	MS in DATA SCIENCE (WITH THESIS) PROGRAM OUTCOMES	NATIONAL QUALIFICATIONS OF RELATED FIELD*																																									
		ENGINEERING																														COMPUTER												
		A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	C5	C6	D1	D2	D3	D4	E1	E2	E3	E4	E5	E6	E7	E8	F1	F2	F3	F4	A1	A2	B1	B2	B3	C1	D1	C3	D1	E1	E2	E3	F1
1	Develop the ability to use critical, analytical, and reflective thinking and reasoning	x			x		x	x	x		x					x		x	x				x			x	x					x	x	x										
2	Reflect on social and ethical responsibilities in his/her professional life.																					x						x															x	x
3	Gain experience and confidence in the dissemination of project/research outputs																			x											x											x		
4	Work responsibly and creatively as an individual or as a member or leader of a team and in multidisciplinary environments.	x								x	x												x							x							x							
5	Communicate effectively by oral, written, graphical and technological means and have competency in English.																			x											x										x			
6	Independently reach and acquire information, and develop appreciation of the need for continuously learning and updating.		x		x		x	x										x							x	x														x				
7	Design and model engineering systems and processes and solve engineering problems with an innovative approach.	x	x	x		x	x	x			x	x	x	x			x	x	x				x	x	x				x					x	x									
8	Establish experimental setups, conduct experiments and/or simulations.		x	x		x	x		x			x	x		x		x	x						x	x		x		x						x									
9	Analytically acquire and interpret data.		x	x		x			x			x			x		x							x			x		x						x									
10	Understand the conceptual foundations of analytical methods and techniques for data science	x	x								x												x									x	x											
11	Understand the theory and practice of applied information systems by developing the necessary computer software skills																											x																x
12	Transform high-volume data sets into actionable information format and use statistical data analysis tools to support decision making within the corporate structure	x	x								x												x									x	x											
13	Understand and apply quantitative modeling and data analysis techniques to extract information from big data and use these findings to analyze business problems, present results using data visualization tools and report findings.	x	x								x												x									x	x											
14	Understand data quality, data integrity and data veracity, recognize ethical aspects of business related to intellectual property and data privacy	x	x								x												x									x	x											

* Please check **http://tyyc.yok.gov.tr/** for the list of national qualifications.

A: KNOWLEDGE, Theoretical & Factual
B: SKILL, Cognitive & Applied
C: COMPETENCY, Working Independently & Taking Responsibility
D: COMPETENCY, Ability to Learn
E: COMPETENCY, Communication & Social Competencies
F: COMPETENCY, Field Specific