Impact and Alignment:

- Strengthened UOB's role as a national contributor to global SDG policy implementation through WHO frameworks.
- Enhanced cross-border collaboration in policy innovation, capacity building, and evidence-based health workforce planning.
- Supported the integration of sustainable development principles within global nursing and midwifery networks.

## 60. Bahrain Council for Health Studies and Specialties

The University of Bahrain (UOB) actively contributes to the Bahrain Council for Health Studies and Specialties, a national council established by Royal Decree No. 13 of 2022 under the authority of the Supreme Council of Health.

### Nature of Participation:

- Development of national strategies and regulatory frameworks governing education and training in medicine, nursing, and allied health sciences across the Kingdom of Bahrain.

### Impact and Alignment:

- Strengthened national governance and quality assurance systems for health education and professional training.
- Supported evidence-based policy development in alignment with WHO standards and national health workforce strategies.
- Advanced Bahrain's progress toward SDG 3 (Good Health and Well-Being) and SDG 17 (Partnerships for the Goals) through intersectoral collaboration between higher education and national health authorities.

## 61. Curriculum Design and Policy Collaboration in Arabic Language Education

The University of Bahrain (UOB) has played a sustained and influential role in curriculum design, educational reform, and language policy development across multiple Arab countries, reinforcing regional collaboration and policy integration in alignment with SDG 4 (Quality Education) and SDG 17 (Partnerships for the Goals).

### Key Engagement and Contribution:

Sami Abdullah Rahmouni, Lecturer of Arabic Language and Islamic Studies at BTC Principal Investigator, Comparative Study on Arabic Language Curricula – Kingdom of Saudi Arabia (2023)

**Role:** Led a comprehensive analytical study on Arabic language curricula in Saudi Arabia; published as part of a collective volume titled “Reading in Arabic Language Curricula: Realities and Prospects.”

### Impact and Alignment:

- Strengthened cross-national educational policy frameworks for Arabic language instruction and assessment.



[UOB Expert Contributes to Regional Arabic Language Education Policy](#)

## 62. Educational Policy Committee – Bahrain Teachers College

The University of Bahrain (UOB) actively participates in the Educational Policy Committee, supporting the Board of Directors of Bahrain Teachers College (BTC). The committee provides a strategic platform for collaboration between BTC and the Ministry of Education, ensuring the alignment of educational policies, curriculum standards, and teacher preparation programs.

### UOB's involvement includes:

1. Identifying shared challenges and policy priorities between the Ministry and BTC, especially in curriculum development, practical training, technology integration, and student assessment.
2. Developing strategies and initiatives to align College policies with national educational objectives, **including:**
  - Establishing mechanisms for communication and information exchange between the College and the Ministry.
  - Contributing to classroom observation standards and feedback models.
  - Designing training workshops for teachers and school leadership.
  - Supporting green education initiatives by integrating sustainability principles into teacher preparation programs.
3. Producing applied policy models, such as standardized student assessment tools, lesson quality benchmarks, and frameworks for digital integration in education.

4. Monitoring implementation of policies and professional practices related to continuous professional development, digital education, and research collaboration to ensure institutional quality and alignment.

### SDG Alignment:

- SDG 4 – Quality Education: Enhancing teacher education quality, improving learning outcomes, and promoting lifelong learning.
- SDG 9 – Industry, Innovation, and Infrastructure: Integrating modern digital technologies and innovative tools into training and learning environments.
- SDG 13 – Climate Action: Promoting environmental sustainability through green education initiatives embedded in teacher preparation programs.

### Impact:

This participation demonstrates UOB's role in evidence-based policy development, strengthening university–government partnerships, and contributing to sustainable, high-quality teacher education in Bahrain.

### 63. Memoranda of Understanding (MoU) Committee – Bahrain Teachers College

The University of Bahrain (UOB) actively participates in the MoU Committee at the Bahrain Teachers College (BTC), which is tasked with developing and strengthening collaborative relationships with local, regional, and international partner institutions.

#### ***Nature of Participation:***

#### **UOB's contributions include:**

1. Identifying potential institutions and opportunities for new MoUs that support BTC's mission and strategic objectives.
2. Reviewing and drafting MoUs in compliance with University of Bahrain policies and procedures.
3. Coordinating with relevant university departments to ensure legal and administrative compliance in MoU approval and implementation.
4. Monitoring the execution and effectiveness of existing MoUs in achieving shared objectives.
5. Preparing periodic reports detailing progress, challenges, and recommendations for continuous improvement.

#### **SDG Alignment:**

- SDG 4 – Quality Education: Enhancing teacher education quality and improving learning outcomes through strategic partnerships.
- SDG 17 – Partnerships for the Goals: Strengthening institutional collaboration with academic and professional organizations locally and internationally to support education, research, and professional development.
- Bahrain Vision 2030 Alignment: Supporting a knowledge-based economy through strategic partnerships that foster innovation, capacity building, and human capital development.

#### **Impact:**

This committee exemplifies UOB's role in institutional collaboration and policy alignment, contributing to high-quality teacher education, research integration, and sustainable education partnerships at national, regional, and global levels.

## 64. Policy Collaboration and Institutional Alignment for Teacher Education

Bahrain Teachers College (BTC) maintains a structured and strategic partnership with the Ministry of Education through its Policy Advisory Committee, directly supporting the implementation of national education policies and Sustainable Development Goals, particularly SDG 4 (Quality Education).

### Key Committee Contributions and Initiatives:

- **Development of Unified Practical Training Frameworks**

- Role: Designed and implemented standardized models for student teacher evaluation and classroom observation, ensuring consistent quality assurance in practical training.

- **Co-design of Professional Development Programs**

- Role: Collaboratively developed and delivered targeted training workshops for in-service teachers and school leaders, enhancing institutional capacity.

- **Integration of Digital Education Tools**

- Role: Established mechanisms and standards for embedding technology and digital tools into teaching practices and curriculum delivery.

- **Advancement of Green Education Initiatives**

- Role: Supported the Ministry's sustainability goals by integrating principles of environmental education and sustainable development into teacher preparation programs.

### Impact and Alignment:

- **Strengthened Institutional Policy Coherence:** Directly aligned BTC's teacher preparation programs with the strategic objectives and policy frameworks of the Ministry of Education.
- **Enhanced Evidence-Based Practices:** Established standardized mechanisms for feedback and evaluation, creating a continuous loop for improving teaching quality and student outcomes.
- **Advanced National SDG Targets:** Furthered national progress on SDG 4 through improved teacher quality, supported SDG 9 via technology integration, and promoted SDG 13 through green education initiatives.

## 65. Strategic Partnership Development through Memoranda of Understanding (MoUs)

Bahrain Teachers College (BTC) proactively builds and manages a network of strategic collaborations with local, regional, and international institutions through its systematic MoU framework. This structured approach to partnership directly facilitates the exchange of knowledge, innovation, and best practices, aligning with SDG 4 (Quality Education) and SDG 17 (Partnerships for the Goals).

### Key Functions and Contributions:

#### • Partnership Identification and Scoping

- Role: Systematically identifies and evaluates potential partner institutions for new MoUs that support BTC's strategic mission and objectives.

#### • Agreement Formulation and Review

- Role: Drafts and reviews proposed MoUs to ensure full alignment with the University of Bahrain's official policies and governance procedures.

#### • Legal and Administrative Coordination

- Role: Coordinates with relevant university departments to ensure all legal and administrative procedures for MoU ratification are completed accurately and efficiently.

#### • Implementation Monitoring and Evaluation

- Role: Monitors the implementation of existing MoUs and evaluates their effectiveness in achieving stated mutual goals.

#### • Performance Reporting and Development

- Role: Prepares periodic progress reports on all active agreements, highlighting achievements, challenges, and providing actionable recommendations for enhancement.

### Impact and Alignment:

- Strengthened Institutional Partnerships: Established a robust and growing network of academic and professional collaborators, enhancing the college's regional and international reach.
- Enhanced Policy and Goal Implementation: Directly enabled cross-institutional collaboration on curriculum development, faculty exchange, joint research, and professional training, advancing quality education (SDG 4).
- Advanced National and Global Goals: Contributed to the knowledge-based economy objectives of Bahrain's Economic Vision 2030 by fostering strategic partnerships that drive innovation and human capital development, operationalizing the principles of SDG 17.

## 66. Education Policy Alignment and Digital Integration Initiative

The Bahrain Teachers College (BTC), through its Education Policy Advisory Committee, maintains a strategic partnership with the Ministry of Education to co-develop and align national teacher education policies. This collaboration directly integrates digital innovation and sustainability into the educational framework, supporting the implementation of SDG 4 (Quality Education), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 13 (Climate Action).

### Key Collaborative Initiatives and Outcomes:

#### • Co-development of National Teacher Standards

- Role: Jointly established unified frameworks for practical training evaluation, classroom observation standards, and feedback models to ensure national quality assurance.

#### • Strategic Professional Development Programs

- Role: Collaboratively designed and delivered targeted training workshops for teachers and school leaders, enhancing institutional capacity nationwide.

#### • Digital Learning Transformation Initiative

- Role: Spearheaded the development of Digital Learning Certificates, integrating internationally-aligned digital training pathways into teacher preparation programs.

#### • Digital Profile Ecosystem Development

- Role: Exchanged best practices with the Ministry to develop teacher Digital Profiles, enhancing digital competencies and documenting professional development in internationally recognized e-learning programs.

#### • Green Education Policy Integration

- Role: Advised on the integration of environmental sustainability principles into national teacher education curricula and college operations.

### Impact and Strategic Alignment:

- Enhanced Policy Coherence: Successfully aligned BTC's strategic objectives with the Ministry of Education's national policies, creating a unified approach to teacher development.
- Accelerated Digital Transformation: Established scalable, standards-based digital credentialing and professional profiling systems, directly contributing to the modernization of educational infrastructure (SDG 9).
- Strengthened Quality Education: Improved the quality and relevance of teacher preparation through evidence-based policy development and practical training reforms, directly advancing SDG 4 targets.
- Mainstreamed Sustainability: Systematically embedded principles of environmental sustainability and climate action into the national teacher education curriculum, supporting SDG 13 objectives.

## 67. Language and Literacy Education Initiatives – University of Bahrain

Dr. Samia Al-Basuny has played a leading role in the design and implementation of national literacy and teacher training initiatives aimed at improving Arabic and English language instruction

### Key Contributions:

- Postgraduate Associated Diploma in Language and Literacy (Approved 2023) A specialized Associate's diploma program for Arabic and English language teachers, consisting of six courses delivered over two semesters.
- Role: Team Leader – Oversaw curriculum development, program design, and quality assurance to strengthen pedagogical skills in literacy instruction.

### 1. Development of Reading Clinics Concept in Bahraini Schools (Implemented 2023–2024)

- Pilot program involving four schools, integrating reading clinics to address students' reading difficulties through targeted interventions.
- Role: Team Member – Contributed to the design, teacher training, and evaluation of the pilot program.

### Impact and Alignment:

- Enhanced teacher professional development and literacy outcomes in primary schools.
- Strengthened university–school collaboration for evidence-based educational interventions.
- Directly supports SDG 4 – Quality Education, promoting equitable access to high-quality literacy instruction and lifelong learning.



[New Postgraduate Diploma to Empower Language Teachers at UOB](#)

[UOB Pilots “Reading Clinics” in Local Schools to Tackle Student Literacy Challenges](#)

## 68. University of Bahrain Representation on National and Regional Government and NGO Committees Supporting SDG Policy Development

### • Professor Adnan Bakhit

Professor Adnan Bakhit represents the University of Bahrain as a member of the National Clinical Trials Committee, contributing directly to national health policy oversight. His role includes reviewing clinical study protocols to ensure scientific integrity and alignment with national ethical standards. Through this engagement, he supports the advancement of safe, evidence-based health research and enhances national regulatory frameworks. His work reinforces the university's partnership with key governmental health bodies and contributes to SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education) by promoting high-quality clinical research and training environments.

### • Ms. Sherry Nasrallah

Ms. Sherry Nasrallah serves as a member of the National Continuous Professional Development Committee, where she provides expert review of national policies and mechanisms for professional certification and upskilling. Her participation strengthens national frameworks for lifelong learning and workforce competency, demonstrating UOB's role in shaping national education and training standards. Her contributions advance SDG 3 (Good Health and Well-being) and SDG 4 (Quality Education) by supporting sustainable systems for professional capacity-building.

