



جامعة عجمان
AJMAN UNIVERSITY

17 PARTNERSHIPS
FOR THE GOALS



17.4.2

**Education for SDGs: specific courses
on sustainability**

Year 2025



17.4.2 Education for SDGs: specific courses on sustainability

In line with its mission to graduate socially responsible and innovative professionals, Ajman University offers catalogued, credit-bearing courses that address the environmental, social, and economic dimensions of sustainability and the United Nations Sustainable Development Goals (SDGs). A review of courses included in the Academic Year 2024–2025 and 2025–2026 catalogs identified 210 course–SDG alignments across SDGs 1–16. Courses with particularly direct sustainability content include Environmental Engineering (CIE352), Solid and Hazardous Waste Management (CIE487), Hydrology and Water Resources (CIE354), Renewable Energy Systems (MEC453), Smart Grid Renewable Energy Systems (ELE477), Science of Energy and Global Environment (ENV113), Urban Planning (ARC461), Social Responsibility (SSW111), and Human Rights (LAW106). The mapping below applies the UN SDG Top 100 Keywords to identify relevant curriculum connections. Because some courses address more than one SDG, a course may appear under multiple Goals, but it is counted only once within each SDG. During Academic Year 2024–2025, these offerings spanned **24 undergraduate** and **14 graduate** programs.

- **Undergraduate Programs:** All **24 undergraduate programs** integrate sustainability through the General Education Program. The [General Education Program](#) is aligned with the updated **UAE National Qualifications Framework (QFEmirates)**, endorsed by **Cabinet Resolution No. 106 of 2024**, which establishes learning-outcome expectations across **knowledge, skills, and values and responsibility**. Through this framework and its sustainability-related learning, the General Education Program supports students' understanding of and contribution to the **United Nations Sustainable Development Goals (SDGs)**.
- **Graduate Programs:** A total of **14 graduate programs** explicitly address the UN Sustainable Development Goals (SDGs), with a focus on innovation, excellence, lifelong learning, sustainability, and advanced knowledge in leadership, strategy, and operational solutions across diverse fields, including **education, business, engineering, artificial intelligence and data science, architecture and design, healthcare, and law (public and private)**.

A mapping of **courses (items 1 and 2)** with the UN Sustainable Development Goals (SDGs) using the **Top 100 SDG keywords** is provided as follows:

1- Summary of Courses Mapped with UN SDGs Top 100 Keywords

Ajman University developed a comprehensive mapping of the UN Sustainable Development Goals (SDGs) Top 100 Keywords against its curriculum to identify courses directly contributing to sustainability education. The mapping covers all courses offered in Year 2025, as summarized in the following table and detailed in Section (2).

UN Sustainable Development Goals	# of Courses Mapped to UN SDGs top 100 keywords
SDG 1: No Poverty	25
SDG 2: Zero Hunger	6
SDG 3: Good Health and Well-being	24
SDG 4: Quality Education	23
SDG 5: Gender Equality	4
SDG 6: Clean Water and Sanitation	7
SDG 7: Affordable and Clean Energy	9
SDG 8: Decent Work and Economic Growth	18

UN Sustainable Development Goals	# of Courses Mapped to UN SDGs top 100 keywords
SDG 9: Industry, Innovation and Infrastructure	24
SDG 10: Reduced Inequalities	13
SDG 11: Sustainable Cities and Communities	9
SDG 12: Responsible Consumption and Production	13
SDG 13: Climate Action	12
SDG 14: Life Below Water	5
SDG 15: Life On Land	7
SDG 16: Peace, Justice and Strong Institutions	11
Total	210

2- Mapping of UN Sustainable Development Goals (SDGs) keywords with Ajman University Curriculum – Courses offered in year 2025

This section provides a detailed course-level mapping between AU's curriculum and the relevant SDG keywords, highlighting the breadth of sustainability integration across disciplines.

Sources:

[Undergraduate Student Catalog AY 2024-2025](#)

[Undergraduate Student Catalog AY 2025-2026](#)

Methodology note: The course lists below are illustrative. Some courses appear across multiple SDGs due to cross-cutting content. All totals are computed from a master dataset that counts each course code once per SDG. Any typographical repetitions in the narrative lists do not affect the totals.

