INFORMATION ON THE MECHANICAL ENGINEERING DOCTORATE PROGRAM	
General Information	42 ECTS credit course work, a seminar speech and doctoral thesis research form the basis of the education
Program Purpose	We graduate mechanical engineers (Ph.D.) with ability of conduct original reserach in new and emerging fields of engineering
Degree Earned	Mechanical Engineer, Ph.D.
Level of Degree Earned	Doctorate Degree (NQF - HETR 8. Level)
Requirements and Rules of the Degree Earned	Based on the University regulations
Registration Admission Requirements	Based on the University regulations
Recognition of Prior Learning	Evaluated based on the course content
Examinations, Assessment and Grading	Based on the University regulations
Teaching Style	Full time Education
Graduation Requirements	Based on the University regulations
Occupational Profiles of Graduated-Employment Opportunities	Graduates are employed by defence, automotive, machine production, energy and construction companies. They also pursue higher level of education abroad.
Transition to a Upper Degree	Graduates can apply A1:B13for post doctoral education

NQF-HETR PROGRAM QUALIFICATION MATRIX				PROGRAM QUALIFICATIONS														
Program : Mechanical Engineering																		
Related NQF-HETR Core Field: Engineering (Academic) - Doctorate				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CORE AREA QUALIFICATIONS	INFORMATION	Theoretical - Factual	Understands and applies the basic sciences, mathematics and engineering sciences at a high level.	X	X			X					X					
			Has extensive and in-depth knowledge including the latest developments in his / her field.	X										X				
	SKILLS	Cognitive - Applied	Has access to the most up-to-date information in an area and has a high level of competence in the methods and skills required to comprehend them.									X		X				
			Undertakes a comprehensive study that brings innovation to knowledge or technology, develops a new scientific method or technological product / process, or applies a known method to a new field.	X	X	X		X			X	X	X	X				
			Ddeviates and applies basic sciences, mathematics and engineering sciences at a high level.	X	X			X			X		X					
			Has extensive and in-depth knowledge including the latest developments in his / her field.	X										X				
			Perceives, designs, implements and concludes the original research process independently; it manages this process.			X			X	X		X	X	X				
	COMPETENCIES	Ability to work independently and to take responsibility	Ccontributes to the science and technology literature by publishing the outputs of his academic studies in a prestigious academic setting.			X				X				X				
			Undertakes a comprehensive study that brings innovation to knowledge or technology, develops a new scientific method or technological product / process, or applies a known method to a new field.	X	X	X		X			X	X	X	X				
			Ttransfers scientific, technological, social and cultural developments to the assembly with the awareness of scientific impartiality and ethical responsibility.						X	X				X				
		Learning Competence	Perceives, designs, implements and concludes the original research process independently; it manages this process.			X			X	X		X	X	X				
			Has access to the most up-to-date information in an area and has a high level of competence in the methods and skills necessary to comprehend them.									X		X				
			Undertakes a comprehensive study that brings innovation to knowledge or technology, develops a new scientific method or technological product / process, or applies a known method to a new field.	X	X	X		X			X	X	X	X				
			Contributes to the science and technology literature by publishing the outputs of his academic studies in a prestigious academic setting.			X				X				X				
		Communication and Social Competence	Makes critical analysis, synthesis and evaluation of ideas and developments in the field of expertise.			X			X	X				X				
			Communicates effectively with the professionals and the wider scientific and social communities in writing and verbal communication and communicate and discuss advanced written, oral and visual communication using a foreign language at least at the European Language Portfolio C1 General Level.							X				X				
		Field Specific Competence	Evaluates scientific, technological, social and cultural developments and conveys the gathering with the consciousness of scientific impartiality and ethical responsibility.						X	X				X				
			Interacts effectively with staff in the field of expertise and wider scientific and social communities in written and oral communication and communicate and discusses advanced written, oral and visual communication using a foreign language at least at the European Language Portfolio C1 General Level.							X				X				

Program Qualifications	
1	An advanced ability to apply knowledge of mathematics, science, and engineering
2	An ability to perform theoretical or experimental research, as well as to interpret data
3	An ability to conduct original research
4	An ability to collaborate with multidisciplinary project teams
5	An ability to formulate, and solve engineering problems
6	An understanding of scientific onjectiveness and ethical responsibility
7	An ability to publish and present effectively in English and in Turkish
8	An ability to use the techniques, skills, and modern engineering tools necessary for engineering research
9	An ability to apply scientific research metodology
10	An ability to use the analytical, computational and experimental techniques and resolve issues in this process
11	An ability to engage in life-long learning and carry out scientific literature review.

All Courses in the Program		Program Qualifications										
Code	**Course Name**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
MAK 501	Engineering Mathematics	4	3	1	2	3	1	1	2	3	2	1
MAK 502	Numerical Methods in Engineering	4	4	1	2	4	1	1	3	3	2	1
MAK 503	Theory of Elasticity	5	5	3	1	5	2	2	2	2	3	2
MAK 509	Continuum Mechanics	5	4	2	2	4	1	2	2	2	3	2
MAK 512	Finite Element Anaysis in Solid Mechanics	5	5	5	2	5	2	2	5	3	3	2
MAK 516	Heat Treatment	5	4	4	3	3	2	2	2	4	3	2
MAK 540	Advance Dynamics	5	4	4	1	4	1	2	2	2	3	2
MAK 546	Fluid Power Control	5	4	4	1	4	1	2	2	2	3	2
MAK 549	Advanced System Dynamics and Optimum Control	5	4	4	2	4	2	2	2	2	3	2
MAK 550	Measurement and Instrumentation	5	3	3	4	2	2	2	3	3	3	2
MAK 552	Introduction to Biomechanics	5	4	4	3	3	3	2	3	4	3	2
MAK 553	Advanced Biomechanics	5	4	4	3	4	3	2	3	4	3	3
MAK 554	Clinical Biomechanics of Spine	5	4	4	3	4	3	2	3	4	3	3
MAK 562	Advanced Fluid Mechanics	5	5	4	1	5	2	2	3	2	3	2
MAK 565	Convective Heat Transfer	5	5	4	1	5	2	2	3	2	3	2
MAK 572	Boundary Layer Theory	5	5	4	1	5	2	2	4	3	3	2
MAK 570	Combustion	5	5	4	2	5	3	2	4	3	3	2
MAK 697	Seminer	1	1	1	1	1	1	5	1	1	1	4
MAK 699	Dissertation	5	5	5	3	5	5	5	5	5	5	5