AGU Graduate School of Engineering & Science
Electrical and Computer Engineering M.Sc. Program

Program Records

About the Program	The Electrical and Computer Engineering Department's MSc Program at AGU emphasizes advanced graduate education for cutting-edge research. Our research focuses on current high-growth fields like optics, photonics, nanotechnology, biomedical and bioinformatics, information and communications technology, power systems engineering, energy, control, and automation. All graduate students are encouraged to participate in funded research projects. Research projects are funded by TUBITAK, BAP, EU Framework Programs, and industry. Applicants are strongly encouraged to apply for TUBITAK 2211 and TUBITAK 2215 scholarships. Internally funded scholarships will also be available for highly qualified candidates. Electrical and Computer Engineering (ECE) MSc program at AGU will build its reputation based on the quality of its faculty members and graduate students. Bright, motivated, and ambitious graduate students with renowned professors in their field will help to develop one of the best ECE programs.
Program Objectives	Conduct independent research and education activities at national and/or international industrial companies, R&D institutions, and/or universities,
	Follow the latest developments in their field of expertise to contribute to the literature.
	Develop innovative and sustainable solutions to current problems in electrical and computer engineering.
Qualification Awarded	Graduate; Master of Science (M.Sc.) Degree / M.Sc. in Electrical and Computer Engineering
Length of Program & Credits	2 years 120 ECTS
Level of Qualification	Second Cycle (Master) Degree; EQF-LLL: Level 7, QF-EHEA: Level 2
Mode of Study	Full Time
Field of Study	Engineering
Admission Requirements	An undergraduate diploma; a passing or acceptable score from the English Proficiency Exam of Abdullah Gül University, YDS (Foreign Language Exam), YÖKDİL (Foreign Language Exam for Higher Education Institutions), or TOEFL; an acceptable score from the Academic Personnel and Postgraduate Education Entrance Exam (ALES - Mathematical Score Type); a passing score at the oral interview for the concerned master's program. International students are admitted based on the criteria posted by the university.
Recognition of Credit Mobility	Course Substitution: For course substitutions, medium of instruction of a previous course must be English, its final grade must be at least 3.00 out of 4.00 and approval of a relevant University Board is required.
	Lateral Transfer: Spending at least one semester at the master's program currently enrolled in, taking at least 2 credit courses and passing them with at least 3.00 out of 4.00 and approval of a relevant University Board is required.
Graduation Requirements & Regulations	Successful completion of 1 compulsory course, 6 elective courses (at least 4 of them must be taken from the ECE department; refer to the Curriculum section below for research track specifications), Seminar course and Ethics course; a minimum grade point average (GPA) of 3.00; earning 120 ECTS credits; successful submission of a thesis.
Occupational Profiles of Graduates	The main mission of the Graduate School of Engineering & Science of AGU is to develop highly qualified entrepreneurs, researchers, high-level managers, and academicians. In parallel with this mission, graduates of ECE program can be

employed as researchers or managers in the companies working in the fields like optics, photonics, nanotechnology, biomedical and bioinformatics, information and communications technology, power systems engineering, energy, control, and automation; or they can be employed as researchers or academicians in universities.

Access to Further Studies	Graduates may apply to third cycle (Level 8) degree programs.
Assessment & Grading Policy	Based on Abdullah Gul University Graduate Education and Examination Regulation rules.

Letter Grade	Coefficient	Score	Status	Information letters	Explanation
A	4,00	90-100	Pass	NA	Not Attended
A-	3,67	87-89	Pass	W	Withdrawn
B+	3,33	83-86	Pass	I	Incomplete
B	3,00	80-82	Pass	T	Transferred
B-	2,67	77-79	Pass	S	Satisfactory
C+	2,33	73-76	Pass	U	Unsatisfactory
C	2,00	70-72	Failed	P	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. Expand knowledge by conducting scientific research in the field of electrical and computer engineering.

PO2. Apply comprehensive knowledge about current techniques and methods applied in electrical and computer engineering, including their limitations.

PO3. Produce scientific knowledge by using scientific methods with uncertain, limited, or missing data from different disciplines.

PO4. Find out more information about emerging applications in electrical and computer engineering.

PO5. Define scientific problems related to the field.

PO6. Develop methods to design complex systems or processes related to electrical and computer engineering.

PO7. Implement theoretical, experimental, and modeling-based research.

PO8. Communicate verbally and in writing using English language at professional level.

PO9. Be able to discuss the processes and results of their work in national and international contexts, in written or oral form.

PO10. Understand the social, environmental, health, safety, legal, and sustainability dimensions of engineering applications, as well as project management and professional practices.

