17.4.1 Education for SDGs Commitment to Meaningful Education

2024–2025

The Arab Academy for Science, Technology and Maritime Transport (AASTMT) demonstrates its commitment to education for sustainable development through institutional strategies, structured learning opportunities, and practical educational initiatives addressing the United Nations Sustainable Development Goals (SDGs). During the 2024–2025 academic year, the Academy continued to support students' understanding of sustainability through training frameworks, interdisciplinary research, specialized workshops, and educational activities addressing environmental, social, and economic challenges. These initiatives reflect AASTMT's approach to promoting meaningful sustainability education by connecting academic knowledge with practical applications and encouraging students to develop the awareness, competencies, and critical understanding needed to contribute to sustainable development.

Training on Social Sustainability Aspects

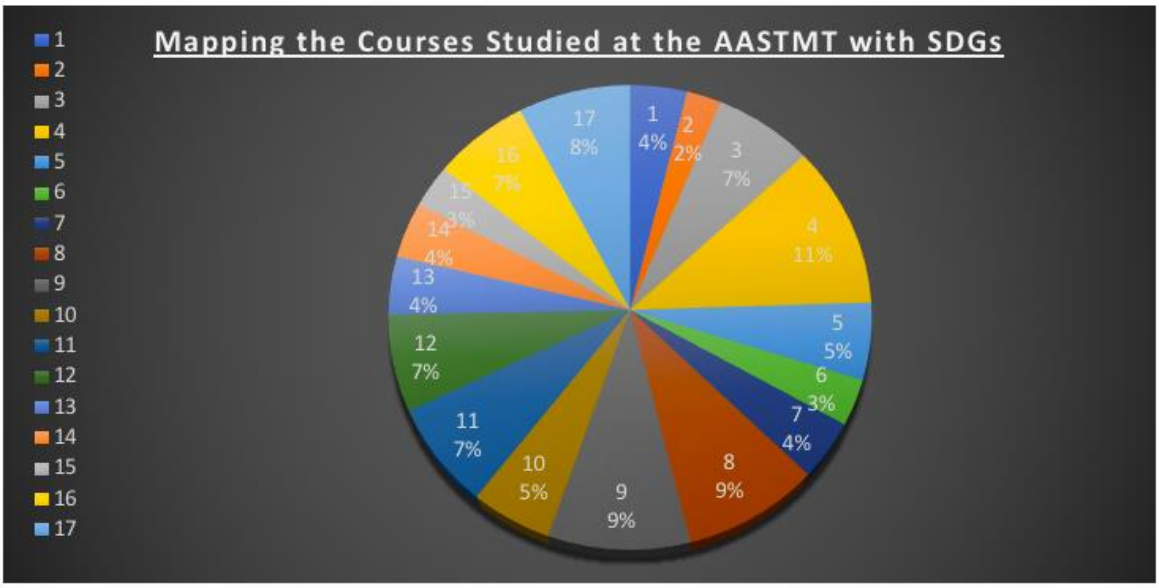
AASTMT supports sustainability education through a structured framework for training on the social dimensions of sustainable development. According to the Academy's published framework, annual training on social sustainability is intended for students, faculty members, and professional staff. The framework addresses human rights, equality and inclusion, social justice, gender equity, disability rights, community resilience, peacebuilding, and responsible governance.

For students, learning opportunities are delivered through embedded academic modules, workshops, awareness campaigns, student-led initiatives, and international engagement activities. The framework estimates approximately 20–30 hours of annual social sustainability learning and engagement per student, based on programme schedules and course contact hours, with actual participation varying across colleges and extracurricular activities. These initiatives reflect AASTMT's efforts to raise students' awareness of the social dimensions of sustainable development and encourage their engagement with related issues



Mapping AASTMT Courses with the UN SDGs

AASTMT demonstrates its commitment to integrating sustainable development into academic education through its institutional initiative, "Mapping AASTMT courses with the UN SDGs," launched in 2020. The initiative maps academic courses across programmes, disciplines, and campuses to the 17 United Nations Sustainable Development Goals. The published mapping provides an overview of SDG coverage within the curriculum and identifies individual courses associated with specific goals. This initiative provides evidence of AASTMT's institutional efforts to incorporate sustainability-related learning across different academic disciplines, extending beyond dedicated sustainability programmes.



Mapping AASTMT Courses with the UN SDGs

AASTMT Strategic Plan (2021–2026)

AASTMT's Strategic Plan (2021–2026) establishes sustainable development as an integral part of the Academy's institutional mission and long-term educational priorities. The plan emphasizes the role of high-quality education and training in preparing graduates to contribute to sustainable development. It also identifies education and learning as a central strategic priority, while recognizing the importance of economic, social, and human development across the Academy's activities. This institutional direction provides a strategic foundation for promoting meaningful education that equips students with the knowledge, skills, and awareness required to understand and address sustainable development challenges.



AASTMT Strategic Plan (2021–2026)

Natural Gas and Petrochemicals Simulator System

AASTMT supports practice-oriented technical education through its Natural Gas and Petrochemicals Simulator System. The facility provides students with opportunities to engage in realistic industrial simulations involving natural gas operations, liquid cargo handling, environmental protection, and operational risk management. Through interactive simulation terminals and practical exercises, students develop technical competencies and an understanding of the environmental and safety considerations associated with industrial operations. By linking technical training with responsible resource management, environmental protection, and safe industrial practices, the facility represents an applied learning environment that supports education relevant to sustainable development.



