

## THE RELATIONSHIP BETWEEN NATIONAL QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION IN TURKEY PROGRAMME KEY LEARNING OUTCOMES- BASIC FIELD QUALIFICATIONS

Basic Field Qualifications (Engineering)		PROGRAM QUALIFICATIONS/OUTCOMES															NATIONAL QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION IN TURKEY (NQF-HETR) 5. Level (Associate's) Qualifications		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
<b>KNOWLEDGE</b>	1- Has sufficient knowledge about mathematics, science and application of these fields to basic engineering sciences.		X	X	X	X	X	X	X	X				X			1- Possess theoretical and practical knowledge supported by textbooks with updated information, practice equipments and other resource on basic level based on qualifications gained at secondary education level.	<b>KNOWLEDGE</b>	
	2- Has knowledge on basic concepts related to basic engineering programs.		X	X	X	X	X	X	X	X				X					
<b>SKILLS</b>	1- Functionalises the identified engineering problems with the basic engineering point of view and analyses them .		X	X	X	X	X	X	X	X		X		X			1- Gain the skills to use basic level theoretical and practical knowledge acquired within the field in the same field of a higher education level or in a field of same level.  2- Interpret and evaluate data, define problems, do analysis, produce solutions based on proof with using basic level knowledge and practices gained within the field.	<b>SKILLS</b>	
	2- Uses modern tools and equipment needed for an engineering application by taking additional technical education.		X	X	X	X	X	X	X	X				X					
	3- Draws graphics.			X															
	4- Thinks algorithmically				X	X	X				X			X					
	5- Carries out experiments to figure out engineering problems , gathers data, presents and comments on them			X	X	X	X	X	X	X	X	X		X					
<b>COMPETENCES</b>	<b>Competence to Work Independently and Take Responsibility</b>	1- Conducts studies either individually or in engineering teams	X		X	X	X	X	X		X	X					1- Conduct studies at basic level within the field independently.  2- Take responsibility as a team member in order to solve unexpected complex problems faced in the implementations within the field.  3- Conduct activities towards the development of subordinates within a project.	<b>Competence to Work Independently and Take Responsibility</b>	<b>COMPETENCES</b>
												X	X						
			X									X	X						

## THE RELATIONSHIP BETWEEN NATIONAL QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION IN TURKEY PROGRAMME KEY LEARNING OUTCOMES- BASIC FIELD QUALIFICATIONS (Cont.)

Basic Field Qualifications (Engineering)			PROGRAM QUALIFICATIONS/OUTCOMES															NATIONAL QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION IN TURKEY (NQF-HETR) 5. Level (Associate's) Qualifications)			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
<b>COMPETENCES</b>	<b>Learning Competence</b>	1- Follows professional and academic developments in his/her field with consciousness of the need for lifelong learning and is open to innovations			X	X	X	X				X	X	X				1- Evaluate the acquired knowledge and skills at basic level within the field with a critical approach, determine and respond to learning needs.	<b>Learning Competence</b>	<b>COMPETENCES</b>	
		2- Uses modern tools and equipment needed for an engineering application by taking additional technical education	X			X	X	X			X	X	X	X		X					2- Direct the education received to a higher education level in the same field or to an occupation in the same level.
														X	X						3- Gain awareness of lifelong learning.
<b>COMPETENCES</b>	<b>Communication and Social Competence</b>	1- Uses informatics and communication technologies with at least a minimum level of European Computer Driving License Basic Level software knowledge			X	X			X			X	X				1- Transfer the ideas based on the basic knowledge and skills acquired within the field through written and oral communication.	<b>Communication and Social Competence</b>	<b>COMPETENCES</b>		
		2- Monitors the developments in the field and communicates with colleagues by using a foreign language at least at a level of European Language Portfolio A2 General Level .									X			X						2- Share the ideas and solution proposals to problems about issues within the field with professionals and non-professionals.	
		3- Establishes a technical communication by using graphics.			X			X					X	X							3- Monitor the developments in the field and communicate with peers by using a foreign language at least at a level of European Language Portfolio A2 General Level.
					X								X	X							4- Use informatics and communication technologies with at least a minimum level of European Computer Driving License Basic Level software knowledge.
<b>COMPETENCES</b>	<b>Competence Field Specific</b>	1- Has an awareness of regarding professional ethics in engineering applications									X	X					1- Possess social, scientific, cultural and ethic values on the stages of gathering, implementation and release of the results of data related to the field.	<b>Competence Field Specific</b>	<b>COMPETENCES</b>		
			X									X								2- Possess sufficient consciousness about the issues of universality of social rights, social justice, quality, cultural values and also, environmental protection, worker's health and security.	

