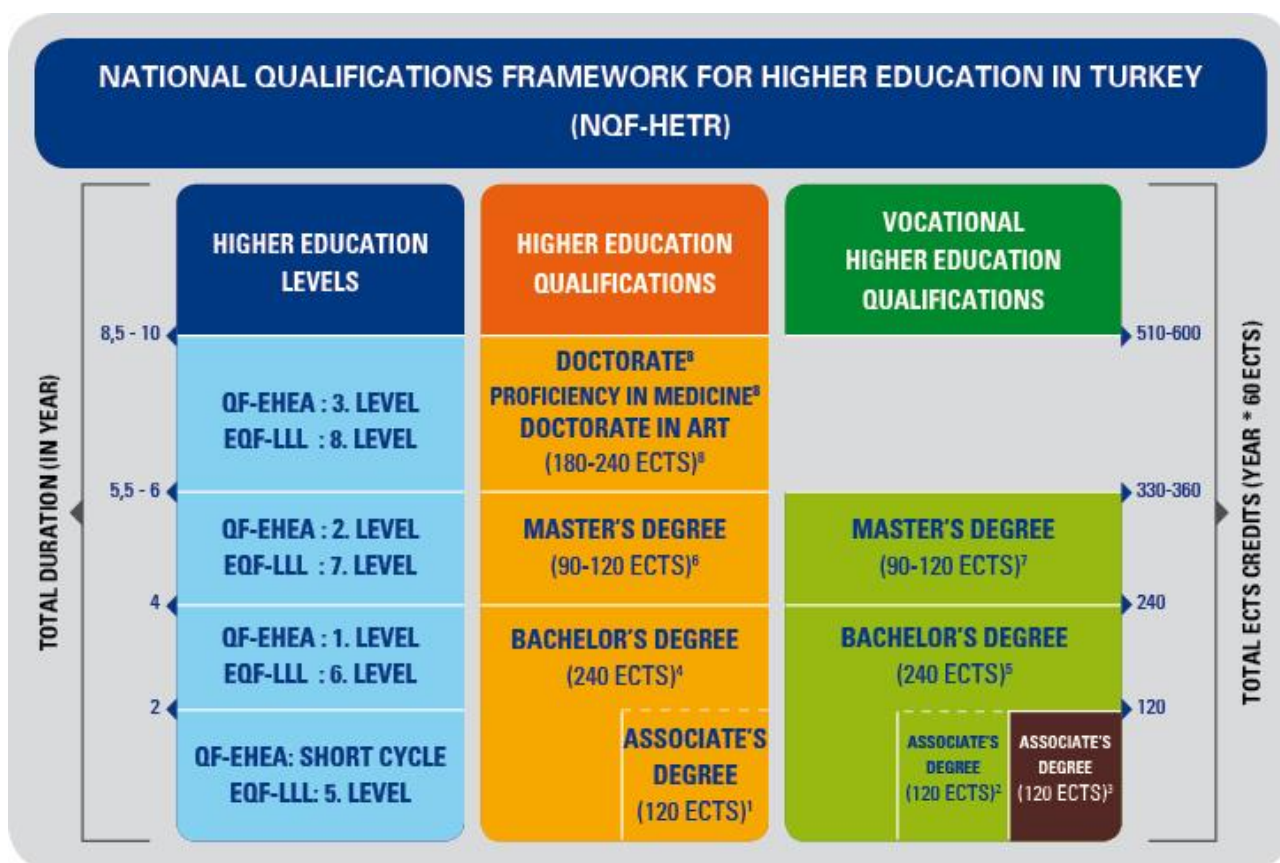


NQF-HETR/PROGRAM COMPETENCIES MATRIXES

<http://www.tyyc.yok.gov.tr/>)

Qualifications' Profiles for NQF-HETR Levels



1. Academically-oriented associate's degree educational programmes which are related to or within undergraduate programmes.
2. Vocationally-oriented associate's degree educational programmes which are related to or within undergraduate programmes.
3. Vocationally-oriented associate's degree educational programmes of Vocational Higher Schools
4. Academically-oriented programmes
5. Vocationally-oriented bachelor's degree programmes
6. Academically-oriented master's degree programmes with or without thesis

7. Vocationally-oriented master's degree programmes with thesis or without thesis
8. Doctoral programmes

Table 1: National Qualifications Framework For Higher Education In Turkey (NQF-HETR) Level 6 (Undergraduate Education) Qualifications (Level Higher Education Qualifications Framework is equivalent for TR and TRNC.)