SDG 1: 25 Courses

Description: **No poverty**

UN SDGs Keywords

Financial inclusion, Health care, Economic development, Community resilience, Family income, Rural development, Access to finance, Clean water, Energy access, Affordable energy, Sustainable energy, Sustainable development, Financial support, Universal health coverage, Family welfare, International development cooperation, Health care access, Social entrepreneurship

Courses

- | | |
|--|--|
| 1. ECO320 Economic Development of GCC | 8. MGT212 Management of Small Business |
| 2. BDS211 Preventive Dent. & Nutrition | 9. SSW366 Family and social counseling |
| 3. BSN102 Introduction to Healthcare | 10. LAW106 Human Rights/ENG |
| 4. FIN323 Islamic Banking and Finance | 11. ENV113 Science of energy and GL E/ENG |
| 5. ELE477 Smart Grid Renewable Energy System | 12. SSW187 Social Work & the local community |
| 6. MEC453 Renewable Energy Systems | 13. CIE354 Hydrology & Water Resources |
| 7. SSW193 Family and Childhood | |

- | | |
|--|---|
| 14. SSW363 Approach to Community Org. | 20. SSW258 Areas of Social Work |
| 15. BSN303 Maternity & Newborn Health Nursing (Theory) | 21. SSW194 Welfare of the Elderly |
| 16. ECO210 Macroeconomics | 22. FIN324 Commercial Banking |
| 17. SSW364 Social Problems | 23. SSW192 Social Work in the Med. area |
| 18. CIE352 Environmental Engineering | 24. SSW472 Social Planning and Policies |
| 19. ARC271 Behavior & Built Environment | 25. MKT423 Social Media |

SDG 2: 6 Courses

Description: Zero Hunger

UN SDGs Keywords

Water scarcity, Soil conservation, Water management, Food nutrition security, Sustainable development goals, Malnutrition, Soil health, Rural development, Food education, Plant-based nutrition, Sustainable diets, International development, Access to clean water, Water-efficient agriculture, Food security education, Sustainable irrigation, Food security, Hunger eradication

Courses

1. BDS211 Preventive Dentistry & Nutrition
2. ENV113 Science of Energy and Global Environment
3. ECO320 Economic Development of GCC
4. CIE354 Hydrology and Water Resources
5. CIE361 Geotechnical Engineering I
6. MEC456 Water Desalination

SDG 3: 24 Courses

Description: Good health and well-being

UN SDGs Keywords

Health education, Reproductive health, Child nutrition, Public health education, Universal health coverage, Maternal health, Child health, Mental health, Communicable diseases, Health systems strengthening, Healthcare workforce, Nutrition, Disease prevention, Medical infrastructure, Maternal mortality, Health literacy, Safe childbirth, Antenatal care

Courses

- | | |
|---|---|
| 1. BSN102 Introduction to Healthcare | 5. COM476 Occupational & Environmental Medicine |
| 2. BSN303 Maternity and Newborn Health Nursing (Theory) | 6. PHA466 Pharmacoeconomics |
| 3. BSN304 Maternity and Newborn Health Nursing (Clinical) | 7. BHS364 Behavioral Science |
| 4. BDS211 Preventive Dentistry & Nutrition | 8. BME302 Medical Electronics |
| | 9. PRO124 Communication Skills for Healthcare Professionals |

- | | |
|--|---|
| 10. PHA374 Therapeutics I | 18. LAW106 Human Rights |
| 11. BDS111 Microbiology & Immunology | 19. SSW193 Family and Childhood |
| 12. POD242 Pathogenesis of Diseases | 20. APY241 Anatomy and Physiology II |
| 13. BSN202 Fundamentals of Nursing II | 21. BDS209 General Surgery & ENT |
| 14. BSN302 Adult Health Nursing (Clinical) | 22. BME307 Biomedical Instrumentation I |
| 15. BDS504 Emergency Dental Care | 23. BSN103 Fundamentals of Nursing I |
| 16. PSY111 General Psychology | 24. BSN201 Health Assessment |
| 17. MEC456 Water Desalination | |

SDG 4: 23 Courses

Description: Quality education

UN SDGs Keywords

Problem-solving skills, Education data, Education for all Skill development, Student engagement, Learning outcomes, Digital education, Education for marginalized groups, Education for girls, Student performance, Classroom management, School leadership, School nutrition, Critical thinking, Education for sustainable development, School governance, Education research, Education statistics

