

#### **Program Records**

_	
About the Program	Sustainable Urban Infrastructure Engineering Master's Program is an interdisciplinary program focusing on urban infrastructure engineering and sustainability. The objective of the program is to educate students with a Master of Science Degree with the knowledge and skills to be able to create sustainable engineering solutions for the problems due to the rapidly growing urban population in cities, tackling the problems from a different viewpoint of different disciplines. The program is supported by faculty members of Civil Engineering, Computer Engineering, Industrial Engineering, and Electrical and Electronics Engineering Departments.
Program Objectives	Equip students with the expertise and proficiency to serve as specialists, technical staff, or managers in addressing urban infrastructure engineering challenges within both national and international private and public sector entities.
	Prepare students for academic roles, enabling them to pursue doctoral studies in urban infrastructure fields at national and international universities, fostering further research and development in the discipline.
	Cultivate a cadre of innovative, research-oriented professionals capable of spearheading national or international business ventures focused on urban infrastructure systems and their sustainability, thereby addressing societal needs aligned with global technological advancements.
Qualification Awarded	Graduate; Master of Science (M.Sc.) Degree
Length of Program & Credits	2 years, 120 ECTS
Level of Qualification	Master; QF-EHEA: Level 2; EQF-LLL: Level 7
Mode of Study	Full Time
Field of Study	Engineering, Manufacturing, and Construction

#### **Admission Requirements**

- Bachelor's degree
- One of the minimum valid scores below:
  - o ALES<sup>1</sup> SAY: 70,
  - o GRE<sup>2</sup>: 680 (old scoring), or 153 (new scoring),
  - o GMAT<sup>3</sup>: 500.

# Requirement and weighted scale grading for Admission to the program

Requirement	Weighted scale grading for admission (%)
Undergraduate GPA	%15
ALES	%50
Interview	%35
Cut score for admission	75 out of 100

- The medium of instruction at AGU is English, so one of the following minimum language proficiency scores is required:
  - YDS, e-YDS, YÖKDİL Score:73 (Valid for a maximum of five years from the date the result is announced)
  - o TOEFL IBT: 87 (Valid for two years from the test date)
  - o PTE: 74 (Valid for two years from the exam date)



#### Notes:

Minimum undergraduate and graduate grade point averages (GPA) are checked by the AGU Institute of Science and Technology Board of Directors. In calculating the conversion of graduation GPAs from the 4-point grading system to the 100-point grading system, the conversion table prepared by the Council of Higher Education will be used.

1 ALES: Academic Personnel and Graduate Education Entrance Examination

2 GRE: The Graduate Record Examination

3 GMAT: The Management Admission Test

ALES, GRE, and GMAT scores are valid for five (5) years from the date the exam results are announced.

# Recognition of Credit Mobility

Courses taken outside of the program could be transferred in accordance with the associated principles of the Abdullah Gul University Graduate Education and Examination Regulation rules by the respective management board.

For course substitutions, the courses should have been taught in English; the course grade must be 3.00 out of 4.00 (or an equivalent letter grade), and approval of the University Board is required.

Lateral Transfer Requirements: Applicants must spend at least one semester in their current master's program, enroll in and successfully complete at least 2 credit courses, and pass them with at least 3.00 out of 4.00.

# Graduation Requirements & Regulations

Successful completion of 2 Compulsory, 5 Elective Courses (at least 3 of them must be taken from SIE department), Seminar, and Ethics; a minimum grade point average (GPA) of 3.00; earning 120 ECTS credits; successful submission of a thesis.

# Occupational Profiles of Graduates

Graduates of AGÜ Graduate School of Engineering Science - Sustainable Urban Infrastructure Engineering Master's Program can be employed as specialists, technical staff, or managers in urban infrastructure engineering issues in national or international private and public sector organizations. In addition, graduates of this program can also have the opportunity to set up their own firms in the fields of urban infrastructure engineering or to pursue an academic career studying for a PhD degree.

#### **Access to Further Studies**

Graduates may apply to third-cycle (Level 8, PhD) degree programs.

# Assessment & Grading Policy

Based on Abdullah Gul University Graduate Education and Examination Regulation rules.