PO11. Prioritize ethical values in all stages of data collection, interpretation, disclosure, and in all professional activities.

TQF-HE & Program Outcomes Coverage

	Knowledge Theoretical Conceptual	Skills Cognitive Practical	Competences Work Independently and Take Responsibility	Learning	Communication and Social	Field Specific
PO1	X			X		
PO2	X			X		
PO3	X			X		

	1	2	3	4	5	6	7
PO4	X				X		
PO5	X	X	X				X
PO6	X	X			X		X
PO7		X	X				X
PO8					X	X	
PO9		X				X	
PO10		X	X			X	X
PO11					X	X	X

Institutional & Program Outcomes (IOs) * Coverage	IO1	IO2	IO3	IO4	IO5	IO6	IO7
P01	X						
PO2	X						
PO3	X						
PO4	X				X		
PO5	X	X	X				
PO6	X	X	X		X		
PO7	X	X					
PO8			X	X	X	X	
PO9				X	X	X	
PO10			X			X	X
PO11			X				X

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

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Curriculum (Power Track / Computers Track / Electronics and Communication Track)

Semester	Code	Course		T	P	C	ECTS
1st	GCC 1001	Introduction to Scientific Research Methods and Scientific Publication Ethics		3	0	3	7,5
	ECE 551	Scientific Computing with MATLAB		3	0	3	7,5
	ECE XXX	Elective*		3	0	3	7,5
	ECE XXX	Elective*		3	0	3	7,5
		semester credits	**12**	12	0	**12**	**30**
2nd	ECE XXX	Elective*		3	0	3	7,5
	ECE XXX	Elective*		3	0	3	7,5
	X-1	Elective*		3	0	3	7,5
	X-2	Elective*		3	0	3	7,5
		semester credits	**12**	12	0	**12**	**30**
3rd - 4th	ECE 500	Seminar		0	2	0	5
	ECE 597	Special Topics in ECE		4	0	0	10
	ECE 599	M.Sc. Thesis		0	1	0	45
		semester credits	**7**	4	3	**0**	**60**
		TOTAL	**24**	**28**	**3**	**24**	**120**

Curriculum Summary (Power Track / Computers Track / Electronics and Communication Track)

%		Courses	Credit	ECTS
6.25	**YÖK/HEC Courses** GCC 1001 Introduction to Scientific Research Methods and Scientific Publication Ethics	1	3	7,5
6.25	**Compulsory** ECE 551	1	3	7,5
37.5	**Technical Electives*** ECE XXX, X-1, X-2	6	18	45
4.17	**Seminar** ECE 500	1	0	5
8.33	**MSc Special Topics** ECE 597	1	0	10
37.5	**MSc Thesis** ECE 599	1	0	45
100	**TOTAL**	**11**	**24**	**120**

* ECEXXX coded courses can be completed by taking ECE5XX or ECE6XX coded courses.
* X-1 and X-2 coded courses can be completed by taking ECE5XX or ECE6XX coded courses or courses with the same ECTS from other graduate programs.
* For Power Track students, apart from the compulsory courses, at least three of four ECE XXX coded courses must be from among Power Track courses.
* For Electronics and Communication Track students, apart from the compulsory courses, at least two of four ECE XXX coded courses must be from among Electronics and Communication Track courses.
* For Computers Track students, apart from the compulsory courses, at least two of four ECE XXX coded courses must be from among Computers Track courses.

The semester in which the courses will be offered is under the authority of the Program Executive Board.

Track Name	Course Code
Power Track	ECE 506, ECE 507, ECE 519, ECE 553, ECE 555, ECE 557, ECE 558, ECE 576, ECE 577, ECE 578, ECE 588, ECE 607, ECE 651, ECE 652, ECE 653, ECE 654, ECE 655
Electronics and Communication Track	ECE 501, ECE 504, ECE 505, ECE 508, ECE 513, ECE 515, ECE 520, ECE 521, ECE 522, ECE 523, ECE 525, ECE 527, ECE 535, ECE 541, ECE 543, ECE 585, ECE 588, ECE 589, ECE 590, ECE 640, ECE 641, ECE 642, ECE 643, ECE 645, ECE 686
Computers Track	ECE 503, ECE 511, ECE 512, ECE 514, ECE 518, ECE 528, ECE 529, ECE 530, ECE 531, ECE 532, ECE 533, ECE 544, ECE 547, ECE 560, ECE 561, ECE 562, ECE 563, ECE 564, ECE 565, ECE 566, ECE 581, ECE 582, ECE 646, ECE 661, ECE 663