

MS in INDUSTRIAL ENGINEERING (WITH THESIS) PROGRAM OUTCOMES		NATIONAL QUALIFICATIONS OF RELATED FIELD*																														
		ENGINEERING																														
		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	
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					
2	Reflect on social and ethical responsibilities in his/her professional life.																					x						x				
3	Gain experience and confidence in the dissemination of project/research outputs																				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		
5	Communicate effectively by oral, written, graphical and technological means and have competency in English.																				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					
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		
8	Establish experimental setups, conduct experiments and/or simulations.		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		
10	Establish a strong theoretical background in several of a broad range of subjects related to the discipline, such as manufacturing processes, service systems design and operation, production planning and control, modeling and optimization, stochastics, statistics.	x	x								x														x			x				
11	Develop novel modeling and / or analytical solution strategies for problems in integrated production and service systems involving human capital, materials, information, equipment, and energy, also using an interdisciplinary approach whenever appropriate.						x						x						x							x						
12	Implement solution strategies on a computer platform for decision-support purposes by employing effective computational and experimental tools.						x		x				x						x								x					
13	Acquire skills to independently explore and tackle problems related to the discipline that were not encountered previously. Develop appropriate modeling, solution, implementation strategies, and assess the quality of the outcome.	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