Sustainable Development Graduate Program
Fostering Green Innovation and Entrepreneurship

Master of Science (MSc) in Sustainable Development
Graduate Diploma in Sustainable Development

Open to graduates from different academic backgrounds
The American University in Cairo

The American University in Cairo was founded in 1919 by Americans devoted to education and community service in the Middle East. Today, AUC is the region’s premier English-language University — an essential contributor to the social, political and cultural life of the Arab world. It also serves as a crossroads for the world’s cultures: a vital, vibrant forum for reasoned argument, spirited debate and understanding across cultures. AUC is an independent, nonprofit, apolitical, non-sectarian and equal-opportunity institution, fully accredited in Egypt and the United States. AUC’s academic program is rooted in liberal arts education.

Degrees

The program offers two degrees: a Master of Science (MSc) in sustainable development and a graduate diploma. These two interdisciplinary programs aim to equip social entrepreneurs with comprehensive skills that will allow them to start up green businesses, launch innovative ventures and products, and initiate public policy and social entrepreneurship innovations. This, in turn, will help address society’s most pressing environmental and natural resource challenges while balancing social concerns and economic feasibility. Students will acquire a sound theoretical and practical understanding of sustainable development in all three sectors — private, governmental and nonprofit — in preparation for careers as entrepreneurs and intrapreneurs in a large range of organizations.

Dual Degree from AUC and Politecnico di Milano

Students interested in an international perspective can enroll in the dual master’s degree in sustainable development in partnership with Politecnico di Milano (Polytechnic University of Milan), the largest technical university in Italy and one of the top technical universities worldwide. Students can finish their first year at the AUC and then spend their second year in Italy, which enables them to earn their double degree in their area of concentration.

Why Study Sustainable Development?

The world is in urgent need for sustainable development, not for activities that lead to deterioration of the environment, exhaustion of natural resources and the triggering of diseases. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. It is about thinking and working in a profoundly different way.

Engineers, economists, ecologists, as well as political and social scientists cannot continue working on isolated islands. People with new skills who understand and are able to bring different disciplines together to develop their environments in a sustainable manner are needed more than ever before. A graduate program in sustainable development will enable participants to actively contribute to upgrading slums, reducing the use of fossil fuels, meeting renewable energy targets, conserving local resources, solving water problems, managing waste, reducing pressure on the local environment and supporting the creation of sustainable communities.

Participants who join the program will be:

- Among the first group studying sustainable development in the region
- One of few green entrepreneurs in the Middle East and Africa
- Desired in the local and international job market
- Taught by international professors from four different schools at AUC
- Active in helping the community while studying
- Taking classes with students from different backgrounds
Program Structure

Master of Science: 33 credit hours
Graduate Diploma: 18 credit hours

Students registered for the graduate diploma or the master’s degree must acquire a minimum of nine credit hours of core courses (Module M1).

Students pursuing the graduate diploma have to earn an additional nine credit hours of electives from the four sustainable development modules (M3-A, M3-B, M3-C and M3-D) to reach a minimum of 18 credit hours. Students pursuing the Master of Science program are expected to acquire 15 credit hours of electives from at least three of the four sustainable development modules (M3-A, M3-B, M3-C and M3-D) in order to reach a minimum of 24 credit hours of courses and nine credit hours for the thesis.

Students might be asked to take one or more courses from a list approved by the program committee (Module M2) and selected with their adviser in order to upgrade their knowledge and qualify them for this program.

Program Modules

Core Module – M1
Diploma or MSc: 9 credits
- Global Changes and Sustainable Development (3 credits)
- Engineering for a Sustainable Environment (3 credits)
- Core Concepts and Applications for Social and Environmental Policy (3 credits)
- Entrepreneurship and Innovation (3 credits)
- Community Assessment and Program Evaluation (3 credits)

Balance Module – M2
Noncredit
- A range of courses from the four schools will be selected by the program committee and assigned based on the individual needs of students.

Sustainable Development Modules – M3
Diploma: 9 credits; MSc: 15 credits

Green Technologies Module (M3-A)
- Water Desalination (3 credits)
- Renewable Energy Systems (3 credits)
- Solid and Hazardous Wastes Engineering (3 credits)
- Green Buildings (3 credits)

Entrepreneurship Module (M3-B)
- Marketing Management (3 credits)
- Strategic Management of Innovation (3 credits)
- Management in a Dynamic Environment (3 credits)
- Financial Management (3 credits)

Sustainable Cities Module (M3-C)
- Policy for Sustainable Cities (3 credits)
- Greening the Built Environment (3 credits)
- Urban Infrastructure Development for Sustainability (3 credits)

Sustainable Communities Module (M3-D)
- Population Dynamics (3 credits)
- Community Psychology and Systems Theory (3 credits)
- Prevention and Intervention in Communities (3 credits)
- Cities, Structure and Dynamics (3 credits)

Master’s Thesis MSc: 9 credits
- Graduate Thesis Seminar I (2 credits)
- Graduate Thesis Seminar II (1 credit)
- Research Guidance Thesis (6 credits)
Admission Requirements

The design of the program is flexible, giving the opportunity for graduates of engineering, natural science, business, as well as political and social science, to apply. Applicants might be asked to acquire additional noncredit courses to bring them to the knowledge level necessary for this program. A GPA of 3.0 and English-language proficiency (as demonstrated through the TOEFL and IELTS exams) are the minimum requirements for full admission to the program. Provisional admission may be granted in certain circumstances, with noncredit courses prescribed by the program coordinators.

Participating Schools

The program is offered by faculty members from four schools at AUC: School of Sciences and Engineering, School of Business, School of Global Affairs and Public Policy, and School of Humanities and Social Sciences. The Center for Sustainable Development is the body coordinating the program, in collaboration with the four schools. The Master of Science program is enhanced by the advanced facilities and state-of-the-art equipment available at the University.

Career Opportunities

A graduate qualification and community-based experience in sustainable development may lead to career opportunities in national and international organizations. Graduates typically seek career advancement in:

- Startups in the areas of green technologies and business
- International organizations that are active in fields related to sustainable development
- Local or regional nongovernmental organizations that work closely with the communities
- Governmental institutions on the policy level
- Corporate social responsibility departments of major corporations
- Consultancy firms working in the area of environmental services or social development
- Bilateral donor agencies

International Partners

- RWTH Aachen University, Germany
- Politecnico di Milano, Italy
- Graz University of Technology, Austria

The MSc in sustainable development is a partner in the Green Innovation and Entrepreneurship Program. www.giep.eu

Supported by TEMPUS