NATIONAL QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION IN TURKEY (NQF-HETR) (7. Level) Qualifications						
NQF-HETR LEVEL	KNOWLEDGE -Theoretical -Conceptual	SKILLS -Cognitive -Practical	COMPETENCES			
			Competence to Work Independently and Take Responsibility	Learning Competence	Communication and Social Competence	Field Specific Competence
7 MASTER'S —— EQF-LLL: 7. Level —— QF-EHEA: 2. Cycle	NQF-HETR 1: Ability to develop and deepen knowledge in the same or a different field to an expert level based on undergraduate level qualifications. NQF-HETR 2: Ability to understand the interdisciplinary interaction related to the field.	NQF-HETR 3: Ability to use theoretical and practical knowledge acquired at the level of expertise in the field. NQF-HETR 4: Ability to interpret the knowledge acquired in the field by integrating it with information from different disciplines and to create new knowledge, NQF-HETR 5: Ability to solve	NQF-HETR 6: Ability to independently conduct a study that requires expertise in the field. NQF-HETR 7: Ability to develop new strategic approaches to solve unforeseen complex problems encountered in field-related applications and to produce solutions by taking responsibility. NQF-HETR 8: Ability to lead in environments that require solving problems related to the field.	NQF-HETR 9: Being able to critically evaluate the knowledge and skills acquired at the expert level in the field and to direct his/her learning.	NQF-HETR 10: Ability to systematically convey current developments in the field and one's own studies to groups in and outside the field, in written, verbal and visual formats, by supporting them with quantitative and qualitative data. NQF-HETR 11: Ability to critically examine social relations and the norms that guide these relations, develop them and, when necessary, take action to change them. NQF-HETR 12: Ability to communicate verbally and in writing using a foreign language at least at the European Language Portfolio B2 General Level.	NQF-HETR 14: Being able to monitor social, scientific, cultural and ethical values in the collection, interpretation, application and announcement stages of data related to the field and to teach these values. NQF-HETR 15: Being able to develop strategies, policies and implementation plans on issues related to the field and to evaluate the results obtained within the framework of

		problems encountered in the field using research methods.			NQF-HETR 13: Ability to use computer software and information and communication technologies at an advanced level as required by the field. NQF-HETR 16: Being able to use the knowledge, problem-solving and/or application skills they have assimilated in their field in interdisciplinary studies.
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Table 2. Matrix of NATIONAL QUALIFICATIONS FRAMEWORK FOR HIGHER EDUCATION IN TURKEY (NQF-HETR) and Data science Master's Program Outputs

NQF-HETR	Knowledge	Skills		Competences												
	Theoretical Conceptual	Cognitive Practical		Competence to Work Independently and Take Responsibility			Learning Competence			Communication and Social Competence				Field Specific Competence		
NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR	NQF-HETR
Program	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Outputs																
PO1	5	4	5	4	3	3	3	2	4	4	2		3	3	2	4
PO2	5	4	5	5	4	4	3	2	4	4	2		3	4	3	5
PO3	5	3	5	4	5	3	3	2	3	3	1		4	3	3	4
PO4	5	3	5	3	4	4	3	2	3	3	2		5	3	3	4
PO5	4	4	4	4	4	4	3	2	3	4	3		3	3	2	4
PO6	3	3	3	3	3	5	5	5	4	4	3	2	3	3	3	4
PO7	5	3	5	4	4	3	3	2	3	3	2		5	3	3	4
PO8	4	5	4	4	4	4	4	3	4	4	3		4	3	3	5
PO9	3	3	3	3	3	3	3	3	4	3	4		3	5	4	3
PO10	4	4	4	4	3	4	4	3	5	5	4	2	4	4	4	5
5-Very High	4-Above Average			3-Average			2-Below Average				1-Very Low					

Table 3. National Qualifications Framework For Higher Education In Turkey (NQF-HETR) for Computer Science Field (Master's degree)

Faculty/School/Vocational School: School of Applied Sciences		
Program: Data Science Systems (Master's)		
N	Core Area	Program Competency
1	Knowledge (Theory - T)	T1. Has in-depth and broad theoretical and applied knowledge by conducting scientific research in mathematics, computation and computer science. T2. Has comprehensive knowledge of analysis and modeling methods used in informatics and/or computer science and their limitations.
2	Skills (Abilities - A)	A1. Identifies information and computer science problems, develops methods to solve them, and applies innovative methods in analysis.
3		A2. Designs and implements analytical, modeling and experimental based research, analyzes and interprets complex situations encountered in this process.
6	Competencies	Competence to Work Independently and Take Responsibility - R R1. Provides leadership in multi-disciplinary teams, develops solution approaches in complex situations and takes responsibility.
7		Learning Competence - L L1. Examines and demonstrates awareness of new and developing practices in his/her profession.
8		Communication and Social Competence - C C1. Communicates verbally and in writing using a foreign language at least at the European Language Portfolio B2 General Level. C2. Communicates the processes and results of his/her studies systematically and clearly in writing or orally in national and international environments within or outside that field. C3. Understands the social and environmental dimensions of IT applications.
9		
10		Field Specific Competence - P P1. Observes social, scientific and ethical values in the collection, processing, use, interpretation and announcement of data and in all professional activities.

Faculty/School/Vocational School: School of Applied Sciences
Program: Data science Master's Degree (English)

[illegible]