### • Mr. Ashraf Ahmed Abdulmagaith

Mr. Ashraf Abdulmagaith contributes to national policy development through his participation in strategic advisory roles focused on identifying sectoral challenges, developing national strategies, and producing analytical models and policy reports. His work supports governmental processes for policy implementation and evaluation, enhancing the evidence base for public decision-making. This engagement demonstrates UOB's institutional role in strengthening national policy systems aligned with SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure).

### • Dr. Amani Alhalwachi

Dr. Amani Alhalwachi participates in national committees and advisory platforms focused on identifying systemic challenges, developing policy recommendations, and monitoring implementation outcomes. Her contributions support government bodies in formulating strategic plans and strengthening governance processes. Through this policy engagement, she advances SDG 8 (Decent Work and Economic Growth) by contributing to systems that promote inclusive, skills-based, and productive labor environments.

#### • Ms. Mariam Anwar Ahmed

Mariam Anwar Ahmed actively collaborates with government stakeholders through her work on developing policy models, strategies, and regulatory recommendations addressing social and economic challenges. Her contributions enhance national policy coherence and support frameworks promoting equity and social inclusion. Through this engagement, she advances SDG 10 (Reduced Inequalities) and demonstrates UOB's commitment to evidence-based policy support.

#### • Dr. Sami Mohammed Al-Mahjoub

Dr. Sami Al-Mahjoub serves on the National Childhood Committee within the Ministry of Social Development, where he contributes to developing national childhood strategies and frameworks. His involvement supports government-led efforts to advance child welfare, protection, and holistic development. Through this work, he strengthens public-sector policy processes and contributes to the advancement of SDGs related to social development and human well-being.

#### • Dr. Ahmed Saad Jalal

Dr. Ahmed Saad Jalal represents UOB on the National Disability Assessment Committee under the Ministry of Social Development. His role includes monitoring the implementation of disability assessment policies and ensuring alignment with national standards. His contributions support the enhancement of national social protection systems and reinforce the university's commitment to evidence-led policy development aligned with inclusive SDG outcomes.

#### • Dr. Mooza Isa Salman Al-Doy

Dr. Mooza Al-Doy serves as the Vice Chairman of the Board of Trustees of the Batelco Family Stability Centre Foundation, contributing to national policy discussions on family welfare, social cohesion, and community resilience. Through her governance leadership, she strengthens cross-sector partnerships and supports national strategies promoting health, education, and gender equality. Her work contributes directly to SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), SDG 5 (Gender Equality), and SDG 17 (Partnerships for the Goals).

#### • Dr. Ahlam Rashed Abdulrahman Al-Qasemi

Dr. Ahlam Al-Qasemi engages extensively in national and regional policy-oriented committees, representing UOB in multiple government and civil society platforms. As a member of the International Organization for the Empowerment of Women, she contributes to national and regional efforts to advance gender equality and social inclusion, aligned with SDG 5 and SDG 10.

She also serves on the Media Advisory Committee for Combating Drugs (Ministry of Interior), contributing expertise to national messaging strategies supporting SDG 3 and SDG 16 through drug prevention and community safety initiatives.

Additionally, she participates in national committees addressing sustainability, public order, and community development, including the National Plan (بحريننا), the Public Security Community Affairs Committee, and the Regional Network for Social Responsibility.

Her roles involve policy review, event analysis, and contributions to national development strategies, supporting SDGs 4, 5, 8, 11, 12, 16, and 17.

Her regional contributions include presenting lectures and capacity-building workshops in cooperation with regional organizations such as the National Society for Combating Community Violence (Kuwait), the International Organization for the Empowerment of Women, and the Supreme Council for Family Affairs, advancing regional partnerships aligned with SDG 5 and SDG 16.

She further supports national development through training courses delivered under the Inspiration Economy Association, and lectures at the Young Leaders and Sustainable Development Conference, strengthening national capacities aligned with SDG 8, SDG 9, and SDG 17.

Her participation in cultural and academic events, including engagements with the Family of Writers and Authors, promotes social dialogue on global citizenship, advancing SDG 11 and SDG 17. Through her broad multi-sectoral involvement, Dr. Al-Qasemi exemplifies UOB's commitment to national and regional policy leadership and multi-stakeholder partnership building for the SDGs.

#### • Dr. Samya Albasyoni

Dr. Samya Albasyoni contributes to national education policy development through her participation in two key government-led initiatives. As the Team Leader for the Higher Diploma in Language and Literacy, she collaborates with national education bodies to design and oversee a specialized diploma program for Arabic and English language teachers, comprising six courses delivered across two semesters. This work strengthens national teacher preparation pathways and enhances literacy education practices. In addition, she serves as a Team Member in the national initiative to develop Reading Clinics in Bahrain's schools, contributing to the training of four pilot schools and supporting policy innovation to address students' reading difficulties. Through these engagements, she advances national educational reform efforts and supports SDG outcomes related to quality education and inclusive learning systems.

## 69. Mandatory University-Wide Human Rights Courses

The University of Bahrain (UOB) demonstrates its institutional commitment to the Sustainable Development Goals (SDGs) through the integration of human rights and sustainable development education across all academic disciplines. During the 2023–2024 academic year, the University offered a mandatory course for all students—HRLC107: Principles of Human Rights—taught in both Arabic and English, reaching 5,371 students from all colleges. The course introduces the foundations of human rights, linking them to key SDG themes such as environmental rights, the right to development, and the rights of future generations.

### Evidence of Activity:

Course materials, including [pre-recorded lectures](#) and an official university-[published textbook](#), are made available through the Blackboard e-learning platform, ensuring continuous, equitable access to quality education. In addition, the College of Law delivers a dedicated Human Rights course ([LAW307](#)) for Bachelor of Law students, offering in-depth analysis of international conventions, sustainable governance, and social justice principles.

### Impact and Outcome:

By embedding human rights and sustainability into its core curriculum, UOB advances education for sustainable development, cultivates global citizenship, and prepares graduates to support

evidence-based policymaking aligned with SDG 4 (Quality Education) and SDG 17 (Partnerships for the Goals). This initiative ensures that every student gains the knowledge and values needed to promote inclusive, just, and sustainable societies.

### Key Highlights:

- Mandatory university-wide Human Rights course (HRLC107) reaching 5,371 students.
- Additional Human Rights course ([LAW307](#)) for Bachelor of Law students.
- Covers environmental rights, development, sustainability, and future generations.
- Accessible through Blackboard e-learning for continuous learning.
- Advances education for the SDGs and supports national and global SDG policy goals.

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## 70. University of Bahrain and Shanghai University Promote Inclusive, Global, and Sustainable Education

The University of Bahrain (UoB) is promoting meaningful, inclusive, and globally relevant education through its strategic collaboration with Shanghai University (SHU) and the Confucius Institute. This partnership strengthens curriculum development, pedagogical innovation, capacity building, knowledge sharing, intercultural learning, and lifelong education, while fostering global partnerships, institutional internationalization, and community engagement.

Since October 2023, UoB and SHU have organized joint academic meetings, faculty workshops, co-supervised research projects, and cultural exchange programs, promoting cross-sector collaboration and sustainable education practices. The Confucius Institute provides credit-bearing Chinese language courses, outreach to local schools, teacher training, HSK/YCT testing, and community workshops, expanding equitable access to quality education, global citizenship awareness, and SDG literacy.

### **Institutionalization of Educational Cooperation**

Chinese language education has been formally embedded in UoB's undergraduate curriculum through two credit courses—CHL 101 and CHL 102—open to students from multiple colleges. Results of this partnership are evaluated in UoB's Internationalization Policy and Annual SDG Progress Report. Joint faculty development sessions and

training workshops have been institutionalized, enabling UoB and SHU instructors to share pedagogical innovation, curriculum design expertise, and teaching best practices.

The collaboration also advances SDG 9 – Innovation, Research, and Industry Collaboration through joint symposiums, applied research, faculty mobility, and innovation-driven projects, aligning with Bahrain's strategic development goals. Measurable outcomes include co-authored publications, training programs, student participation, and community outreach, reflecting UoB's sustained commitment to education for sustainable development, evidence-based policy alignment, and international partnership excellence.

## 71. University of Bahrain and British University of Bahrain Sign MoU to Advance Academic Collaboration and Sustainable Education

In 2024, the University of Bahrain (UOB) and the British University of Bahrain (BUB) signed a Memorandum of Understanding (MoU) to strengthen academic cooperation, research collaboration, and professional development between the two institutions. The agreement, signed by Dr. Fuad Mohammed Al-Ansari, President of UOB, and Dr. Ebrahim Mohammed Janahi, President of BUB, reflects a shared institutional commitment to advancing meaningful education aligned with the UN Sustainable Development Goals (SDGs).

The MoU establishes frameworks for faculty exchange, joint research projects, and the organization of academic workshops and training programs, ensuring that both universities enhance their teaching quality, research productivity, and staff development. It also

promotes knowledge sharing and interdisciplinary collaboration, enabling students and faculty to engage in innovative learning experiences that connect academic knowledge with real-world challenges.

Through this partnership, UOB and BUB demonstrate a joint commitment to embedding sustainability and SDG-related values across education, ensuring that learning outcomes contribute to social responsibility, innovation, and lifelong learning. The collaboration supports SDG 4 (Quality Education) and SDG 17 (Partnerships for the Goals) by reinforcing Bahrain's national vision for a sustainable and knowledge-driven higher education ecosystem.



[UOB and BUB Sign MoU to Strengthen Collaboration](#)

## 72. University of Bahrain Collaboration with ISACA Bahrain and the Rotary Club of Manama – School Bags and Stationery Donation Drive

Faculty members and students from the University of Bahrain (UOB) took part in a community-service initiative organized through the ISACA Bahrain Chapter in cooperation with the Rotary Club of Manama. The campaign supported school readiness for children from low-income families by providing school bags and essential stationery supplies before the start of the new academic year, ensuring that every learner had the tools needed to participate confidently in education.

UOB participants assisted in planning, organizing, packaging, and delivering the materials while raising awareness about inclusive and equitable education as a shared social responsibility. Their engagement reflected the University's wider commitment to

civic responsibility, volunteerism, and sustainable development. By connecting academic expertise with community outreach and professional networks, the initiative illustrated how UOB contributes to national goals for education, social inclusion, and ethical leadership.

This collective effort highlighted the alignment of community-based learning with the values of SDG 4 (Quality Education), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals), demonstrating the power of faculty-driven initiatives to transform university knowledge and volunteer energy into tangible community impact across Bahrain.



[University of Bahrain Collaboration with ISACA Bahrain and the Rotary Club of Manama – School Bags and Stationery Donation Drive](#)

### 73. University of Bahrain Collaboration with ISACA Bahrain – Ramadan Food Distribution Initiative

During the Holy Month of Ramadan, faculty members and students from the University of Bahrain (UOB) joined the ISACA Bahrain Chapter and the Capital Governorate in a nationwide food-distribution initiative that supported low-income laborers and underprivileged families across the Kingdom of Bahrain. Drawing on their academic expertise and civic commitment, UOB participants helped prepare and distribute cooked meals and essential food packages, promoting values of generosity, solidarity, and social inclusion rooted in Bahrain's community traditions.

The initiative embodied education for sustainable development beyond campus, linking academic learning with civic empathy and ethical leadership. By

engaging in direct community service, UOB students and faculty deepened their understanding of social inequality, compassion, and collective responsibility, reinforcing the University's mission to integrate sustainability and human values into education.

This partnership represents an effective model of multi-sector collaboration between higher education and a professional organization, translating knowledge and volunteer energy into tangible community impact. The initiative contributes to SDG 1 (No Poverty), SDG 10 (Reduced Inequalities), and SDG 17 (Partnerships for the Goals) by promoting inclusive support systems and social cohesion in alignment with Bahrain's Economic Vision 2030.



[University of Bahrain Collaboration with ISACA Bahrain – Ramadan Food Distribution Initiative](#)

## 74. Career Counseling office : Strengthening Academia–Industry Partnerships to Advance Education for Sustainable Development

The Career Counselling Office (CCO) at the University of Bahrain (UoB) plays a pivotal role in advancing multi-sector partnerships that connect academia, industry, government, and the wider community. Through strategic collaboration and knowledge exchange, the Office mobilizes expertise and resources that enhance graduate employability, support workforce development, and contribute to Bahrain’s sustainable growth in alignment with the United Nations Sustainable Development Goals.