Natural Gas and Petrochemicals Simulator System

PQI and Wilkes University Organize First International Student Research Symposium on Sustainability and Innovation

On 5 May 2025, AASTMT's Productivity and Quality Institute (PQI), in collaboration with Wilkes University (USA), organized its first International Student Research Symposium under the theme "Global Strategies for a Sustainable Future: Bridging the Global North and South through Innovation, Leadership, and Market Resilience." The symposium brought together students from both institutions in five joint interdisciplinary research groups to present projects addressing antimicrobial coatings, bio-based products, digital health, and foreign direct investment strategies. The event promoted international academic exchange and provided students with opportunities to develop research skills, critical thinking, and intercultural collaboration while examining environmental, technological, health, and economic challenges.



PQI and Wilkes University Organize First International Student Research Symposium on Sustainability and Innovation

Student Seminar on Climate Change and Environmental Pollution - Technical & Vocational Institute, Port Said Branch

On 11 November 2024, AASTMT's Technical and Vocational Institute – Port Said Branch organized a student seminar entitled "Methods of Addressing Climate Change and Its Relationship to Environmental Pollution," delivered by Prof. Dr. Tamer Hassan Abu El-Dahab. The seminar was held as part of the Institute's educational activities in connection with the COP29 Climate Summit. It aimed to raise students' awareness of climate change, explain its relationship with environmental pollution, and introduce approaches to addressing these environmental challenges. The event also sought to strengthen students' understanding of environmental responsibility and the importance of sustainable practices in responding to climate-related issues, supporting AASTMT's commitment to education for sustainable development.



Student Seminar on Climate Change and Environmental Pollution - Technical & Vocational Institute, Port Said Branch

AASTMT Port Said Campus Hosts EU Workshop on Green Hydrogen Technologies

On 1 August 2025, AASTMT's Port Said Campus hosted a workshop entitled "Advancing Green Hydrogen Technologies and Applications" as part of the Erasmus+ GREEN Project. The workshop focused on integrating green hydrogen technologies and sustainability into higher education, presenting findings from technical studies and surveys, and encouraging collaboration between academic institutions and industry partners. The discussions highlighted the role of renewable energy technologies in supporting the transition to cleaner energy systems and the importance of developing relevant knowledge and technical expertise through higher education. The initiative contributed to AASTMT's efforts to promote sustainability-related education and strengthen academic engagement with emerging green technologies.



AASTMT Port Said Campus Hosts EU Workshop on Green Hydrogen Technologies

AASTMT Celebrates Arab Disaster Risk Reduction Day with Experts and Multisite Participation

On 20 March 2025, AASTMT marked Arab Disaster Risk Reduction Day through an educational event held at its Abu Qir campus and broadcast across its other campuses and online. The programme brought together specialists in occupational medicine, epidemiology, environmental affairs, and professional training to discuss disaster risks affecting Arab societies and approaches to preparedness, prevention, and community resilience. The expert presentations addressed practical measures for reducing disaster-related risks and strengthening the capacity of communities to respond to emergencies. By making these discussions accessible across its campuses, AASTMT provided an opportunity for interdisciplinary learning on disaster risk reduction and sustainable development.



AASTMT Celebrates Arab Disaster Risk Reduction Day with Experts and Multisite Participation

ABET–SDG Mapping of Learning Outcomes

AASTMT supports the integration of sustainable development into engineering education by linking ABET student learning outcomes with relevant United Nations Sustainable Development Goals (SDGs). This mapping highlights the relationship between engineering competencies, including design, ethical responsibility, communication, teamwork, and continuous learning, and broader environmental and social sustainability objectives. It provides a framework for demonstrating how sustainability-related considerations can be reflected in engineering learning outcomes and supports the Academy's commitment to incorporating sustainable development principles into academic education.

✨ ABET Outcomes vs SDGs Mapping Table

ABET Outcome	Mapped SDGs
Outcome 2 (Design)	SDG 3 – Good Health and Well-Being, SDG 6 – Clean Water and Sanitation, SDG 7 – Affordable and Clean Energy, SDG 9 – Industry, Innovation and Infrastructure, SDG 11 – Sustainable Cities and Communities, SDG 12 – Responsible Consumption and Production, SDG 13 – Climate Action, SDG 14 – Life Below Water, SDG 15 – Life on Land
Outcome 4 (Ethics)	SDG 4 – Quality Education, SDG 5 – Gender Equality, SDG 8 – Decent Work and Economic Growth, SDG 10 – Reduced Inequalities, SDG 16 – Peace, Justice and Strong Institutions, SDG 17 – Partnerships for the Goals
Outcome 3 (Communication)	SDG 1 – No Poverty, SDG 2 – Zero Hunger, SDG 4 – Quality Education, SDG 5 – Gender Equality, SDG 6 – Clean Water and Sanitation, SDG 10 – Reduced Inequalities, SDG 14 – Life Below Water, SDG 16 – Peace, Justice and Strong Institutions, SDG 17 – Partnerships for the Goals
Outcome 5 (Teamwork)	SDG 5 – Gender Equality, SDG 6 – Clean Water and Sanitation, SDG 8 – Decent Work and Economic Growth, SDG 9 – Industry, Innovation and Infrastructure, SDG 10 – Reduced Inequalities, SDG 15 – Life on Land, SDG 16 – Peace, Justice and Strong Institutions, SDG 17 – Partnerships for the Goals
Outcome 7 (Lifelong Learning)	SDG 4 – Quality Education, SDG 6 – Clean Water and Sanitation, SDG 8 – Decent Work and Economic Growth, SDG 9 – Industry, Innovation and Infrastructure, SDG 12 – Responsible Consumption and Production, SDG 13 – Climate Action, SDG 14 – Life Below Water, SDG 15 – Life on Land, SDG 17 – Partnerships for the Goals

ABET–SDG Mapping of Learning Outcomes