Courses

- | | |
|---|---|
| 1. SSW195 School Social Work | 14. SSW156 Social Statistics |
| 2. LED111 Leadership and Team Building | 15. ISL114 Islamic Culture |
| 3. INN311 Innovation and Entrepreneurship | 16. MTH111 Principles of Mathematics |
| 4. STA114 General Statistics | 17. SSW193 Family and Childhood |
| 5. INT207 Multimedia Technology | 18. MGT200 Introduction to Management |
| 6. PSY111 General Psychology | 19. BDS211 Preventive Dentistry & Nutrition |
| 7. SSW367 Training in social Instit. 1 | 20. DAT204 Data Engineering |
| 8. SSW200 Digital Sociology | 21. ENV113 Science of Energy and Global Environment |
| 9. BUS214 Business Research Methods | 22. SSW471 Social of Media & Digital Communication |
| 10. SSW469 Social Research Methods | 23. STA113 Introduction to Analytics |
| 11. LAW106 Human Rights | |
| 12. ENG104 Advanced English Writing | |
| 13. THI211 Critical Thinking | |

SDG 5: 4 Courses

Description: **Gender equality**

UN SDGs Keywords

Women's rights, Women's health, Reproductive rights, Girls' education, Access to health services for women, Legal rights for women, Women's reproductive health services, Gender-based health disparities, Women's access to education, Sexual rights, Reproductive health services, Reproductive health education, Political participation, Women's mental health, Girls' rights, Sexual and reproductive health and rights, Gender equality, Access to education for girls

Courses

1. BSN303 Maternity and Newborn Health Nursing (Theory)
2. LAW106 Human Rights
3. BSN304 Maternity and Newborn Health Nursing (Clinical)
4. ISL114 Islamic Culture

SDG 6: 7 Courses

Description: **Clean water and sanitation**

UN SDGs Keywords

Water scarcity, Water use efficiency, Water availability, Water scarcity solutions, Global water crisis, Sustainable water sourcing, Sustainable water solutions, Clean water, Water quality, Wastewater management, Water conservation, Water management, Sustainable water resources, Water security, Water in agriculture, Climate-resilient water systems, Integrated water resources management, Sustainable water practices

Courses

- | | |
|--|--|
| 1. ENV113 Science of Energy and Global Environment | 5. CIE487 Solid and Hazardous Waste Management |
| 2. CIE354 Hydrology and Water Resources | 6. BSN103 Fundamentals of Nursing I |
| 3. MEC456 Water Desalination | 7. ECO320 Economic Development of GCC |
| 4. CIE101 Introduction to Civil Engineering | |

SDG 7: 9 Courses

Description: **Affordable and clean energy**

UN SDGs Keywords

Affordable and Clean Energy, Clean energy, Renewable energy, Sustainable energy, Green energy, Energy efficiency, Energy transition, Energy security, Sustainable power, Low-carbon energy, Grid infrastructure, Energy innovation, Energy production, Energy efficiency measures, Power sector, decarbonization, Sustainable electricity, Clean technology, Sustainable energy solutions, Technological innovation in energy

Courses

1. MEC453 Renewable Energy Systems
2. ELE477 Smart Grid Renewable Energy Systems
3. ENV113 Science of Energy and Global Environment
4. ELE315 Electrical Machines and Power Systems
5. MEC403 Refrigeration and Air Conditioning
6. ELE464 Power System Analysis
7. ELE319 Electronic Devices and Circuits II
8. INN311 Innovation and Entrepreneurship
9. FIN410 Investments

SDG 8: 18 Courses

Description: **Decent work and economic growth**

UN SDGs Keywords

Decent work, Digital economy, Social entrepreneurship, Sustainable finance, Startups, Sustainable labor practices, Workplace equity, Economic justice, Sustainable economic development, Labor rights, Entrepreneurship, Innovation, Financial inclusion, Business development, Corporate social responsibility (CSR), Sustainable businesses, Workers' rights, Business innovation