### Key Activities and Contributions

The CCO acts as a vital bridge between the University of Bahrain and public and private institutions, developing strategic partnerships that strengthen the connection between higher education and labor-market needs. These collaborations promote mutual learning and ensure that graduates are equipped with the competencies demanded by an evolving economy.

Through a wide range of career guidance programs, professional workshops, and training sessions, the Office fosters knowledge sharing and capacity building across sectors. Such initiatives embody SDG 17’s objective to mobilize knowledge and expertise in

support of sustainable development.

By linking students and graduates with meaningful employment and internship opportunities, the CCO enhances economic participation and reinforces the national workforce’s contribution to inclusive growth—reflecting SDG 17’s emphasis on effective multi-stakeholder collaboration.

The Office also supports collaborative research and innovation by connecting academic expertise with industry challenges, facilitating the development of solutions that address real-world problems. This approach underscores SDG 17’s focus on innovation through partnerships and shared goals.

Furthermore, the CCO cultivates both local and international linkages that extend the University’s impact beyond Bahrain’s borders. Through global engagement and knowledge exchange, it promotes cross-border cooperation in education, research, and workforce development, directly advancing SDG 17’s vision of strengthened global partnerships for sustainable progress.

## 75. Strengthening Capacity and Knowledge-Sharing for Sustainable Development through Community Outreach

The University of Bahrain (UoB) actively advances Education for the Sustainable Development Goals (SDGs) through structured outreach initiatives that connect the University with the wider community, particularly public and private schools. These activities integrate knowledge transfer, capacity-building, and youth empowerment, creating a collaborative learning ecosystem that supports Bahrain's long-term sustainable development objectives.

### • Community and School Engagement

UoB's outreach to primary and secondary schools represents a strategic model of community engagement and directly contributes to SDG 17.4.3 by promoting multi-stakeholder collaboration and public knowledge dissemination. Faculty-led initiatives engage both students and teachers in interactive sessions, workshops, and lectures that inspire innovation, curiosity, and awareness of sustainable development.

Notable examples include motivational lectures delivered by Mrs. Zainab Al Tooq at Al Sanabis and Al Daih Schools; presentations on Artificial Intelligence by Dr. Hala Fawzi at Multinational School and Sacred Heart School; and a professional learning communities workshop led by Dr. Osama Al Mahdi at Beacon Private School. Through these collaborations, the University strengthens school partnerships and fosters a culture of sustainability-focused education at an early age.

### • Government and Policy Collaboration

In addition to school outreach, UoB extends its engagement to government and diplomatic bodies, reinforcing its role as a national partner in public service and sustainable development. Collaborative workshops, consultations, and policy discussions are held with ministries and national agencies to align academic expertise with national priorities. These activities enhance institutional reputation and demonstrate UoB's contribution to evidence-based policymaking and capacity-building in education and workforce development.

### • Community Development and Knowledge Mobilization

UoB's outreach strategy also incorporates broader community engagement through cultural lectures, consultancy, and social development initiatives. Faculty members and students collaborate with schools, community centers, and government entities to address educational and social priorities. For instance, Dr. Fajer led consultancy work with primary schools to facilitate direct knowledge transfer; Dr. Amr Nour Al Din conducted cultural lecture series that promote community learning and cultural understanding; and Dr. Dunya Ahmed organized a national dialogue seminar on aging, alongside students from the College of Health and Sports Sciences who provided health screenings and wellness activities to empower the elderly population and promote intergenerational solidarity.

### • Governance and Strategic Partnerships

Through the leadership of Dr. Hala Al Khalifa, a board member of both St. Christopher’s School and the Supreme Council for Youth and Sport, the University reinforces governance partnerships that connect academia with policy-making institutions. These collaborations ensure that UoB’s academic expertise contributes to the development of national strategies and long-term education reform, exemplifying the principles of SDG 17 on inclusive partnership and knowledge sharing.

### Strategic Outcomes

The University of Bahrain’s outreach model moves beyond isolated events to form a cohesive, systemic strategy for sustainable development. It aligns academic knowledge with the priorities of educational, cultural, and governmental institutions, fortifying strategic alliances that leverage institutional expertise for societal benefit and systemic advancement.

### Impact Statement

Through targeted school engagement, government partnerships, and community-based programs, the University of Bahrain operationalizes Education for SDGs in the Wider Community. These initiatives mobilize academic expertise for the public good, build sustainable partnerships across sectors, and strengthen institutional and community capacity for long-term social impact. Collectively, they demonstrate UoB’s leadership in advancing SDG 17.4.3—empowering communities, promoting sustainability, and fostering inclusive national development through education and collaboration.



[UOB Participates in “Age-Friendly Capital” Day](#)

## 76. University of Bahrain (UoB) – Coursera Partnership for Professional and Lifelong Learning

The University of Bahrain (UoB) has established a strategic partnership with Coursera, one of the world's leading online learning platforms, to advance Education for the Sustainable Development Goals (SDGs) by expanding access to high-quality professional development. This collaboration provides transformative learning opportunities for students, graduates, faculty, and administrative staff, fostering an inclusive ecosystem of lifelong learning and digital capacity building that aligns with Bahrain's national labor-market and future workforce priorities.

Through this initiative, UoB empowers diverse learner groups—including unemployed graduates and academic professionals—to upskill and reskill through world-class educational content, directly supporting SDG 17.4.3: Education for SDGs in the Wider Community.

### Partnership Framework and Implementation

Launched on 18 September 2023, the partnership between UoB and Coursera was developed over a two-year period by the University's E-Learning Center to ensure sustainable integration into academic and professional development frameworks. The initiative grants access to more than 8,000 online courses from leading global universities and institutions such as Imperial College London, Yale University, Johns Hopkins University, and INSEAD, as well as industry partners including IBM, Microsoft, Google, AWS, and Meta.

The program targets a broad range of beneficiaries—students, graduates, faculty, and administrative staff—and offers professional certificates, guided projects, and virtual lab-based learning experiences in multiple languages, including Arabic and English. The integration of Coursera content into UoB's academic programs ensures that theoretical learning is complemented by practical, job-relevant digital skills.

### Reach and Impact

In its pilot year, the initiative aims to benefit approximately 200 unemployed graduates through free training opportunities, with a total projected reach of 1,000 learners in subsequent phases. Specialized management and leadership courses were also designed for academic and administrative staff, focusing on critical areas such as risk management, business continuity, auditing, and compliance—strengthening institutional governance and operational resilience.

By embedding Coursera Professional Certificates and Guided Projects into degree programs, UoB enhances students' employability and workforce readiness, bridging the gap between academia and industry while promoting inclusive access to quality education.

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### Recognition and Capacity Building

UoB recognizes and celebrates excellence in digital learning through institutional awards, including the “College with Outstanding Effort in Leveraging Coursera” (Semester II, 2023/2024), which honors top performers and innovators in integrating Coursera resources into teaching and learning. These recognitions reinforce a culture of continuous professional growth and highlight UoB’s leadership in digital transformation and educational innovation.

### Strategic Contribution to SDG 17

This partnership exemplifies SDG 17’s commitment to fostering global cooperation, technology transfer, and capacity building for sustainable development. By connecting local learners with international knowledge networks, UoB promotes equitable access to lifelong learning, strengthens human capital development, and supports Bahrain’s national goal of cultivating a competitive, future-ready workforce.

Through the UoB–Coursera partnership, the University demonstrates how cross-sector collaboration and digital innovation can expand education beyond traditional boundaries, empowering individuals and communities to actively contribute to the achievement of the Sustainable Development Goals.

## 77. Legal Clinic and Human Rights Center – Climate Change and Environmental Rights

The Legal Clinic and Human Rights Center at the College of Law at the University of Bahrain (UoB) delivered community-centered education for sustainable development during the 2023–2024 academic year. The initiative aimed to enhance public awareness of climate change, environmental rights, and the legal responsibilities that underpin national sustainability efforts, aligning with SDG 17.4.3: Education for SDGs in the Wider Community.

### Purpose

- Promote understanding of environmental rights, climate change, and sustainability among school students.
- Support national environmental and sustainability goals through community-oriented legal education.
- Build youth capacity to engage with SDG-related issues, particularly environmental protection and responsible citizenship.

### Activities

- Legal Clinic students conducted awareness workshops across public and private schools in Bahrain.
- Sessions focused on environmental rights, sustainable practices, and national legislation related to environmental protection.
- Workshops highlighted the shared responsibility of government, the private sector, and civil society in conserving natural resources for future generations.
- Activities were implemented in coordination with the Ministry of Education to ensure alignment with national educational priorities and to reinforce public awareness on climate action and sustainability.

### Reach and Beneficiaries

- Workshops reached more than 250 school students across multiple institutions in Bahrain.
- Impact
- Enhanced community understanding of environmental rights and climate change.
- Provided students with practical legal and sustainability knowledge beyond the university setting.
- Strengthened collaboration between the University of Bahrain and the Ministry of Education.
- Contributed to developing informed, environmentally conscious young citizens capable of supporting national sustainability objectives.



[UOB Law Students Raise Environmental Awareness Through School Workshops](#)

## 78. University of Bahrain and Legislation & Legal Opinion Commission – “Legal Insights” Public Education Series

In partnership with the Legislation and Legal Opinion Commission, the University of Bahrain delivered a series of online lectures as part of the Commission’s “Legal Insights” training program. The initiative aimed to extend legal education and policy awareness to the wider community, including public-sector professionals, policymakers, and students, fostering lifelong learning and informed governance.

- [Dr. Abduljabbar Al Tayeb](#), Assistant Professor of Public Finance Law, discussed the role of financial derivatives in stabilizing markets and supporting economic growth, promoting dialogue on law, economics, and responsible financial regulation.
- [Dr. Arwa Abdullatif Al-Sheikh](#), Assistant Professor of Civil Law, analyzed legislative gaps in Bahrain’s gift contract laws, encouraging modernization and evidence-based policymaking to strengthen civil protections.

- [Dr. Sh. Lulwa Ahmed Al-Khalifa](#), Assistant Professor of International Human Rights Law, examined civil and political rights in the digital age, emphasizing privacy, freedom of expression, and access to information within emerging legal frameworks.

This collaborative program enhanced civic knowledge, built legal and governance capacities, and facilitated cross-sectoral dialogue on sustainable policy reform—illustrating how higher education institutions contribute to Education for SDGs in the wider community through public engagement and government partnership.

## 79. UOB Students Design “Writing Inspired by a Child’s Imagination”

The University of Bahrain actively promotes education for sustainable development through innovative community engagement initiatives. One outstanding example is the “*Writing and Design Inspired by a Child’s Imagination*” project, which reflects the University’s commitment to SDG 17.4.3 – Education for SDGs in the Wider Community.

Launched by the College of Arts, this initiative connects university students with local primary-school children, creating an inclusive learning experience that encourages creativity, literacy, and cultural participation. Each student collaborates with a child to co-develop story ideas, inspired entirely by the child’s imagination, then transforms these ideas into digitally illustrated stories through professional design and artistic production.

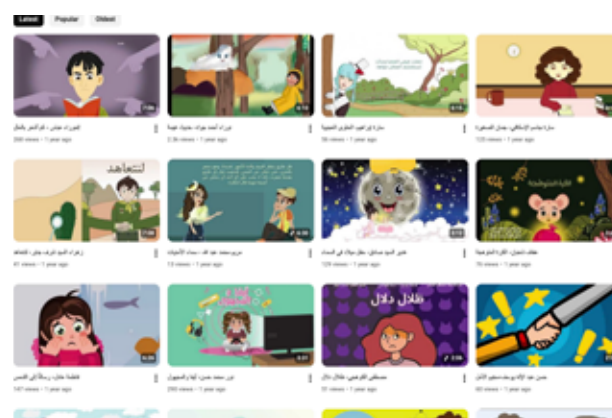
This hands-on project involves field-based community outreach, where students visit *Bahrain Bayan School* to work directly with children in a participatory learning environment. The final stories are exhibited publicly on campus, attended by children, families, and community members — showcasing active civic engagement and educational inclusion.

To extend access and impact, the stories were later transformed into educational animations and shared via a dedicated public YouTube channel titled “*Writing Inspired by the Child’s Imagination*,” featuring over 400 illustrated stories. This open-access digital

platform supports lifelong learning opportunities and public awareness of creative education, aligning with the UN’s vision for accessible, equitable, and quality education for all.

