Engineering Basic Field Qualifications			PROGRAM YETERLİLİKLERİ								Qualifications Framework for Higher Education in Turkey (Level 7)		
			1	2	3	4	5	6	7	8			
KNOWLEDGE	1. Conducts scientific research to expand and deepen knowledge, evaluates, interprets, and applies information in the field of engineering,		X X	X X	X X	X X	X X				1. Based on undergraduate-level qualifications, the ability to further and deepen one's knowledge at an expert level in the same or a different field.		KNOWLEDGE
	2. Possesses comprehensive knowledge of current techniques and methods applied in engineering, as well as their limitations.		X	X X	X X			X	X	X	2. Ability to comprehend interdisciplinary interactions related to the field.		
	3. Completes and applies knowledge using scientific methods with limited or incomplete data; integrates information from different disciplines.			X					X				
	4. Aware of emerging and developing applications in their profession, and when necessary, examines and learns about them.							X		X			
SKILLS	1. Completes and applies knowledge using scientific methods with limited or incomplete data; integrates information from different disciplines.		X	X					X		1. Ability to utilize theoretical and applied knowledge at an expert level in the field.		SKILLS
	2. Constructs engineering problems, develops methods to solve them, and applies innovative approaches in solutions.			X X	X X				X X		2. Capacity to integrate and interpret acquired knowledge in the field with information from different disciplines to generate new insights.		
	3. Generates novel and/or original ideas and methods; devises innovative solutions in system, component, or process designs.					X	X		X	X	3. Proficiency in employing research methods to address issues encountered in the field and arrive at solutions.		
	4. Designs and implements analytical, modeling, and experimental research; resolves and interprets complex situations encountered in this process.			X	X				X				
COMPETENCIES	Competence work independently and take responsibility	1. Leads multidisciplinary teams, develops solution approaches in complex situations, and takes responsibility.		X	X X	X	X				1. Capable of independently conducting work requiring expertise in the field.	Competence work independently and take responsibility	COMPETENCIES
		2. Conducts scientific research in the field of engineering to attain expansive and in-depth knowledge, evaluates, interprets, and applies information.		X	X X	X	X				2. Able to develop new strategic approaches for solving complex and unforeseen problems encountered in relevant applications within the field, and take responsibility for generating solutions.		
		3. Completes and applies knowledge using scientific methods with limited or incomplete data; integrates information from different disciplines.		X X	X X		X		X		3. Competent in providing leadership in environments demanding the resolution of issues related to the field.		
		4. Designs engineering problems, develops methods to solve them, and applies innovative approaches in solutions.		X						X			
		5. Generates novel and/or original ideas and methods; devises innovative solutions in system, component, or process designs.		X	X					X			
		6. Designs and implements analytical, modeling, and experimental research; resolves and interprets complex situations encountered in this process.	X	X			X						
	Competence to learn	1. Is aware of emerging and developing applications in their profession; when necessary, examines and learns about them.			X X			X			1. Able to critically evaluate knowledge and skills acquired at the level of expertise in the field and direct their own learning process.	Competence to learn	
		2. Completes and applies knowledge using scientific methods with limited or incomplete data; integrates information from different disciplines..		X	X				X				
		3. Constructs engineering problems, develops methods to solve them, and applies innovative approaches in solutions.		X						X			
		4. Generates novel and/or original ideas and methods; devises innovative solutions in system, component, or process designs.				X				X			

	Communications and social competence	1. Communicates orally and in writing using a foreign language at least at the B2 General Level of the Common European Framework of Reference for Languages.						X X			1. Capable of systematically conveying current developments in the field and their own work to both internal and external audiences, utilizing quantitative and qualitative data, through written, verbal, and visual means.	Communications and social competence	
		2. Systematically and clearly conveys the process and outcomes of their work in written or verbal form in national and international contexts within their field or beyond.						X X			2. Able to critically examine and, if necessary, modify social relationships and the norms influencing these relationships, with the potential to enhance and, when required, instigate change.		
		3. Describes the social and environmental dimensions of engineering applications.						X		X	3. Competent in communicating orally and in writing using a foreign language at least at the B2 General Level of the Common European Framework of Reference for Languages.		
		4. Conducts scientific research in the field of engineering to attain expansive and in-depth knowledge, evaluates, interprets, and applies information.		X	X		X	X			4. Proficient in advanced utilization of information technology and communication technologies, including computer software, as required by the field.		
		5. Completes and applies knowledge using scientific methods with limited or incomplete data; integrates information from different disciplines.		X	X				X				
		6. Constructs engineering problems, develops methods to solve them, and applies innovative approaches in solutions.				X				X			
		7. Possesses comprehensive knowledge of current techniques and methods applied in engineering, as well as their limitations.							X	X			
		8. Designs and implements analytical, modeling, and experimental research; resolves and interprets complex situations encountered in this process.	X	X			X						
	Competence related to the field	1. Upholds societal, scientific, and ethical values during the stages of data collection, interpretation, and dissemination, as well as in all professional activities.							X X		1. Capable of overseeing the collection, interpretation, application, and dissemination of data related to the field, while adhering to societal, scientific, cultural, and ethical values, and able to teach these values as well.	Competence related to the field	
		2. Completes and applies knowledge using scientific methods with limited or incomplete data; integrates information from different disciplines.		X	X				X	X	2. Proficient in developing strategies, policies, and implementation plans pertaining to the field, and assessing the outcomes within the framework of quality processes.		
		3. Leads multidisciplinary teams, develops solution approaches in complex situations, and takes responsibility.			X	X		X			3. Able to apply the assimilated knowledge, problem-solving and/or application skills from the field in interdisciplinary collaborations.		
		4. Systematically and clearly conveys the process and outcomes of their work in written or verbal form in national and international contexts within their field or beyond.						X					