Letter Grade	Coefficient	Score	Status	Information letters	Explanation
Α	4,00	90-100	Pass	NA	Not Attended
A-	3,67	87-89	Pass	w	Withdrawn
B+	3,33	83-86	Pass	ı	Incomplete
В	3,00	80-82	Pass	Т	Transferred
B-	2,67	77-79	Pass	S	Satisfactory
C+	2,33	73-76	Pass	U	Unsatisfactory
С	2,00	70-72	Failed	Р	In Progress
C-	1,67	64-69	Failed	EX	Exempt
D+	1,33	56-63	Failed		
D	1,00	50-55	Failed	_	
F	0,00	0-49	Failed		



#### **Program Outcomes**

- PO1. Demonstrate mastery of sustainable urban infrastructure engineering principles through theoretical and practical application.
- PO2. Analyze the challenges facing urban infrastructure sustainability.
- PO3. Apply cutting-edge technology and innovative methodologies to design and develop sustainable urban infrastructure systems.
- PO4. Synthesize scientific literature relevant to urban infrastructure systems and sustainability.
- PO5. Collaborate effectively within multidisciplinary teams to address complex urban infrastructure problems and projects.
- PO6. Integrate knowledge from diverse disciplines to optimize sustainability-oriented design across urban infrastructure systems.
- PO7. Assess the social, environmental, and economic dimensions of sustainable urban infrastructure systems.
- PO8. Demonstrate social, scientific, and ethical values in their studies.
- PO9.Innovate novel solutions to emerging challenges in sustainable urban infrastructure.
- PO10. Communicate complex technical concepts and findings clearly and persuasively to diverse stakeholders.

TQF-HE & Program		Knowledge Theoretical Conceptual	Skills Cognitive Practical	Competences				
Outcomes Coverage				Work Independently and Take Responsibility		Learning	Communication and Social	Field Specific
	P01							
	PO2	Х	Х		Х	Х	Х	Х
	PO3	Х	Х		Χ	Χ	Х	
	PO4	Х	Х		Х	Х	Х	Х
	PO5				Х		Х	Х
	PO6						Х	Х
	PO7	Х	Х				Х	Х
	PO8	Х	Х		Χ	Х	Х	Х
	PO9	Х	Х		Χ	Х	Х	Х
	PO10	Х	Х		Χ	Χ	Х	Х
Institutional & Program		101	102	103	104	105	106	107
Outcomes (IOs) Coverage	P01	Х						Х
	PO2	Х	Х					
	PO3	Х	Х					
	PO4						Х	
	PO5				Х	Х	Х	
	PO6	Х	Х			Х		
	PO7			Х				Х
	PO8			Х				Х
	PO9			Х		Х		Х
	PO10		Х					Х

#### **AGU Institutional Student Learning Outcomes (IOs)**

#### Curriculum\*

<sup>\*</sup> Link for the AGU Institutional Student Learning Outcomes (IOs) https://cat.agu.edu.tr/Pages/KurumsalOgrencmeCiktilari.aspx?lang=en-US



Semester	Code	Course	Т	P	С	ECTS
1 <sup>st</sup>	SIE 510	Sustainability in Urban	3	1	3	7.5
		Infrastructure				
	GCC 1001	Introduction to Scientific	3	1	3	7.5
		Research Methods and				
		Scientific Publication Ethics				
	SIE 5XX-1	Elective	3	0	3	7.5
	SIE 5XX-2	Elective	3	0	3	7.5
		Semester Credits	12	2	12	30
2 <sup>nd</sup>	SIE 551	GIS Based City Information	3	1	3	7.5
		Systems				
	SIE 5XX-3	Elective	3	0	3	7.5
	X-1	Elective	3	0	3	7.5
	X-2	Elective	3	0	3	7.5
	SIE 500	Seminar	0	2	0	5.0
		Semester Credits	12	3	12	35
3 <sup>rd</sup> -4 <sup>th</sup>	SIE 599	MSc Thesis	0	1	0	45
	SIE 597	MSc Special Topics	4	0	0	10
		· ·				
		Total	28	6	24	120

<sup>\*</sup>The presented program is tentative, and the department reserves the right to change the course semester.

### **Curriculum Summary**

%		Courses	Credit	ECTS
6	YÖK/HEC Courses GCC 1001	1	3	7,5
12	Compulsory SIE 510, SIE 551	2	6	15
30	Elective* XXX	5	15	37,5
4	Seminar SIE 500	1	0	5
8	MSc Special Topics SIE 597	2	0	10
40	MSc Thesis SIE 599	2	0	45
100,0	TOTAL	13	24	120

<sup>\*</sup> At least three elective courses must be taken from the SIE program; other elective courses can be taken with the same ECTS from other graduate programs.