The initiative also fosters capacity building and regional collaboration, as works were reviewed by professionals from *Sard Bayt Al-Tifl Al-Thaqafi Foundation*, and several UOB students received regional recognition and awards — including the Sheikh Rashid Bin Humaid Award (UAE), the Ihsan Award (Oman), and the Bahrain Trust Award.

Through this sustainable outreach model, the University of Bahrain demonstrates how higher education institutions can empower local communities, enhance creativity among youth, and promote the principles of sustainable development education beyond campus boundaries.



[UOB Students Design “Writing Inspired by a Child’s Imagination”](#)

## 80. “Creative Dialogues” Connecting UOB Students and Elite Global Artists & Designers

The University of Bahrain continues to advance its commitment to SDG 17.4.3 – Education for SDGs in the Wider Community through impactful community outreach and knowledge-sharing initiatives. One exemplary project, “Creative Dialogues,” promotes lifelong learning, cultural exchange, and professional collaboration beyond the university campus.

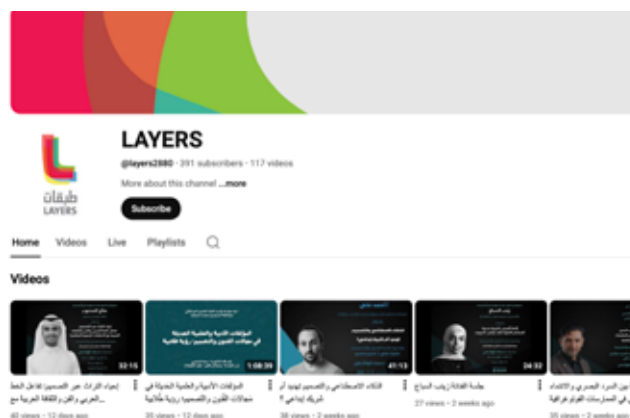
Launched in 2017 as part of the Graphic Design Seminar and Issues in Contemporary Art courses, this initiative creates an open-access educational platform that connects students, alumni, and members of the wider art community with distinguished local, regional, and international artists and designers. Through both in-person and virtual sessions, the project fosters inclusive participation and enables direct interaction between learners and global creative leaders. This initiative has continued and is conducted in each academic year to date.

The dialogues are hosted at leading cultural and artistic spaces across Bahrain — including Al-Riwaq Art Space, Akkas Gallery, Link Atelier, Mashq Art Space, and the Contemporary Art Association — as well as through virtual meetings with international participants. Each session is organized, moderated, and documented by students, providing them with hands-on experience in event management, communication, and community engagement.

To date, more than 200 dialogue sessions have been conducted, engaging over 200 creative professionals from across the Arab region and beyond. These sessions serve as a publicly accessible educational resource, documented and shared through a dedicated YouTube channel, supporting open knowledge dissemination and lifelong learning opportunities for the wider community.

The insights gathered from these sessions are later transformed into academic and cultural outputs, including a forthcoming publication that compiles students’ reflections alongside the featured artists’ and designers’ perspectives — contributing to the documentation of contemporary Arab art and design.

This initiative exemplifies the University of Bahrain’s role as a regional hub for sustainable education, cultural exchange, and creative capacity building, reinforcing the principles of inclusive education and global partnerships for sustainable development.



### [“Creative Dialogues” Connecting UOB Students and Elite Global Artists & Designers](#)

## 81. UOB Students Leverage Graphic Design for Community Service

In alignment with SDG 17.4.3 – Education for SDGs in the Wider Community, the University of Bahrain integrates community engagement and outreach education into its academic programs to promote sustainable development and social responsibility.

As part of the Computer Graphics course, students undertake an annual project in which they design and implement public awareness campaigns that address critical social, health, and environmental issues. This initiative exemplifies how higher education can extend learning beyond the classroom, fostering inclusive community participation and applied education for sustainability.

A notable example is the “Digital Gratitude” campaign, which focused on bridging the digital divide between generations. Through field visits to several nursing homes across Bahrain, students engaged directly with elderly residents, providing hands-on guidance on how to use smartphones and smart applications to simplify daily tasks. Participants were taught how to access news, use service applications, and complete digital transactions, thereby enhancing digital literacy and social inclusion among senior citizens.

By promoting intergenerational learning and technological empowerment, the initiative strengthened community resilience and demonstrated the University’s role in supporting lifelong learning opportunities for all.

Each academic year, students develop dozens of creative, community-oriented campaigns that address real societal challenges and raise awareness of sustainability-related issues. These projects collectively contribute to capacity building, civic engagement, and public education, transforming the educational process into a practical vehicle for social impact and sustainable community development.

Through this model, the University of Bahrain reinforces its position as a national leader in outreach education—empowering students to become agents of change who apply creativity and design thinking to advance the UN Sustainable Development Goals within their communities.

## 82. UOB Students Convert Challenging Lessons into Educational Animations

In alignment with SDG 17.4.3 – Education for SDGs in the Wider Community, the University of Bahrain (UOB) promotes innovative educational outreach and community-based learning through creative student-led initiatives that extend the benefits of higher education to the wider public.

The “Edumation” project, launched within the Principles of Animation course, exemplifies this commitment by transforming university learning into a public educational resource. The initiative encourages students to apply their artistic and digital media skills to enhance educational accessibility and quality learning in Bahrain’s public schools.

Each participating student collaborates with a public school teacher to identify a lesson that students often find challenging—such as topics in science, biology, mathematics, or other core subjects. The university student then reimagines and produces the lesson as an educational animated film, designed to simplify complex ideas through visual storytelling and creative media techniques.

At the end of each semester, these animated lessons are screened for school students and published on a dedicated YouTube channel, freely available and

categorized by grade and subject. This ensures open public access to learning materials and supports lifelong learning opportunities for students across Bahrain.

Through Edumation, University of Bahrain students gain practical experience in digital education design while making a direct community contribution to inclusive learning. The project bridges the gap between higher education and basic education, enhances pedagogical innovation, and supports the development of accessible, technology-driven educational content aligned with the UN’s vision for quality education and sustainable learning for all.

This initiative showcases how higher education can serve as a catalyst for educational transformation and community empowerment, strengthening the university’s role as a leader in creative, socially responsible, and sustainable education practices.

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### 83. UOB Students Train as Assistants for Art Teachers in Schools

As part of its commitment to the United Nations Sustainable Development Goals, particularly SDG 4: Quality Education and SDG 17: Partnerships for the Goals, the University of Bahrain (UOB) launched the “Artist of the Future” initiative to advance education for sustainable development within the wider community.

This program trains Arts and Graphics students to serve as assistant art teachers in local schools, aligning academic learning with community outreach and capacity building in the field of art education. Over the course of a full academic semester, participating students work alongside professional art teachers, engaging in lesson preparation, designing creative and digital education resources, and supporting the organization of art exhibitions and cultural events.

The initiative promotes inclusive education and lifelong learning by equipping students with practical teaching skills, modern classroom management techniques, and experience in educational innovation.

It strengthens their ability to design supplementary curricula, manage creative learning environments, and use technology to enhance sustainable learning access.

By integrating academic knowledge with real-world application, the program represents a transformative model of community-engaged learning. It contributes to national educational development by preparing qualified art educators capable of fostering creativity and artistic appreciation in future generations.

Through this initiative, UOB reinforces its role as a partner in community capacity development, promoting the exchange of knowledge between higher education and local schools. The “Artist of the Future” program exemplifies how the University of Bahrain embeds education for the SDGs into its outreach activities—enhancing the quality, inclusivity, and sustainability of learning across the Kingdom.

## 84. University of Bahrain and IET (UK) Collaboration for GCC Robotics Challenge on Healthcare Innovation

The University of Bahrain (UOB), in collaboration with the Institution of Engineering and Technology (IET–UK), co-organized the GCC Robotics Challenge in November 2024, focusing on robotics-based healthcare solutions. This regional initiative engaged universities, students, and professionals across the GCC, promoting innovation and knowledge sharing in support of the Sustainable Development Goals, particularly SDG 3 (Good Health and Well-being) and SDG 17 (Partnerships for the Goals).

Evidence of Activity:

UOB contributed to the event through co-organization, judging, and technical mentoring, supporting participants in developing robotics and AI-based technologies for healthcare applications such as patient assistance, rehabilitation, and diagnostics. The program encouraged interdisciplinary collaboration between engineering, computing, and health sciences, expanding learning opportunities beyond the University and fostering dialogue on how technology can address real-world health challenges.

### Impact and Outcome:

The initiative extended education for the SDGs to the wider community by raising awareness of healthcare innovation, promoting lifelong learning, and strengthening regional capacity in medical technology development. It enhanced research-driven learning and technology transfer, positioning the University of Bahrain as a regional hub for sustainable innovation and international cooperation.

### Key Highlights:

- Co-organized the GCC Robotics Challenge with IET (UK).
- Focused on robotics and AI applications in healthcare innovation.
- Involved universities and professionals across the GCC.
- Promoted education for the SDGs beyond campus through mentoring and workshops.
- Contributed to SDG 3 (Health and Well-being) and SDG 17 (Partnerships for the Goals).



[University of Bahrain and IET \(UK\) Collaborate to Advance Medical Innovation through GCC Robotics Challenge](#)

## 85. UoB Micro-Credentials Initiative

The University of Bahrain (UoB) has launched a comprehensive Micro-Credentials Policy (2024) to advance SDG 17.4.3 – Education for SDGs in the Wider Community. The initiative reinforces partnerships and community engagement by extending access to quality, flexible learning beyond the university campus, promoting lifelong learning and capacity building that align with national and global sustainable development goals.

Developed by the eLearning Center in collaboration with academic departments and industry partners, the policy provides a structured framework for designing, delivering, and accrediting both credit-bearing and non-credit-bearing micro-credentials. It empowers diverse learners—including students, professionals, and unemployed graduates—to gain practical, job-relevant skills through modular programs tailored to labor-market and community needs.

In support of inclusive education, the initiative offers open-access, free online courses to the wider public, graduates, and unemployed graduates through a dedicated digital platform. A designated number of free training courses are provided annually, ensuring

equitable opportunities for community members to upskill, reskill, and engage in continuous learning.

The micro-credentials emphasize knowledge exchange, cross-sector collaboration, and applied learning in partnership with national institutions and industry experts. They integrate sustainability and innovation themes across disciplines, enabling learners to contribute to the nation’s social and economic development.

By embedding SDG-focused education within its outreach and training activities, the University of Bahrain strengthens community awareness of sustainable development and reinforces its role as a national hub for partnerships, inclusive education, and lifelong learning. This initiative reflects UoB’s enduring commitment to advancing the UN 2030 Agenda through education, collaboration, and shared progress.

## 86. Courses Directly Related to SDGs

Course Title	Level	Rationale
ACC485: Sustainability Accounting & Reporting	Undergraduate	Focus on sustainability reporting, ESG disclosure, and accountability in business impact.
ECON351: Environmental Economics & Sustainable Development	Undergraduate	Links environmental sustainability with economic policy for sustainable development.
FIN330: Sustainable Finance	Undergraduate	Addresses green investment, ESG financing, and climate-related financial risk.
ENTR476: Entrepreneurship and Sustainability	Undergraduate	Integrates sustainable business models and environmental/social entrepreneurship.
ENTR474: Social Entrepreneurship	Undergraduate	Focuses on ventures addressing social and environmental challenges.
MGT437: Business Ethics	Undergraduate	Embeds ethical business behavior and accountability in governance.
FIN634: Sustainable and Green Finance	Postgraduate	Explores green bonds, ESG investing, and environmental responsibility in finance.
ACC630: Sustainability Accounting & Reporting	Postgraduate	Focuses on sustainability disclosure frameworks and corporate environmental accountability.

