

**Program Records**

<b>About the Program</b>	AGU Master studies in Advanced Materials and Nanotechnology is designed with the aim of cultivating a multidisciplinary research perspective within the fields of materials science and nanotechnology. Our program first gives detailed information about the definitions of materials science and nanotechnology, their applications in various fields, and allows the use of engineering approaches in these studies. We strive to educate future problem-solvers who can effectively address the growing challenges and increased competitiveness on a global scale. The core philosophy of our graduate-level training is centered around inspiring and motivating students to undertake groundbreaking research in the dynamic fields of materials science and nanotechnology. Additionally, it is noteworthy that our entire graduate program is conducted exclusively in English, ensuring a conducive and international learning environment for our students.
<b>Program Objectives</b>	Equip students with current practices, enabling the application of knowledge in experimental, research-based activities within their scientific fields. Cultivate the ability to develop new and original ideas and methods and foster skills in designing complex systems and processes. Develop effective communication skills in spoken and written English, ensuring proficiency in professional and academic contexts.
<b>Qualification Awarded</b>	Graduate; Master of Science (M.Sc.) Degree / M.Sc. in Advanced Materials and Nanotechnology Program
<b>Length of Program &amp; Credits</b>	2 years & 120 ECTS
<b>Level of Qualification</b>	Second Cycle (Master of Science) Degree; EQF-LLL Level 7, QF-EHEA Level 2
<b>Mode of Study</b>	Full Time
<b>Field of Study</b>	Materials Science and Nanotechnology
<b>Admission Requirements</b>	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. For foreign students, proof the admission requirements that are announced by the university.
<b>Recognition of Credit Mobility</b>	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.
<b>Graduation Requirements &amp; Regulations</b>	Successful completion of 1 Compulsory (AMN 501), 6 Elective Courses (at least half of them must be taken from AMN program), Seminar (AMN 500), and Introduction to Scientific Research Methods and Scientific Publication Ethics (GCC 1001). Students must complete all courses in the program curriculum with a minimum GPA of 3.00, earn 120 ECTS credits and submit a successful thesis.
<b>Occupational Profiles of Graduates</b>	In the program it is aimed to inspire students to undertake groundbreaking research in materials science and nanotechnology. The program, conducted exclusively in English, mandates each M.Sc. candidate to submit a thesis based on original research or application in related fields. Completion of the graduate program, encompassing courses and an original M.Sc. thesis, can be achieved within three semesters.

Graduates are well-prepared to pursue further studies at AGU, leading global universities, and to embark on careers in advanced technology companies both domestically and internationally.

**Access to Further Studies** Graduates may apply to second (Level 7) or 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. Apply significant thought and scientific method for evaluating and interpreting information by doing scientific research in the field of Materials Science and Nanotechnology.
  - PO2. Use science and engineering knowledge for development of new methods in Materials Science and Nanotechnology.
  - PO3. Analyze materials by using basic knowledge on Materials Science and Mechanical Nanotechnology.
  - PO4. Design analytical models to implement experimental research.
  - PO5. Interpret the problems encountered in experimental research.
  - PO6. Considering scientific and ethical values during the collection and interpretation of data.
  - PO7. Integrating knowledge of different disciplines with the help of scientific methods, and completion and implementation of scientific knowledge using data.
  - PO8. Devise teamwork skills by collaborating with others using team dynamic elements effectively, efficiently, and appropriately, especially in working groups.
  - PO9. Compose solutions of social, scientific and ethical problems encountered in the field of Materials Science and Nanotechnology.
  - PO10. Define information about the interactions between various discipline of Materials Science and Nanotechnology.

TQF-HE & Program Outcomes Coverage	Knowledge	Skills	Competences			
	Theoretical Conceptual	Cognitive Practical	Work Independently and Take Responsibility	Learning	Communication and Social	Field Specific
P01	X			X		
PO2	X	X				X
PO3	X	X	X	X		
PO4			X	X		X

	PO5			X	X			
	PO6	X		X				X
	PO7	X	X	X			X	
	PO8			X			X	
	PO9	X		X			X	
	PO10		X				X	X
<b>Institutional &amp; Program Outcomes (IOs) * Coverage</b>		IO1	IO2	IO3	IO4	IO5	IO6	IO7
	P01	X						X
	P02		X	X				
	P03	X				X		
	P04	X	X		X			
	P05			X		X	X	X
	P06		X		X			
	P07			X		X	X	X
	P08		X		X	X		
	P09	X					X	
	P010							

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

### Curriculum

Sem.	Code	Course	T	P	C	ECTS	
1 <sup>st</sup>	AMN 501	Materials Science and Engineering	3	0	3	7,5	
	GCC 1001	Introduction to Scientific Research Methods and Scientific Publication Ethics	3	0	3	7,5	
	AMN XXX	Elective	3	0	3	7,5	
	AMN XXX	Elective	3	0	3	7,5	
semester credits			<b>12</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>30</b>
2 <sup>nd</sup>	AMN XXX	Elective	3	0	3	7,5	
	XXX XXX	Elective	3	0	3	7,5	
	XXX XXX	Elective	3	0	3	7,5	
	XXX XXX	Elective	3	0	3	7,5	
semester credits			<b>12</b>	<b>12</b>	<b>0</b>	<b>12</b>	<b>30</b>
3 <sup>rd</sup>	AMN 500	Seminar	0	2	0	5	
semester credits			<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>5</b>
3 <sup>rd</sup> to 4 <sup>th</sup>	AMN 597	M.Sc. Special Topics	4	0	0	10	
	AMN 599	M.Sc. Thesis	0	1	0	45	
	semester credits			<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>
<b>TOTAL</b>			<b>24</b>	<b>28</b>	<b>3</b>	<b>24</b>	<b>120</b>

### Curriculum Summary

%		Courses	Credit	ECTS
6,25	YÖK/HEC GCC 1001	1	3	7,5
6,25	Compulsory AMN 501	1	3	7,5
37,5	Electives AMN XXX, XXX XXX (other graduate programs)*	6	18	45
4,2	Seminar AMN 500	1	0	5
8,3	MSc Special Topics AMN 597	1	0	10
37,5	MSc Thesis AMN 599	1	0	45
100,0	<b>TOTAL</b>	<b>11</b>	<b>24</b>	<b>120</b>

\* At least half of them must be taken from the AMN program; other elective courses can be taken with the same ECTS from other graduate programs.

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