Courses

- | | |
|---|---|
| 1. INN311 Innovation and Entrepreneurship | 10. SSW111 Social Responsibility |
| 2. LAW112 Work Ethics | 11. ENV113 Science of Energy and Global Environment |
| 3. LAW106 Human Rights | 12. MGT211 Production and Operations Management |
| 4. MGT212 Management of Small Business | 13. BUS418 Business Feasibility and Planning |
| 5. BUS316 Legal Environment & Ethics | 14. FIN323 Islamic Banking and Finance |
| 6. MGT423 Electronic Business | 15. SSW200 Digital Sociology |
| 7. FIN410 Investments | 16. MKT325 Marketing Channels |
| 8. ECO320 Economic Development of GCC | 17. SSW367 Training in social Instit. 1 |
| 9. FIN210 Fundamentals of Finance | 18. MKT426 Digital Marketing |

SDG 9: 24 Courses

Description: **Industry, innovation, and infrastructure**

UN SDGs Keywords

Infrastructure, Sustainable industrialization, Innovation, Industry, Industrial development, Sustainable infrastructure, Technology, Smart cities, Sustainable transport, Renewable energy infrastructure, Smart infrastructure, Advanced manufacturing, Clean technologies, Science and technology, Sustainable production, Urban development, Smart manufacturing, Green manufacturing

Courses

- | | |
|---|---|
| 1. MGT211 Production and Operations Management | 13. CIE101 Introduction to Civil Engineering |
| 2. ELE477 Smart Grid Renewable Energy Systems | 14. CIE352 Environmental Engineering |
| 3. MEC453 Renewable Energy Systems | 15. INT430 Artificial Intelligence |
| 4. INN311 Innovation and Entrepreneurship | 16. ARC461 Urban Planning |
| 5. CIE473 Construction Management | 17. ENV113 Science of Energy and Global Environment |
| 6. COE472 Intelligent Systems and Robotics | 18. MGT212 Management of Small Business |
| 7. CIE242 Transportation Engineering | 19. MGT221 Purchasing and Materials Management |
| 8. ELE315 Electrical Machines and Power Systems | 20. CIE354 Hydrology and Water Resources |
| 9. ECO320 Economic Development of GCC | 21. ELE102 Introduction to Engineering |
| 10. ELE466 Machine Learning | 22. INT309 Cloud Computing |
| 11. INT103 Information Technology in Business | 23. INT311 Advanced Computer Networks |
| 12. BUS214 Business Research Methods | 24. FIN410 Investments |

SDG 10: 13 Courses

Description: **Reduced inequalities**

UN SDGs Keywords

Social justice, Social inclusion, Inclusive policies, Marginalized communities, Economic justice, Non-discrimination policies, Political empowerment, Discrimination, Disability rights, Economic inclusion, Refugee rights, Financial inclusion, Human dignity, Political participation, Sustainable development, Corporate social responsibility (CSR), Decent work for all, Sustainable finance

Courses

1. LAW106 Human Rights
2. LAW112 Work Ethics
3. ECO320 Economic Development of GCC
4. BSN102 Introduction to Healthcare
5. SSW472 Social Planning and Policies
6. SSW363 Approach to Community Org.
7. FIN323 Islamic Banking and Finance
8. SSW258 Areas of Social Work
9. SSW111 Social Responsibility
10. FIN210 Fundamentals of Finance
11. MGT324 Leadership and Decision Making
12. ENV113 Science of Energy and Global Environment
13. FIN322 Personal Finance

SDG 11: 9 Courses

Description: **Sustainable cities and communities**

UN SDGs Keywords

Renewable energy in cities, Green energy for urban areas, Renewable-powered mass transit, Urban planning, Smart cities, Public transportation, Sustainable communities, Sustainable transport, Community engagement, Smart mobility, Safe and inclusive transport, Community-led urban initiatives, Smart urban solutions, Inclusive urban policies, Land use planning, Waste management, Smart grids, Air quality improvement

Courses

- | | |
|--|--|
| 1. ELE477 Smart Grid Renewable Energy Systems | 6. ARC461 Urban Planning |
| 2. ENV113 Science of Energy and Global Environment | 7. CIE487 Solid and Hazardous Waste Management |
| 3. SSW363 Approach to Community Org. | 8. SSW472 Social Planning and Policies |
| 4. CIE242 Transportation Engineering | 9. CIE473 Construction Management |
| 5. MEC453 Renewable Energy Systems | |

SDG 12: 13 Courses

Description: **Responsible consumption and production**

UN SDGs Keywords

Sustainable tourism, Sustainable development, Renewable resources, Waste-to-energy, Sustainable innovation, Renewable energy in production, Corporate environmental responsibility, Sustainable hospitality, Green energy transition, Sustainable event management, Green manufacturing, Eco-friendly products, Zero waste, Energy efficiency, Corporate social responsibility (CSR), Low-impact production, Biodegradable products, Waste minimization