Course Title	Level	Rationale
TC2SCT413: Teaching Environmental & Earth Sciences 2	Undergraduate	The course integrates multiple Sustainable Development Goals (SDGs) by connecting scientific concepts to real-world sustainability practices. It addresses SDG 6 through lessons on water conservation and pollution control; SDG 7 via discussions on renewable energy and air quality; and SDG 11 through projects on waste management and community engagement. Students also explore SDG 12 by examining sustainable resource use and circular economy principles, SDG 13 through understanding ecosystem roles in climate regulation, and SDG 15 by studying biodiversity and conservation. Collectively, these elements equip students to design and lead educational initiatives that foster environmental awareness, sustainable behaviour, and climate responsibility.
TC1SC348: Teaching Environmental & Earth Sciences1	Undergraduate	The course integrates multiple Sustainable Development Goals (SDGs) through a holistic approach that links scientific understanding with practical sustainability action. Students explore SDG 6 by studying water conservation, pollution control, and sustainable water management; SDG 7 through lessons on renewable energy and air quality; and SDG 11 by connecting classroom learning to community initiatives on waste reduction and sustainable living. They address SDG 12 by examining consumption patterns and promoting responsible resource use, and SDG 13 by understanding the relationship between ecosystems and climate regulation, developing strategies for climate literacy and action. Elements of SDG 14 and SDG 15 are covered through discussions on biodiversity, aquatic systems, and land conservation, emphasizing the interdependence of natural ecosystems. Finally, SDG 17 is reinforced through collaborative projects using international environmental resources, highlighting the role of partnerships and knowledge exchange in achieving sustainability goals.

Course Title	Level	Rationale
TCHL418: Health, Safety, and Nutrition for Children	Undergraduate	The course aligns with multiple Sustainable Development Goals (SDGs) by promoting holistic child health, inclusive education, and sustainable practices. It advances SDG 3 through training in physical, mental, and emotional well-being, preventive care, and first aid; and supports SDG 2 by teaching balanced nutrition and food security awareness. In line with SDG 4, it prepares future teachers to create safe, health-conscious learning environments, while SDG 5 and SDG 10 are addressed through gender-sensitive and inclusive approaches to child care and health education. The course integrates SDG 6 and SDG 12 by emphasizing hygiene, sanitation, and responsible food consumption, and connects to SDG 13 through lessons on climate impacts on health and sustainable school environments. It contributes to SDG 16 by promoting child protection and safeguarding, and reinforces SDG 17 by fostering partnerships between educators, health institutions, and communities to strengthen collective action toward sustainable well-being.
TCSC118: General Science	Undergraduate	The course integrates environmental sustainability themes across several SDGs. It addresses SDG 13 by examining the environmental impact of human activities and promoting sustainable responses to climate change. SDG 14 is reflected in lessons on marine and freshwater ecosystems, emphasising control of pollution and the sustainable use of resources. Through topics on biodiversity and conservation, the course advances SDG 15, while SDG 12 is reinforced through discussions on energy efficiency, resource management, waste reduction, and recycling practices.
TC2SC213: Fundamentals of Biology	Undergraduate	The course integrates key environmental sustainability concepts across SDG 15, SDG 14, and SDG 13. It emphasizes the protection and sustainable management of terrestrial and aquatic ecosystems, biodiversity conservation, and the prevention of desertification. By exploring how living and non-living components interact within ecosystems, students gain insight into their role in regulating the Earth's climate and supporting sustainable use of natural resources, reinforcing the importance of ecosystem preservation for planetary stability.

Course Title	Level	Rationale
TCSC228: Teaching Environmental Literacy and 21st Century Learning Skills in Science	Undergraduate	The course integrates SDGs 6, 7, 13, 14, and 15 by engaging students in developing lesson plans and projects on water conservation, clean energy, climate action, and ecosystem protection. Through hands-on assignments, students design educational materials that promote sustainable water use, renewable energy awareness, climate change mitigation, and the conservation of marine and terrestrial biodiversity, fostering environmental literacy and responsibility among future educators.
TCST418: STEAM Education for Primary Teachers	Undergraduate	The course aligns with SDG 3 by integrating the UNESCO STEM framework, using global and environmental issues to design lessons that foster global citizenship and sustainability awareness. It directly supports SDG 4 (Target 4.7) by preparing teachers to embed education for sustainable development into their teaching practice. Additionally, it enables flexible integration of other SDGs (e.g., 6, 7, 13, 14, 15) through a pedagogical framework that connects science education with real-world sustainability challenges.
Engineering Management	Undergraduate	There are no explicit references to the United Nations Sustainable Development Goals (SDGs) or the 2030 Agenda within the syllabus. The following topics align with a couple of SDGs (possibly not explicitly). Chapters/Topics – Design of Products & Quality Management. The topic Product Design covers subjects like Design for Environment, which theoretically explains the importance of sustainable practices (SDG9 and SDG12). Additionally, topics such as Six Sigma and Quality Management Systems in the course focus on continuous improvement, reducing rework and defects, and thereby decreasing waste, which again aligns with SDG12.
Manufacturing Processes	Undergraduate	The course includes a chapter on the economics of machining (a manufacturing technique). Process conditions best suited to minimise cost and maximise production rate are determined and applied in real-life production. Both aspects are closely associated with sustainability and thus sustainable development

Course Title	Level	Rationale
Social and Cultural Factors in Design	Undergraduate	The course INTD 414 Social and Cultural Factors in Design directly supports SDG 5 – Gender Equality by engaging students in a critical investigation of how built environments influence and reflect women lived experiences. Through assignments and case-based analyses, students explore spatial needs, safety, privacy, accessibility, and empowerment as essential design determinants for women in domestic, educational, and public contexts. The course encourages learners to assess social norms and cultural frameworks that shape women’s participation in space, leading to design proposals that promote inclusivity, dignity, and equal opportunities. By translating theoretical understanding into spatial strategies—such as designing women-centric workspaces, educational facilities, or community hubs—students cultivate design literacy that advances gender-responsive and equitable environments in alignment with the United Nations Sustainable Development Goals.
MENG 300	Undergraduate	It includes engineering financial assessment related to environmental and sustainable projects
Building Service Systems	Undergraduate	One of the topic contents show the harvesting of rainwater for irrigation.
Manufacturing Processes	Undergraduate	The course includes a chapter on the economics of machining (a manufacturing technique). Process conditions best suited to minimise cost and maximise production rate are determined and applied in real-life production. Both aspects are closely associated with sustainability and thus sustainable development
ARCG 216	Undergraduate	The course is an introduction to sustainable design. Students are briefly introduced to sustainable development and SDGs. The course then focuses on environmental design to reduce energy use and adopt passive solutions.
ARCH712: CONTEMPORARY ISSUES	Postgraduate	SDG 1: No Poverty through and SDG 2: Sustainable cities and communities by bridging the gap of students' knowledge to globalization, migration, sustainability, deforestation, climate change, poverty, natural and man-made disasters, wars, heritage conservation, and preservation

Course Title	Level	Rationale
Urban Design (ARCG317)	Undergraduate	This course integrates the principles of Sustainable Development Goal 11 (Sustainable Cities and Communities) and Goal 7 (Affordable and Clean Energy) through evidence-based urban design projects. Students explore the spatial, social, and environmental dimensions of sustainable urban form, focusing on walkability, housing, renewable energy integration, and public space design. The course involves collaboration with governmental institutions related to urban planning and housing in Bahrain, fostering real-world engagement with national sustainability strategies.
Design V (with Eskan Bank Award)	Undergraduate	The Design Studio V course advances SDG 11 (Sustainable Cities and Communities) and SDG 17 (Partnerships for the Goals) through the Eskan Bank Award housing project, where students design adaptable low-rise housing and collaborate with governmental housing institutions to promote inclusive and sustainable urban development.
ARCG310, ARCG320	Undergraduate	ARCG310 is an architectural design course that focuses on the Environmental aspect of the design and construction of projects. ARCG320 is an architectural design course that focuses on preserving and expressing cultural identities. Therefore, it enriches students' understanding of culture and the importance of preserving it.
INTA 321 Furniture Design & Production	Undergraduate	The course contains a design project that focuses on the use of CNC machining, which helps in local manufacturing and reduces waste. It promotes using one material when making a furniture piece. This is aligned with SDG 11. Sustainable Cities and Communities and SDG 12. Responsible Consumption and Production.

Course Title	Level	Rationale
ARCH712: CONTEMPORARY ISSUES, ARCG 621– Comprehensive Design Project, ARCH 631– Professional Practice, ARCH731 - Research & Design , ARCG 510 - Architectural Design VII, ARCG522 - PROJECT MANAGEMENT , LNDA 313 Working Drawings	Postgraduate	ARCH712: CONTEMPORARY ISSUES, SDG 1: No Poverty through and SDG 2: Sustainable cities and communities by bridging the gap of students' knowledge to globalization, migration, sustainability, deforestation, climate change, poverty, natural and man-made disasters, wars, heritage conservation, and preservation ARCG 621– Comprehensive Design Project SDG 1: No Poverty through, SDG 3 Good Health and well-being and SDG 11: Sustainable cities and communities that this course guides the students to conceptualize a real design project based on consideration of the SDG 1: No Poverty through, SDG 3 Good Health and well-being and SDG 11: Sustainable cities and communities. ARCH 631– Professional Practice SDG 11: Sustainable cities and communities, and SDG 8: Decent Work and Economic Growth, by bridging the gap between students' knowledge and professional practice. ARCH731 - Research & Design SDG 17 Partnership for the Goals bridges the gap between students' knowledge and contributes to enhancing design via the Partnership. ARCG 510 - Architectural Design VII SDG 11: Sustainable cities and communities, where students are expected to demonstrate their knowledge and architectural design skills, with equal emphasis on cultural, environmental, social, and technical issues. ARCG522 - PROJECT MANAGEMENT SDG 8: Decent Work and Economic Growth through introducing project management, project delivery, and project life cycle, resource planning, and Cost estimating, budgeting, and control. LNDA 313 Working Drawings SDG 8: Decent Work and Economic Growth and SDG 11: Sustainable cities and communities, where students use sustainable concepts in selecting building construction and materials

Course Title	Level	Rationale
ARCH 511: Graduation Project I	Undergraduate	<p>ARCG 511 prepares students to develop a comprehensive architectural program that integrates functional, human, technical, and environmental considerations. Through this course, students engage in research, site analysis, and the application of sustainable design principles, directly linking to several SDGs: SDG 3 – Good Health and Well-Being. By assessing user needs and activities, students design spaces that promote physical, mental, and social well-being. SDG 4 – Quality Education: The course enhances students’ specialist knowledge, research skills, and critical thinking, fostering high-quality learning outcomes. SDG 9 – Industry, Innovation, and Infrastructure: Students apply advanced architectural theories, design methodologies, and technical skills to create innovative and resilient infrastructure solutions. SDG 11 – Sustainable Cities and Communities: Emphasis on site analysis, functional design, and sustainable environmental strategies ensures that proposed architectural solutions contribute to safe, inclusive, resilient, and sustainable urban environments. SDG 12 – Responsible Consumption and Production: By incorporating passive environmental controls, sustainable energy systems, and relevant building codes, students learn to design resource-efficient and environmentally responsible buildings. SDG 13 – Climate Action: The integration of renewable energy systems and passive environmental controls aligns student projects with climate-responsive and energy-efficient design practices. Overall, ARCG 511 equips students to create architectural solutions that balance human needs, environmental sustainability, and social responsibility, reflecting the holistic objectives of the SDGs.</p>

Course Title	Level	Rationale
ARCG 520: Graduation Project II – Design Stage	Undergraduate	ARCG 520 focuses on the design stage of the graduation project, enabling students to express creativity, architectural identity, and critical problem-solving skills while addressing complex design challenges. The course's emphasis on integrating environmental, technical, and social considerations connects to several SDGs: SDG 3 – Good Health and Well-Being: Students design spaces that consider user safety, accessibility, and comfort, promoting overall well-being. SDG 4 – Quality Education: The course develops advanced analytical, research, and design skills, fostering lifelong learning and professional competency. SDG 9 – Industry, Innovation, and Infrastructure: Students apply innovative architectural solutions and technical expertise in developing resilient, functional, and creative designs. SDG 11 – Sustainable Cities and Communities: By integrating site characteristics, environmental considerations, and sustainable systems, students contribute to the creation of sustainable and inclusive built environments. SDG 12 – Responsible Consumption and Production: Designs incorporate sustainable materials, energy efficiency, and environmental responsiveness. SDG 13 – Climate Action: Environmental and technical integrations, such as passive design strategies and site-specific responses, address energy efficiency and climate resilience. Overall, ARCG 520 fosters the development of innovative, sustainable, and socially responsible architectural designs that reflect global SDG principles.
Design, Culture and Environment	Undergraduate	INTD 326 will focus on 3- Good Health and Well Being;9- Industry, Innovation and Infrastructure;11- Sustainable Cities and Communities;13- Climate Action. Lectures with sustainability-focused content; Case studies on sustainable practices; Hands-on projects and design challenges; Research-based assignments. the course will include Fieldwork or real-world case studies, Group projects with sustainability themes.

