

2023 Student Design Competition

"Act Responsible ... Design Sustainable"

This competition is to spread the knowledge of SDG11 among AASTMT students.

Introducing SDG11

SDG11: Make cities and human settlements inclusive, safe, resilient, and sustainable.



According to the UN-Habitat, this goal could be achieved through the following targets:

- 11.1 By 2030, ensure access for all to adequate, safe, and affordable housing and basic services and upgrade slums.
- 11.2 By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
- 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- 11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

- 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
- 11.7 By 2030, provide universal access to safe, inclusive, and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.
- 11.a Support positive economic, social, and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.
- 11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.
- 11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

For more about SDG 11 Events, visit: <https://sdgs.un.org/goals/goal11>

Competition Rules and Guidelines:

1. The competition accepts projects that can include but are not limited to these themes: Sustainable Cities, Inclusive Environment, Smart Cities, Inclusive Mobility, Culture Heritage, Pro-Environment Cities, Community Development, Sustainable Economy, Circular Economy, and other themes that could be extracted from the SDG11 mentioned above Targets.
2. Teams are given approximately twelve calendar weeks to develop a project that tackles a solution for an issue within the SDG11 targets mentioned above. This project must solve a realistic problem drawn from the Egyptian context.
3. Projects are to be submitted online and must include a written Executive Summary, an optional Explanatory Appendix, and two videos described in the Submission Materials section below. All presentations must be in English.
4. Teams should use the Judging Criteria as a checklist to ensure they have addressed all relevant issues. Judging is done by a panel of industrial and academic judges using Judging Criteria. Judging the projects will be blindly based on the submitted project and the



Project video. The Team Introduction video will be withheld from the judges, and the names of the judges will be withheld until the final judging is complete.

5. Three winners are selected and announced at an online Awards Ceremony in June. Excerpts from the Team Introduction and Project Presentation videos for the winning teams are shown during this online conference.
6. AASTMT has the right to show, and display submitted work. The winning presentations are posted on the AASTMT website for general viewing.

Eligibility

- Teams are comprised of one to six students. If any team members are post-graduate students, the team size is limited to two. Only students currently enrolled at AASTMT are eligible.
- The competition committee encourages multidisciplinary teams from different colleges.
- It is eligible to submit a project developed within a course during the academic year 2022/2023. You will need to mention the supervisor of the course during the initial registration form.

Submission Materials:

The project will be submitted in digital format, and should consist of the following:

1. The project boards:
 - Theoretical approach – from one to two posters size A2
 - Empirical approach – one to two posters size A2 with the physical project or two to three boards size A1 with an optional physical model.
2. A written *Executive Summary*- A4 document that does not exceed two pages, providing a brief written summary of your recommendations.
3. A *Team Introduction video* (maximum 2 minutes) to introduce the project team members and colleges. This will not be shared with judges but will be used in introductions.
4. A *Project Presentation video* (maximum 10 minutes) to clearly explain your solution. You may use slides and video recordings from the project but should not include the team members' logos, templates, or other identifying materials. Any identifying material in the project presentation could bias judges and risk disqualification. This video should not introduce the problem – that is done outside this presentation. Instead, it should describe the solutions recommended and the approaches taken to create those solutions.
5. A *letter signed by team members* certifying that the project work was completed solely by the team members.
6. *Contact information* for the team members and a publication-quality photo of the team members (at least 300 dpi).
7. You are encouraged to include *an appendix* containing any project background you share. For example, you might explain how you approached the dilemma with different tasks. The appendix may be written informally and will not be judged in evaluating your work may use the content.

Submission is completed upon receipt of a confirming email from the official competition email.

Awards:

Cash prizes will include First Place – 7000EGP, Second Place – 5000EGP, and Third Place – 2000EGP. Honorable mentions and other non-cash awards may also be presented. All cash awards are divided equally among the participating team members. In addition to the cash awards, winners receive personal award certificates, which are announced on the AASTMT website, newsletter, and other means. Students can include their contact information to encourage networking and job offers.

Assessment Criteria:

Find below a table of the assessment criteria. Jurors will use these points to evaluate your work and their relevance to the goals and targets of SDG11.

Area of Importance	SPECIFIC INDICATORS		
Idea	Motivation	Social impact	Sustainability
Technical	Defined Objectives	Demonstrated Technical Awareness	Obtained and Interpreted Appropriate Results
	Formulated Supportable Conclusions	Properly Considered Error	Provided Recommendations for Future Work
Logistical	Organized Project	Met Deadlines	Executed Project Plan
	Kept Detailed Records		
Teaming	Division of Labor	Professional Conduct	Learning Experiences for All Team Members
Experimental Operation	Maintained Safe Practices	Developed Hazardous Operations (HAZOP) Report	Dressed Appropriately
	Proper Use/Maintenance of Equipment	Performed end-of-semester Shut Down	

Presentation

Prototype

Banner

Video (Media)

Defense

Success Tips:

The following are a few tips that should be considered:

1. The competition projects are used in many ways – the students use these projects to fulfill widely varying objectives. For that reason, each problem has a base problem and optional extensions. The students involved can determine the appropriate scope and level of effort.
2. Create reports that summarize the options explored, results recorded, and your recommendations.
3. In both your video and backup materials, assume that you have a mixed audience – a board of directors that includes technical and non-technical managers, all with expertise in the problem domain.
4. Since this is a team competition, your project must reflect your team's work, not that of any student assistant or faculty advisor. That said, this is also a learning endeavor. It is perfectly acceptable to seek help learning some skills, project management, and other skills necessary to complete the project successfully.
5. Please carefully read the Rules and Guidelines to ensure that you follow all the rules. Look to the Judging Criteria to see how your work will be evaluated.
6. There are many ways to approach the SDG11 targets, many opportunities to "fill in the blanks" by making reasonable assumptions, many options to evaluate, and many opportunities to demonstrate creativity.

Timeline:

February 26, 2023: Launch of the 2023 Student Design Competition

March 14th, 2023: Deadline for team registration.

March 30th, 2023: Deadline for Q&As via email.

July 1st, 2023: Submittal of the Entry Form for the 2023 Student Design Competition is due.

July (to be determined), 2023: 2023 Student Design Competition final ceremony will be held to announce the winners.

Registration & Submission:

To register in the student competition, you need to fill out a form found through this link:



<https://forms.gle/noqG684Li67LypGi9>

Following your registration and a confirmation email, you will be emailed with a google drive link to the group leader. You will upload all the required materials before the submission deadline.

FOR ADDITIONAL INFORMATION & CONTACT:

If teams need assistance making arrangements, don't hesitate to contact Dr. Nancy Abdel-Moneim at the email address below.

Nancy Abdel-Moneim

"Act Responsible ... Design Sustainable" Competition Chair

Email: nancyabdelmoneim@aast.edu