Courses

- | | |
|--|--|
| 1. ENV113 Science of Energy and Global Environment | 8. SSW111 Social Responsibility |
| 2. MEC453 Renewable Energy Systems | 9. MKT413 Hospitality and Tourism |
| 3. MGT211 Production and Operations Management | 10. ECO320 Economic Development of GCC |
| 4. CIE487 Solid and Hazardous Waste Management | 11. INN311 Innovation and Entrepreneurship |
| 5. ELE477 Smart Grid Renewable Energy Systems | 12. MGT200 Introduction to Management |
| 6. MKT200 Principles of Marketing | 13. CIE354 Hydrology and Water Resources |
| 7. MGT221 Purchasing and Materials Management | |

SDG 13: 12 Courses

Description: **Climate action**

UN SDGs Keywords

Renewable energy, Sustainable energy, Clean energy, Energy transition, Renewable resources, Energy efficiency, Green energy, Renewable power generation, Clean transportation, Water conservation, Renewable energy systems, Clean energy solutions, Low-carbon transportation, Climate risk, Sustainable transport, Clean technology, Climate finance, Energy storage

Courses

- | | |
|--|---|
| 1. MEC453 Renewable Energy Systems | 7. ELE315 Electrical Machines and Power Systems |
| 2. ENV113 Science of Energy and Global Environment | 8. CIE354 Hydrology and Water Resources |
| 3. ELE477 Smart Grid Renewable Energy Systems | 9. FIN210 Fundamentals of Finance |
| 4. CIE242 Transportation Engineering | 10. BID333 Interior Building Systems |
| 5. MEC403 Refrigeration and Air Conditioning | 11. FIN321 Financial Risk & Insurance |
| 6. ECO320 Economic Development of GCC | 12. MEC456 Water Desalination |

SDG 14: 5 Courses

Description: **Life below water**

UN SDGs Keywords

Ocean data collection, Marine research, Fisheries ecosystem approach, Coastal ecosystems, Marine protection, Aquatic ecosystems, Coastal protection, Ecosystem-based management, Marine ecosystem services, Oceanic ecosystems, Offshore wind energy, Saltwater ecosystems, Sustainable use of marine resources, Sustainable coastal development, Ocean-based renewable energy, Maritime environmental protection, Ecosystem-based adaptation, Marine pollution

Courses

1. ENV113 Science of Energy and Global Environment
2. BIO111 General Biology
3. BUS214 Business Research Methods
4. MEC453 Renewable Energy Systems
5. ECO320 Economic Development of GCC

SDG 15: 7 Courses

Description: **Life on land**

UN SDGs Keywords

Land use planning, Wetland protection, Soil conservation, Soil erosion, Soil fertility, Forest policies, Soil restoration, Ecosystem restoration, Wildlife protection, Ecosystem services, Forest ecosystems, Green cover, Natural habitats, Ecosystem-based approaches, Tree planting, Species protection, Ecosystem-based adaptation, Natural resource management

Courses

1. ENV113 Science of Energy and Global Environment
2. BIO111 General Biology
3. CIE361 Geotechnical Engineering I
4. SSW472 Social Planning and Policies
5. ARC461 Urban Planning
6. CIE354 Hydrology and Water Resources
7. SSW363 Approach to Community Org.

SDG 16: 11 Courses

Description: **Peace, justice and strong institutions**

UN SDGs Keywords

International peace, Accountability for human rights, Human rights education, Access to political rights, Human rights, Inclusive institutions, Protection of rights, International law, Civil rights, Social inclusion, Indigenous rights, Human rights defenders, Peace, Conflict mediation, Peaceful communities, Equal access to justice, Peacekeeping, Rule of law institutions

Courses

1. LAW106 Human Rights
2. LAW403 International & Local
Commercial Arbitration
3. LAW233 Administrative Law
4. LAW231 Public International Law
5. SSW363 Approach to Community Org.
6. LAW381 International Organizations
7. SSW111 Social Responsibility
8. SSW364 Social Problems
9. LAW122 Constitutional Law
10. SSW472 Social Planning and Policies
11. LAW114 Introduction to Law