Course Title	Level	Rationale
ARCG 410: Architectural Design V	Undergraduate	ARCG 410 develops students' architectural design skills with a focus on housing, integrating technical knowledge, social awareness, and environmental considerations. Through site-responsive housing design, material selection, and building systems integration, students create functional, sustainable, and inclusive residential solutions that address diverse user needs. The course aligns with several SDGs: SDG 3 – Good Health and Well-Being: Students design residential spaces considering safety, accessibility, and human comfort to promote physical and mental well-being. SDG 4 – Quality Education: The course fosters critical thinking, research, and design communication skills, contributing to high-quality professional learning. SDG 9 – Industry, Innovation, and Infrastructure: Students apply knowledge of building systems, materials, and structural solutions to develop innovative and resilient housing designs. SDG 11 – Sustainable Cities and Communities: Site analysis, context-sensitive planning, and sustainable design strategies support the creation of safe, inclusive, and environmentally responsible housing within communities. SDG 12 – Responsible Consumption and Production: Consideration of material performance, environmental impact, and reuse promotes sustainable construction practices in residential buildings. SDG 13 – Climate Action: Integration of site orientation, climate responsiveness, and environmental systems encourages energy-efficient and climate-sensitive housing solutions. Overall, ARCG 410 equips students with the skills to produce architecturally creative, socially inclusive, and environmentally sustainable housing designs, reflecting the principles of the SDGs.
CENG322: Water Supply & Sewerage	Undergraduate	SDG 6: Clean Water and Sanitation // The course directly addresses the requirement for safe water access and sanitation by providing students with the essential design and maintenance skills for robust water distribution networks and effective sewerage systems, which are foundational to Goal 6. // This course teaches students the engineering principles for managing water resources from source to disposal. The content covers the fundamentals of groundwater flow, the design of conduits and water distribution systems, and the operation of reservoirs and pumping stations for clean water supply. For sanitation, it focuses on the design of sanitary sewers, the hydraulics of wastewater flow, and the construction and maintenance of sewer systems.

Course Title	Level	Rationale
ARCH 611: Design and Community	Postgraduate	<p>ARCH 611 explores the intersection of architecture with social, cultural, and environmental contexts, emphasizing inclusive and sustainable design that positively impacts communities. Through research, case studies, and collaborative design, students develop skills in empathy, social innovation, and stakeholder engagement, directly connecting to several SDGs: 1. SDG 3; Good Health and Well-Being: By focusing on community needs and inclusive spaces, the course promotes social, mental, and physical well-being. 2. SDG 4; Quality Education: Students engage in critical research, reflection, and knowledge synthesis, fostering advanced learning and professional competencies. 3. SDG 10; Reduced Inequalities: The course emphasizes social justice, equity, and design strategies that address disparities within communities. 4. SDG 11; Sustainable Cities and Communities: By examining environmental, cultural, and social contexts, students contribute to creating resilient, inclusive, and sustainable urban environments. 5. SDG 16; Peace, Justice, and Strong Institutions: The focus on participatory design and collaborative processes nurtures community empowerment, ethical engagement, and inclusive decision-making. 6. SDG 17; Partnerships for the Goals: Multidisciplinary collaboration and stakeholder engagement foster partnerships to advance sustainable community development. Overall, ARCH 611 equips students to design thoughtfully, integrating social, environmental, and cultural considerations to create equitable, sustainable, and community-focused built environments, reflecting the core principles of the SDGs.</p>
CENG427: Treatment of Wastewater	Undergraduate	<p>SDG 6: Clean Water and Sanitation // This course is a direct effort towards SDG 6, which aims to improve water quality by reducing pollution and increasing the safe treatment of wastewater. By focusing on tertiary treatment and the environmental impact of contaminants, the course trains engineers to safeguard water ecosystems and public health. // This course focuses entirely on the principles for the design and operation of wastewater treatment facilities. It is designed to give students a strong understanding of the main contaminants in Municipal Wastewater and their impacts on human health and the environment. Key topics include the design principles for various treatment stages: preliminary, primary, secondary, tertiary treatment units, and sludge treatment processes.</p>

Course Title	Level	Rationale
CENG427: Treatment of Wastewater	Undergraduate	SDG 6: Clean Water and Sanitation // This course is a direct effort towards SDG 6, which aims to improve water quality by reducing pollution and increasing the safe treatment of wastewater. By focusing on tertiary treatment and the environmental impact of contaminants, the course trains engineers to safeguard water ecosystems and public health. // This course focuses entirely on the principles for the design and operation of wastewater treatment facilities. It is designed to give students a strong understanding of the main contaminants in Municipal Wastewater and their impacts on human health and the environment. Key topics include the design principles for various treatment stages: preliminary, primary, secondary, tertiary treatment units, and sludge treatment processes.
ARCG 522: Project Management	Undergraduate	Describe the best practices of Project Management - Related to 9- Industry, Innovation and Infrastructure
ARCG 413: Contracts & Implementations of Documents	Undergraduate	All about interrelationships and contracts - 9- Industry, Innovation and Infrastructure
CENG209: Introduction to Engineering Profession	Undergraduate	SDG 16: The focus on Ethics and Corporate Responsibility supports the principles of transparent and just practice (SDG 16). This foundational course explicitly addresses non-technical, professional competencies vital for sustainable development. Key topics include Sustainability, Corporate Responsibility, Ethics (including professional ethics), and the interaction between technology and society. It also includes project management and teamwork.

Course Title	Level	Rationale
CENG328: Civil Engineering Projects and Seminar	Undergraduate	SDG 9: Industry, Innovation, and Infrastructure & SDG 11: Sustainable Cities and Communities. This directly links academic knowledge to practical, sustainable design solutions, aligning with SDG 9's call for innovation and SDG 11's goal of resilient infrastructure. The focus on real-world problems ensures the projects address contemporary challenges of sustainable development. The course is a core mechanism for developing "creative design and critical thinking skills" by challenging students to use "problem-based learning to find solutions to real engineering problems". Students are exposed to "ongoing important projects in the country and in the world" and must organize a seminar to present their proposed design components. The course emphasizes the role of civil engineers as designers and decision makers.
CENG580: Advanced Construction Project Management	Postgraduate	SDG 9: Industry, Innovation, and Infrastructure & SDG 12: Responsible Consumption and Production. This course applies advanced management techniques to construction projects. It focuses on the strategic planning and control necessary to execute large-scale, resilient infrastructure projects effectively (SDG 9). By emphasizing efficient resource allocation, risk management, and schedule optimization, the course contributes to minimizing waste and maximizing value throughout the project life cycle, aligning with SDG 12 (responsible consumption and production).
ARCU 624: Sustainable Urban Design	Postgraduate	This course focuses on the sustainability of urban environments through an integrated exploration of urban design, planning, and development economics. Students will analyse the environmental, social, and economic dimensions of urban growth, with an emphasis on sustainable development agendas and the reduction of environmental impacts from urbanisation. By studying real-world urban systems and planning frameworks, learners will gain the tools to design cities that are resilient, inclusive, and resource efficient. This Course aligns with SDG (11), (9) & (13)

Course Title	Level	Rationale
LNDA 311: Urban Studies	Undergraduate	This course introduces the foundational principles of urban design and explores its interconnections with urban landscapes. It examines the city as both a landscape and a system of places, highlighting how spatial design shapes human experience and environmental quality. Students will study the concept of the landscape as a series of “outdoor rooms,” focusing on how design enables a sense of place, identity, and community. Through lectures, case studies, and design exercises, the course integrates urban design theory, landscape design practices, and sustainability principles to foster a holistic understanding of urban environments. This course aligns with SDG (11), (13), (3) & (9)
Conservation of Buildings	Undergraduate	The course content is primarily aligned through its direct contribution to SDG 11.4, which focuses on protecting cultural heritage. It also contributes to broader impact on other goals such as sustainable cities (SDG 11) by enhancing adaptive reuse of heritage sites and local communities (SDGs 1, 8, 11) through intangible cultural activities documentation and awareness.
Architecture Design III - ARCG 310	Undergraduate	The course Architecture Design III (ARCG 310) aligns with SDG 4 – Quality Education and SDG 11 – Sustainable Cities and Communities by fostering critical thinking, creativity, and environmental responsibility among students. It provides students with a comprehensive understanding of how environmental factors influence architectural design, encouraging sustainable development to develop context-responsive solutions. Through analytical research and and practical design project, students develop essential skills to integrate traditional environmental control techniques with modern practices. By emphasizing the design of sustainable urban environments, the course promotes learning and innovation in architecture that supports the development of sustainable cities and communities.

Course Title	Level	Rationale
ARCG 320: Architecture Design IV	Undergraduate	Architectural Design IV supports SDG 4 – Quality Education and SDG 11 – Sustainable Cities and Communities by providing students with an integrated learning experience that connects theory, history, culture, and environmental awareness through design practice. The course encourages students to apply their accumulated knowledge to real-world contexts: historical, urban, and natural, enhancing their critical thinking and design problem-solving abilities. By emphasizing the relationship between architecture, culture, and the environment, it promotes a holistic and inclusive approach to education that cultivates creativity, cultural sensitivity, and sustainable design thinking.
Highway Engineering	Undergraduate	SDG 3: Good Health and Well-being: The course contributes to safer mobility and public health by teaching students how to design highways and road networks that minimize accident risk, improve traffic safety, and ensure comfortable travel conditions. Through topics such as geometric design, pavement evaluation, and traffic control, students learn how engineering decisions directly influence road safety and users' well-being. SDG 9: Industry, Innovation, and Infrastructure: Highway Engineering builds students' capacity to design, construct, and maintain sustainable and resilient transportation infrastructure. The course emphasizes innovative materials, modern construction techniques, and efficient design standards that support economic growth and technological advancement within the transportation sector. SDG 11: Sustainable Cities and Communities: By addressing the planning and design of road systems that integrate with urban development, the course supports the creation of inclusive, safe, and accessible transport networks. Students learn to develop highway solutions that enhance mobility, reduce congestion, and support sustainable urbanisation, thereby contributing to more liveable and connected communities.

Course Title	Level	Rationale
INTD 324: Furniture Design	Undergraduate	The course contains a design project that focuses on the use of CNC machining, which helps in local manufacturing and reducing waste. It promotes using one material when making a furniture piece. This is aligned with SDG 11. Sustainable Cities and Communities and SDG 12. Responsible Consumption and Production.
ARCG 314 / ARCG 326/ ARC 211/ ARCG 210/ ARC 210/ LND 411/ LND 420	Undergraduate	ARCG 314 / ARCG 326/ ARC 211: Theory of architecture, talks about people, communities, and places, strongly linked to SDG 11 SDG 11 "Sustainable Cities and Communities". ARCG 210/ ARC 210: Design 1, same focus on housing, also SDG 11, LND 411/ LND 420, GRADUATION 1 & 2 FOR LANDSCAPE, relates to SDG 14 – Life Below Water & SDG 15 – Life on Land
ARCG 318: Vernacular Heritage	Undergraduate	Vernacular architecture, defined by its reliance on local resources, cultural context, and passive climate strategies, offers a powerful, time-tested model for sustainability. Studying this tradition moves beyond simple historical analysis; it serves as a foundation for designing modern, resilient, and equitable built environments, directly contributing to the achievement of the UN Sustainable Development Goals (SDGs). The course particularly aligns with the following SDGs: SDG 11: Sustainable Cities and Communities, SDG 12: Responsible Consumption, SDG 13: Production and Climate Action, SDG 9: Industry, Innovation, and Infrastructure and SDG 4: Quality Education.
Graduation Project I	Undergraduate	The course includes research on passive and active environmental solutions for the students' projects. this aligns with SDG 11: Sustainable Cities and Communities, SDG 7: Affordable and Clean Energy, SDG 13: Climate Action.
ARCG 520: Graduation Project II	Undergraduate	The course includes applying passive and active environmental solutions to the students' projects. This aligns with SDG 11: Sustainable Cities and Communities, SDG 7: Affordable and Clean Energy, and SDG 13: Climate Action.

