

# THE RELATIONSHIP BETWEEN BASIC FIELD QUALIFICATIONS - PROGRAM QUALIFICATIONS - THE QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION IN TURKEY<sup>1</sup>

Basic Field Qualifications (Engineering- Level 8)		PROGRAM YETERLİLİKLERİ											Qualifications Framework for Higher Education in Turkey (Level 8)		
		1	2	3	4	5	6	7	8	9	10	11			
KNOWLEDGE	1. Understands and applies basic sciences, mathematics and engineering sciences at a high level.	X	X			X		X			X		1. Develop and deepen the current and advanced knowledge in the field with original thought and/or research and come up with innovative definitions based on Master's degree qualifications.	KNOWLEDGE	
	2. Has extensive and in-depth knowledge of her field, including the latest developments.	X		X	X			X	X			X	2. Conceive the interdisciplinary interaction which the field is related with; come up with original solutions by using knowledge requiring proficiency on analysis, synthesis and assessment of new and complex ideas.		
SKILLS	1. Has a high level of proficiency in the methods and skills required to access and comprehend the latest information in a field and conduct research.	X		X			X		X			X	1. Evaluate and use new information within the field in a systematic approach.	SKILLS	
	2. It carries out a comprehensive study that brings innovation to science and technology, develops a new scientific method or technological product/process, or applies a known method to a new field.	X		X		X		X			X		2. Develop an innovative knowledge, method, design and/or practice or adapt an already known knowledge, method, design and/or practice to another field; research, conceive, design, adapt and implement an original subject.		
	3. Identify and apply basic sciences, mathematics and engineering sciences at a high level.		X		X			X	X				3. Critical analysis, synthesis and evaluation of new and complex ideas.		
	4. Gain extensive and in-depth knowledge, including the latest developments in the field.				X		X		X	X		X	4. Gain advanced level skills in the use of research methods in the field of study.		
	5. Independently perceives, designs, implements and concludes an original research process; manages this process.	X				X					X				
COMPETENCIES	Competence work independently and take responsibility	1. It contributes to the science and technology literature by publishing the outputs of its academic studies in reputable academic environments.	X	X		X		X	X		X		1. Contribute the progression in the field by producing an innovative idea, skill, design and/or practice or by adapting an already known idea, skill, design, and/or practice to a different field independently.	Competence work independently and take responsibility	COMPETENCIES
		2. It carries out a comprehensive study that brings innovation to science and technology, develops a new scientific method or technological product/process, or applies a known method to a new field.			X	X		X	X			X	2. Broaden the borders of the knowledge in the field by producing or interpreting an original work or publishing at least one scientific paper in the field in national and/or international refereed journals.		
		3. It evaluates scientific, technological, social and cultural developments and conveys them to the society with scientific impartiality and ethical responsibility	X			X					X		3. Demonstrate leadership in contexts requiring innovative and interdisciplinary problem solving.		
	Competence to learn	1. Independently perceives, designs, implements and concludes an original research process; manages this process.			X				X				1. Develop new ideas and methods in the field by using high level mental processes such as creative and critical thinking, problem solving and decision making.	Competence to learn	

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COMPETENCIES		2. Accesses the latest information in a field and acquires a high level of proficiency in the methods and skills required to comprehend and conduct research.	X		X	X		X		X					
		3. It carries out a comprehensive study that brings innovation to science and 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			
		4. It contributes to the science and technology literature by publishing the outputs of its academic studies in reputable academic environments.			X		X	X			X		X		
	Communications and social competence	1. Conducts critical analysis, synthesis and evaluation of ideas and developments in the field of expertise.	X	X		X	X		X				X		
		2. Communicates effectively in written and oral form with those working in the field of expertise and with the wider scientific and social communities, communicates and discusses at an advanced level in written, verbal and visual communication using a foreign language at least at the European Language Portfolio C1 General Level	X	X			X						X		
COMPETENCIES	Competence related to the field	1. It evaluates scientific, technological, social and cultural developments and conveys them to the society with scientific impartiality and ethical responsibility.	X	X		X		X	X	X					
		2. Communicates effectively in written and oral form with those working in the field of expertise and with the wider scientific and social communities, communicates and discusses at an advanced level in written, verbal and visual communication using a foreign language at least at the European Language Portfolio C1 General Level						X					X		
									X	X					

<sup>1</sup> Combined matrix is formed by the combination of Basic Field Qualifications (blue colored zone on left side) - Program Qualifications and Qualifications Framework for Higher Education in Turkey (pink colored zone on right side). Individual remarks (X) pertinent to each zone are given with the same color of the zones.