Qualifications of Fields of Education			PI	PROGRAM CAPABILITIES							National Qualifications Framework for Higher Education in		
(Engineering)			1	2	2 3	4	5	6	7	8	Turkey (NQF-HETR, 6 <sup>th</sup> Cycle, Bachelor's Degree)		
KNOWLEDGE	1. Posse their own	Possesses sufficient background in mathematics, natural sciences and eir own field of study.		X X		XX					1. Possessing advanced level theoretical and practical knowledge supported by textbooks with updated information, practicing equipment and other resources.	KNOWLEDGE	
SKILLS	1. Makes use of theoretical and practical knowledge on mathematics, natural sciences and their own field concurrently for engineering solutions.				x	x	X X				1. Use of advanced theoretical and practical knowledge within the field.		
	2. Identifies, defines, formulates and solves engineering problems; selects and applies analytical methods and modeling techniques appropriate for this purpose.			X	x	X	x				2. Interpret and evaluate data, define and analyze problems, develop solutions based on research and proofs by using acquired advanced knowledge and skills within the field.	S	
	3. Analy consider applies r	Analyzes a system, a system component or a process; makes a design in onsideration of realistic constraints to meet the requirements expected; and oplies modern design methods.			X							KILLS	
	<ol> <li>Selects and employs modern techniques and devices required for engineering applications.</li> </ol>				X								
	5. Designs and conducts experiments; collects data; analyzes and interprets the results.		X	X	(								
COMPETENCES	Work d Take ty	1. Works effectively as an individual and in multi-disciplinary teams.						X X			1. Conduct studies at an advanced level in the field independently.		
	etence to ndently an sponsibili	<ol> <li>Accesses to information and conducts literature survey; and makes use of databases and other information resources.</li> </ol>	X	X	(		x	x			2. Take responsibility both as a team member and individually in order to solve unexpected complex problems faced within the implementations in the field.		
	Comp Indeper Re						x	x			3. Planning and managing activities towards the development of subordinates in the framework of a project.	COMPE	
	e	1. Accesses to information and conducts literature survey; and makes use of databases and other information resources.	X X	X X	X X	X X	x				1. Evaluate the knowledge and skills acquired at an advanced level in the field with a critical approach.	TEN	
	mpeteno	<ol> <li>Is aware of the need for lifelong learning; keeps up with the developments in science and technology and renews him/herself continuously.</li> </ol>								X X	2. Determine learning needs and direct the learning.	CES	
	rning Co	3. Makes use of theoretical and practical knowledge on mathematics, natural sciences and their own field concurrently for engineering solutions.	X	X	X	X				X	3. Develop positive attitude towards lifelong learning.		
	Lea	4. Identifies, defines, formulates and solves engineering problems; selects and applies analytical methods and modeling techniques appropriate for this purpose.	X	X	(	X					in ce		

		<ol> <li>Analyzes a system, a system component or a process; makes a design in consideration of realistic constraints to meet the requirements expected; and applies modern design methods.</li> </ol>		X								
		<ol><li>Selects and employs modern techniques and devices required for engineering applications.</li></ol>		Х	(							
		7. Works effectively as an individual and in multi-disciplinary teams.					Χ					
	al	1. Uses computer software and communication and information technologies required in the field at the advanced level, as defined by the European Computer Driving License.						X X		1. Inform people and institutions, transfer ideas and solution proposals to problems in written and orally on issues in the field.	Communication and Social Competence	
	ind Socia ce	<ol><li>Communicates in oral and written form in a foreign language at minimum B1 level, as defined by the European Language Portfolio.</li></ol>						X X		<ol> <li>Share the ideas and solution proposals to problems on issues in the field with professionals and non-professionals by the support of qualitative and quantitative data.</li> </ol>		
	ttion a peten	3. Establishes communication through technical drawing.			X	x			X	<ol><li>Organize and implement project and activities for social environment with a sense of social responsibility.</li></ol>		
	nmunica Com	<ol> <li>Accesses to information and conducts literature survey; and makes use of databases and other information resources.</li> </ol>	X	XX	( )	C		x		4. Monitor the developments in the field and communicate with peers by using a foreign language at least at a level of European Language Portfolio B1 General Level.		
	Con	5. Has awareness of universal and social influences of their solution proposals to environmental problems; is conscious about entrepreneurship and innovation; and possesses knowledge about problems of the age in which he/she lives.		X	×	X		x	X	<ol> <li>Use informatics and communication technologies with at least a minimum level of European Computer Driving License Advanced Level software knowledge.</li> </ol>		
		1. Possesses sense of professional and ethical responsibility.				X X				1. Act in accordance with social, scientific, cultural and ethic values on the stages of gathering, implementation and release of the results of data related to the field.	Field Specific Competence	
	eld Specific ompetence	<ol> <li>Has consciousness about project management, workplace practices, workers' health, environmental risk evaluation, environmental and work safety; and has awareness about legal consequences of engineering applications.</li> </ol>				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.		
	Fie Cc	3. Shows the awareness of the effects of engineering solutions and applications at global and social scales; is aware of the subjects of entrepreneurship and innovation and has knowledge of the problems of the time.				X			X			