Course Title	Level	Rationale
Environmental Systems III	Undergraduate	The course covers topics related to Illumination, Lighting Efficiency and Initial vs Operational costs for installations. the project also encourages the students to come up with an efficient lighting design by combining various concepts.
ARCG 412 and ARCG 423	Undergraduate	The course ARCG 412 (Working Drawing-I) develops the technical literacy students need to deliver safe, resource-efficient buildings through working drawings (plans, elevations, sections and details) and coordinated building services. The course covers water supply and drainage layouts (supporting SDG 6), selection of materials, finishes, and building envelope systems (responsible sourcing and durability under SDG 12 and innovation under SDG 9), and integrated documentation that links design to construction for more sustainable urban outcomes (SDG 11). A construction site-visit report reinforces real-world practice and reflective learning (SDG 4). Building on ARCG 423 (Working Drawing-II), this course expands integrative coordination of MEP systems (Electrical layout, lighting, HVAC, firefighting/alarm) and coordinated reflected ceiling plans, which support energy efficiency and safety (SDG 7, SDG 3). Students produce advanced details for facades/cladding, vertical circulation (stairs/elevators), openings, and green/roof-garden assemblies (drainage, waterproofing, expansion joints), promoting durable, low-impact assemblies (SDG 12), infrastructure innovation (SDG 9), and liveable community buildings (SDG 11). The technical model + final submission consolidates professional competencies (SDG 4).
ARCG310	Undergraduate	The course focuses on environmental solutions that are linked to environment-related Sustainable Development Goals (SDGs).
ARCG 520	Undergraduate	The Graduation Design course is a comprehensive project encompassing architectural, sustainable, structural, social, and cultural aspects, all of which are closely aligned with the Sustainable Development Goals (SDGs).

Course Title	Level	Rationale
INTA 223	Undergraduate	INTA 223 has one project that aligns with SDG 9 (Industry, Innovation, and Infrastructure) by integrating technology and creativity into the design process. Using digital fabrication tools such as CNC machines and laser cutters, students learn to transform digital designs into precise physical models, promoting innovation and technological advancement.
Traffic Engineering	Undergraduate	The Traffic Engineering course supports several United Nations Sustainable Development Goals (SDGs) by promoting safer, more efficient, and sustainable transportation systems. It directly contributes to SDG 3 (Good Health and Well-being) through the study of driver and vehicle characteristics and traffic control measures that enhance road safety. By optimizing traffic flow, reducing congestion, and improving travel time and delay, it supports SDG 11 (Sustainable Cities and Communities) through better urban mobility and reduced environmental impact. Additionally, the course's emphasis on capacity analysis and efficient roadway design aligns with SDG 9 (Industry, Innovation, and Infrastructure) by fostering resilient and sustainable transport infrastructure.
Highway Engineering	Undergraduate	The Highway Engineering course aligns with several United Nations Sustainable Development Goals (SDGs) by emphasizing the development of safe, efficient, and sustainable transport infrastructure. It contributes to SDG 9 (Industry, Innovation, and Infrastructure) through the study of highway planning, design, and construction practices that promote resilient and quality infrastructure. By addressing topics such as geometric design, drainage, and pavement materials, the course supports SDG 11 (Sustainable Cities and Communities) through the creation of accessible and reliable road networks that enhance urban and rural connectivity. Furthermore, by incorporating economic and environmental considerations in highway planning and design, the course advances SDG 13 (Climate Action) by encouraging sustainable construction practices and minimizing the environmental impact of transportation systems.

Course Title	Level	Rationale
Advanced Traffic Engineering	Postgraduate	<p>The Advanced Traffic Engineering course aligns with several United Nations Sustainable Development Goals (SDGs) by focusing on innovative, data-driven, and sustainable approaches to traffic management and system optimization. It contributes to SDG 9 (Industry, Innovation, and Infrastructure) through the application of advanced traffic flow theories, modelling techniques, and intelligent transportation systems that enhance the efficiency and resilience of transport networks. By emphasizing safety analysis, congestion management, and signal optimization, the course supports SDG 11 (Sustainable Cities and Communities) through the development of smart, safe, and accessible urban mobility solutions. Furthermore, by promoting sustainable traffic operations and reducing vehicular emissions through efficient system design, the course advances SDG 13 (Climate Action) by contributing to the reduction of the environmental footprint of transportation systems.</p>
Transportation Planning and Modelling	Postgraduate	<p>The Transportation Planning and Modelling course aligns with several United Nations Sustainable Development Goals (SDGs) by emphasizing data-driven, equitable, and sustainable approaches to transportation system design and evaluation. It contributes to SDG 9 (Industry, Innovation, and Infrastructure) through the application of analytical and modelling techniques that support the development of efficient and resilient transport systems. By addressing urban transportation planning, travel demand forecasting, and network assignment, the course supports SDG 11 (Sustainable Cities and Communities) through the promotion of integrated, accessible, and environmentally responsible mobility solutions. Moreover, by incorporating evaluation methods that balance social, economic, and environmental factors, the course advances SDG 13 (Climate Action) by fostering sustainable transportation planning practices that mitigate congestion and reduce emissions.</p>

Course Title	Level	Rationale
Traffic Flow and Capacity Analysis	Undergraduate	The Advanced Traffic Engineering course aligns with several United Nations Sustainable Development Goals (SDGs) by focusing on innovative, data-driven, and sustainable approaches to traffic management and system optimization. It contributes to SDG 9 (Industry, Innovation, and Infrastructure) through the application of advanced traffic flow theories, modelling techniques, and intelligent transportation systems that enhance the efficiency and resilience of transport networks. By emphasizing safety analysis, congestion management, and signal optimization, the course supports SDG 11 (Sustainable Cities and Communities) through the development of smart, safe, and accessible urban mobility solutions. Furthermore, by promoting sustainable traffic operations and reducing vehicular emissions through efficient system design, the course advances SDG 13 (Climate Action) by contributing to the reduction of the environmental footprint of transportation systems.
Road Safety Analysis	Postgraduate	Safety design and operational practices for streets and highways, including safety improvement programs, design of barrier systems, bicycle and pedestrian consideration, access control, safety evaluation, and measures of effectiveness.
Road Safety Analysis	Postgraduate	The Road Safety Analysis course aligns with several United Nations Sustainable Development Goals (SDGs) by focusing on the development of safe, inclusive, and sustainable transportation systems. It contributes to SDG 3 (Good Health and Well-being) through the study of safety design principles, operational practices, and evaluation methods that reduce traffic crashes and enhance the protection of all road users. By incorporating pedestrian and bicycle safety considerations, the course supports SDG 11 (Sustainable Cities and Communities) through the promotion of inclusive and equitable mobility within urban environments. Additionally, by emphasizing evidence-based safety improvement programs and effective design strategies, the course advances SDG 9 (Industry, Innovation, and Infrastructure) by fostering the creation of resilient, efficient, and safer transport infrastructure.

Course Title	Level	Rationale
Public Mass Transportation Systems	Postgraduate	The Public Mass Transportation Systems course aligns with several United Nations Sustainable Development Goals (SDGs) by promoting sustainable, efficient, and inclusive urban mobility. It contributes to SDG 11 (Sustainable Cities and Communities) through the study of public transit systems that enhance accessibility, reduce congestion, and support equitable transportation for all populations. By addressing topics such as planning strategies, management, and financing of transit systems, the course supports SDG 9 (Industry, Innovation, and Infrastructure) through the development of modern, resilient, and efficient mass transport infrastructure. Furthermore, by emphasizing environmentally friendly modes such as rail and bus transit, the course advances SDG 13 (Climate Action) by encouraging a modal shift from private vehicles to sustainable public transportation, thereby reducing emissions and improving urban air quality.
Road Traffic Management	Postgraduate	The Road Traffic Management course aligns with several United Nations Sustainable Development Goals (SDGs) by promoting efficient, safe, and sustainable management of transportation systems. It contributes to SDG 11 (Sustainable Cities and Communities) through the study of integrated urban traffic management, bus priority systems, and non-motorised transport facilities that enhance urban mobility and accessibility. By incorporating Intelligent Transport Systems (ITS), speed management, and road pricing strategies, the course supports SDG 9 (Industry, Innovation, and Infrastructure) through the application of advanced technologies and innovative policies that improve traffic efficiency and infrastructure performance. Furthermore, by encouraging sustainable travel modes and reducing congestion and emissions, the course advances SDG 13 (Climate Action) by fostering environmentally responsible traffic management practices that contribute to cleaner and more liveable cities.

Course Title	Level	Rationale
REE602: Photovoltaic Systems	Undergraduate	History of PV technology; Types of PV Systems, Principles of operation of photovoltaic systems; PV systems performance characteristics as a function of environmental conditions; Site assessment for PV systems installation, selection of an appropriate system design; Installation of basic subsystems; Inspection and maintenance of PV Systems; Safety considerations during installation and exploitation of PV systems. PV systems: standard PV systems, PV concentrator.
REE603: Wind Energy Systems	Postgraduate	The following topics will be covered in the course: Statistical methods of wind analysis, Wind Resources Assessment and Site Selection, Wind Machine Technologies and wind turbines performance analysis. The course deals with the basic characteristics of wind energy, site characterisation, fundamental principles of wind energy utilisation, and discusses the design of basic parts, including aerodynamics, mechanical and electrical design aspects. Special emphasis will be given to the theory of the design of turbine blades. Offshore and onshore wind plants. integration into the power systems will also be addressed in this course. Furthermore, the environmental impacts of wind power utilization will be discussed.
EENG490: Senior Project	Undergraduate	This paper studied a wind energy system and proposed two techniques in the control of the output voltage of a wind turbine generator. Note that the output voltage from the wind turbine generator is often not constant due to the intermittency of the wind speed. The voltage controller has been designed using MATLAB/SIMULINK toolboxes' flexibility. The performance of the proposed voltage controller has been tested via computer simulations as well as via an experiment performed on a typical laboratory vertical-axis wind turbine (VAWT). The present paper also studied the distance optimization between VAWTs when the latter are installed as arrays in highways.

Course Title	Level	Rationale
EENG446: Solar and Wind Renewable System	Undergraduate	EENG 446 equips students with the knowledge and skills to design and analyse solar and wind energy systems, promoting the use of clean, reliable, and sustainable energy solutions that support global access to affordable and renewable energy.
EENG444: Electric Drives I	Undergraduate	Use the regeneration of Energy during the braking of electric motors.
REE601: Renewable Energy Systems	Postgraduate	REE601 fosters advanced understanding of renewable energy technologies, including solar, wind, biomass, and hybrid systems, to promote sustainable and efficient energy solutions. The course aligns with SDG 7 by preparing students to develop and implement innovative clean energy systems that enhance energy access, efficiency, and sustainability at local and global levels.
REE601: Renewable Energy Systems Fundamentals	Postgraduate	Gaining an understanding of the principles of renewable energy technologies is key to understanding the technological basis of the systems and their applications. This is particularly important with regard to the overall energy mix of a specific country. This module provides you with the fundamentals of renewable energy technologies and their impact on global and national energy systems. The purpose of this module is to introduce the basis for assessment of the performances of wind, wave and tidal, hydroelectricity, biomass and waste technologies, and geothermal technologies. Basic introduction to the relevant market and financial management, policies, regulations and incentives will be experienced.
REE602: Photovoltaic Energy Systems	Postgraduate	REE602 focuses on the design, operation, and performance analysis of photovoltaic (PV) systems, promoting the adoption of clean and sustainable electricity generation. The course aligns with SDG 7 by enabling students to develop efficient and affordable solar energy solutions that support the global transition toward renewable energy and reduced dependence on fossil fuels

Course Title	Level	Rationale
REE603: Wind Energy Systems	Postgraduate	REE603 enhances students' understanding of wind energy conversion technologies and system integration for sustainable electricity generation. The course aligns with SDG 7 by promoting the development and implementation of efficient, clean, and affordable wind energy solutions that contribute to global renewable energy goals and reduce carbon emissions.
REE604: Solar thermal Energy	Postgraduate	REE604 supports SDG 7 (Affordable and Clean Energy) by promoting the design and application of solar thermal technologies for clean and sustainable heat and power generation. It also contributes to SDG 13 (Climate Action) through the reduction of greenhouse gas emissions, SDG 9 (Industry, Innovation, and Infrastructure) by encouraging innovation in renewable energy systems, and SDG 12 (Responsible Consumption and Production) by fostering efficient and sustainable energy utilization practices.
CHENG423: Plant Design Project course	Undergraduate	SDG 3: Good Health and Well-being: Emphasis on safety and health considerations in process design., SDG 4: Quality Education: Promotes experiential learning through field visits, group projects, and presentations., SDG 9: Industry, Innovation and Infrastructure: Focus on industrial process design, innovation, and infrastructure development., SDG 12: Responsible Consumption and Production: Includes sustainability assessments, material and energy balances, and economic evaluations., SDG 13: Climate Action: Environmental impact assessments and sustainability considerations support climate-conscious engineering
EEM699: Master Thesis	Postgraduate	EEM699 – master's Thesis allows students to conduct in-depth research or development projects in renewable energy and related fields, directly supporting SDG 7 (Affordable and Clean Energy) by fostering innovative solutions for sustainable energy. The course also promotes SDG 9 (Industry, Innovation, and Infrastructure) through research-driven technological advancement and SDG 13 (Climate Action) by encouraging projects that address climate mitigation, energy efficiency, and low-carbon solutions.

Course Title	Level	Rationale
REE605: Special Topics in Renewable Energy Engineering	Postgraduate	These courses collectively support SDG 7 (Affordable and Clean Energy) by promoting knowledge and practical skills in renewable energy generation, storage, and system installation. Energy Storage Systems and Energy Conservation Techniques contribute to SDG 12 (Responsible Consumption and Production) through efficient energy management and reduced energy waste. Energy Economics, Policies, and Regulations align with SDG 13 (Climate Action) and SDG 8 (Decent Work and Economic Growth) by addressing sustainable energy policies, economic frameworks, and climate-resilient strategies. Installation of Renewable Energy Systems supports SDG 9 (Industry, Innovation, and Infrastructure) by developing technical expertise for clean energy deployment. Courses such as Geothermal Energy, Wave Energy, and Other Forms of Renewable Energy Systems further contribute to SDG 13 (Climate Action) by diversifying renewable energy resources and fostering innovation toward a sustainable, low-carbon future.
MSc Thesis	Postgraduate	The MSc Thesis course aligns strongly with several United Nations Sustainable Development Goals (SDGs) by emphasizing independent research, innovation, and the pursuit of solutions to global civil engineering challenges. As a capstone of the MSc program, the thesis allows students to apply advanced knowledge and analytical skills to address complex problems related to infrastructure, sustainability, safety, and environmental stewardship. This directly supports SDG 9 (Industry, Innovation, and Infrastructure) through the development of resilient and sustainable engineering solutions. By encouraging research that promotes sustainable urban development, efficient resource use, and climate resilience, the course also advances SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action). Moreover, in line with the program's intended learning outcome (PILO) of solving global issues through research, the MSc Thesis fosters innovation, ethical responsibility, and global awareness—qualities essential for achieving the broader vision of the SDGs and contributing to a more sustainable and equitable world.

Course Title	Level	Rationale
ARCG210	Undergraduate	The course emphasizes designing sustainable homes with conscious passive designs to respond perfectly to the local environment.
Architectural Design 2	Undergraduate	The course emphasizes in designing sustainable, energy-efficient community buildings which are designed in a way to encourage collaboration and engagement between the community members.
Environmental System I	Undergraduate	The course teaches the students how to design energy-efficient buildings using insulation, shading, and passive strategies as a response to the climate in order to save energy. It also promotes designing sustainable buildings that reduce resource consumption while meeting occupants' comfort requirements at the same time.
Building service systems	Undergraduate	The course promotes designing buildings' efficient water supply, drainage, and electrical systems, which save water use, enhance safe drainage, and reliable electrical systems, directly promoting in provision of clean Water and clean energy. It also contributes to creating resilient structures and safer living environments.
Architectural construction I	Undergraduate	The course promotes the use of sustainable building materials and construction methods to achieve responsible consumption and production. It also enhances safety in buildings, as a response to achieve sustainable cities and communities.
Architectural Graphics I	Undergraduate	The course supports the sustainable goals by developing precision and communication skills essential for designing sustainable and efficient buildings. It also preserves foundational skills in technical drawing, supporting lifelong learning and quality education.
Design communication I	Undergraduate	The course supports the sustainable goals by developing precision and communication skills essential for designing sustainable and efficient buildings. It also preserves foundational skills in technical drawing, supporting lifelong learning and quality education.

Course Title	Level	Rationale
Architectural Graphics II	Undergraduate	The course teaches freehand sketching and manual drawings that foster creativity and visual communication skills, supporting quality education through hands-on, artistic learning. Helping students to visualise and communicate sustainable design concepts, it indirectly supports sustainable cities and encourages more thoughtful, human-centred architecture.
Design Communication II	Undergraduate	The course teaches freehand sketching and manual drawings that foster creativity and visual communication skills, supporting quality education through hands-on, artistic learning. Helping students to visualise and communicate sustainable design concepts, it indirectly supports sustainable cities and encourages more thoughtful, human-centred architecture.
INTD 411: Graduation Project Design Stage and INTD 420: Graduation Project Design Stage	Undergraduate	Both the Programming and Design Stage courses support the SDGs by encouraging students to apply sustainable design principles in their projects. Through researching sustainable materials and energy-efficient tools, students contribute to SDG 4 (Quality Education), SDG 7 (Clean Energy), SDG 11 (Sustainable Cities), SDG 12 (Responsible Consumption), and SDG 13 (Climate Action), fostering environmentally and socially responsible design practices.
INTA 212: Building Construction I	Undergraduate	This course aligns with the UN Sustainable Development Goals (SDGs) by encouraging students to explore sustainable and eco-friendly materials, climate-responsive and energy-efficient techniques, and local construction practices. Through this learning, students contribute to SDG 4 (Quality Education), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action)—promoting environmentally responsible and contextually appropriate building study.

Course Title	Level	Rationale
CHENG 463: Fundamentals of Water Desalination	Undergraduate	SDG 6: Clean Water and Sanitation: The course focuses on desalination processes that provide safe drinking water, addressing the critical need for clean water in regions with limited freshwater resources. Topics on water quality, including the characteristics of seawater and groundwater, ensure that students understand the importance of providing safe and potable water for both drinking and industrial use. The economics of desalinated water and the discussion on water treatment processes contribute to sustainable management practices for water resources, essential for long-term water security.

## 87. Academic Programs Directly Related to SDGs

Program Title	Level	Rationale
Master of Science in Adult Health Advanced Practice Nursing	Postgraduate	This program trains nurses to provide advanced care for complex adult health conditions, enhancing healthcare delivery. By focusing on preventative care and chronic disease management, it supports SDG 3 (Good Health and Well-Being) by promoting better health outcomes and reducing the burden of illnesses in adult populations.
Postgraduate Diploma in Midwifery	Postgraduate	Emphasizing safe and respectful maternal and newborn care, this program empowers midwives to improve reproductive health. It aligns directly with SDG 3 by ensuring safe childbirth practices and maternal health, as well as SDG 5 (Gender Equality) by advocating for women's rights during pregnancy and childbirth, ultimately contributing to healthier families and communities.
Postgraduate Diploma in Critical Care Nursing	Postgraduate	This diploma equips nurses with specialized skills for managing critically ill patients, emphasizing rapid assessment and intervention. By enhancing the quality of critical care services, it supports SDG 3 by improving survival rates in emergencies and providing life-saving interventions, which are essential in promoting health and well-being.

Program Title	Level	Rationale
Postgraduate Diploma in Emergency Nursing	Postgraduate	Focused on preparing nurses for high-pressure situations, this program enhances the ability to provide immediate and effective care in emergencies. Aligning with SDG 3, it ensures timely healthcare responses in crisis situations, thus improving health outcomes for populations during emergencies and disasters.
Postgraduate Diploma in Cardiovascular Care Nursing	Postgraduate	Aimed at preventing and managing cardiovascular disease, this program educates nurses on heart health and lifestyle interventions. By addressing one of the leading causes of death globally, it directly supports SDG 3 by promoting cardiovascular health and enhancing the quality of life for affected individuals, reducing healthcare costs and improving community health.
Postgraduate Diploma in Nephrology Nursing	Postgraduate	This program specializes in caring for patients with kidney diseases, emphasizing disease management, patient education, and lifestyle modifications. It aligns with SDG 3 by focusing on improving the quality of life for individuals with chronic kidney conditions and championing healthcare systems that effectively manage chronic illnesses, leading to better health outcomes.

Program Title	Level	Rationale
M.Sc. in Sustainable Energy Transition Systems	Postgraduate	<p>The M.Sc. in Sustainable Energy Transition Systems aligns with several United Nations Sustainable Development Goals (SDGs). SDG 13: Climate Action: The focus on reducing carbon emissions and promoting energy transition directly tackles climate change issues. Courses on carbon capture and utilization foster strategies to mitigate climate impacts.</p> <p>. SDG 7: Affordable and Clean Energy: The program focuses on energy transition from fossil fuels to sustainable energy sources, promoting clean and affordable energy access. Courses on energy generation and storage are directly linked to developing technologies that ensure energy security and sustainability. SDG 9: Industry, Innovation, and Infrastructure: By addressing the technological challenges of energy systems and emphasizing innovation (e.g., energy digitization and carbon capture), the program encourages resilient infrastructure and fosters innovation in the energy sector.</p> <p>SDG 11: Sustainable Cities and Communities: The program's emphasis on energy policy and management contributes to the development of sustainable urban environments that prioritize clean energy solutions, thus enhancing community resilience and sustainability. SDG 4: Quality Education: The interdisciplinary nature of the program provides high-quality education that equips students with critical thinking and problem-solving skills necessary for addressing complex energy issues.</p>

Program Title	Level	Rationale
Master in Environment and Sustainable Development	Postgraduate	The Master in Environment and Sustainable Development aligns with several United Nations Sustainable Development Goals (SDGs). SDG 11: Sustainable Cities and Communities: The program focuses on urban planning, environmental governance, and sustainable resource management, enabling students to design and support resilient and inclusive communities. SDG 13: Climate Action: Courses addressing climate adaptation, mitigation strategies, and environmental impact assessments equip learners to analyze climate-related risks and develop actionable solutions for national and global challenges. SDG 6: Clean Water and Sanitation: By examining water quality, wastewater treatment, and sustainable water resource management, the program supports efforts to ensure safe and sustainable water access. SDG 15: Life on Land: The program's emphasis on biodiversity protection, land management, and ecological restoration contributes to conserving terrestrial ecosystems. SDG 4: Quality Education: Through interdisciplinary training and research-based learning, the program enhances students' analytical, technical, and leadership skills to address complex sustainability issues.
Master of Science in Environmental Chemistry	Postgraduate	The Master of Science in Environmental Chemistry aligns with several United Nations Sustainable Development Goals (SDGs). SDG 6: Clean Water and Sanitation: The program emphasizes chemical analysis of water pollutants, treatment processes, and monitoring techniques that support safe and sustainable water systems. SDG 3: Good Health and Well-Being: By examining the impact of chemical contaminants on human health, the curriculum equips students to assess environmental risks and develop measures to reduce exposure. SDG 12: Responsible Consumption and Production: Courses addressing industrial pollution, hazardous waste management, and sustainable chemical practices foster environmentally responsible production systems. SDG 13: Climate Action: The study of atmospheric pollutants and their contribution to climate change enables students to propose scientific solutions for emission reduction and environmental protection. SDG 4: Quality Education: The program provides advanced laboratory skills, research methodologies, and scientific knowledge necessary to prepare specialists capable of contributing to national environmental priorities.

Program Title	Level	Rationale
Doctor of Philosophy in Environment and Sustainable Development	Postgraduate	The Doctor of Philosophy in Environment and Sustainable Development aligns with several United Nations Sustainable Development Goals (SDGs). SDG 13: Climate Action: The program engages doctoral candidates in advanced research on climate mitigation, adaptation frameworks, and environmental policymaking, contributing to long-term climate resilience. SDG 11: Sustainable Cities and Communities: Research areas such as environmental planning, urban sustainability, and risk reduction strategies support the creation of safe, inclusive, and sustainable urban systems. SDG 7: Affordable and Clean Energy: The program explores sustainable energy transitions and policy frameworks that enable cleaner and more efficient energy systems. SDG 15: Life on Land: Investigations into ecosystem protection, biodiversity conservation, and land restoration reinforce national and global commitments to preserving natural habitats. SDG 4: Quality Education: Through original research, scholarly publications, and capacity-building, the program strengthens academic excellence and contributes to expanding national expertise in sustainability.



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