

BSc in INDUSTRIAL ENGINEERING PROGRAM OUTCOMES		NATIONAL QUALIFICATIONS OF RELATED FIELDS*																						
		ENGINEERING & ENGINEERING TRADES																						
		A1	B1	B2	B3	B4	B5	C1	C2	D1	D2	D3	D4	D5	D6	D7	E1	E2	E3	E4	E5	F1	F2	F3
1	Understand the world, their country, their society, as well as themselves and have awareness of ethical problems, social rights, values and responsibility to the self and to others.																				X	X	X	X
2	Understand different disciplines from natural and social sciences to mathematics and art, and develop interdisciplinary approaches in thinking and practice.	X									X													
3	Think critically, follow innovations and developments in science and technology, demonstrate personal and organizational entrepreneurship and engage in life-long learning in various subjects; have the ability to continue to educate him/herself.					X		X	X	X				X					X	X			X	
4	Communicate effectively in Turkish and English by oral, written, graphical and technological means.																X							
5	Take individual and team responsibility, function effectively and respectfully as an individual and a member or a leader of a team; and have the skills to work effectively in multi-disciplinary teams.						X								X								X	
6	Possess sufficient knowledge of mathematics, science and program-specific engineering topics; use theoretical and applied knowledge of these areas in complex engineering problems.	X	X								X													
7	Identify, define, formulate and solve complex engineering problems; choose and apply suitable analysis and modeling methods for this purpose.			X		X						X		X										
8	Develop, choose and use modern techniques and tools that are needed for analysis and solution of complex problems faced in engineering applications; possess knowledge of standards used in engineering applications; use information technologies effectively.					X										X								
9	Have the ability to design a complex system, process, instrument or a product under realistic constraints and conditions, with the goal of fulfilling specified needs; apply modern design techniques for this purpose.				X									X										
10	Design and conduct experiments, collect data, analyze and interpret the results to investigate complex engineering problems or program-specific research areas.					X																		
11	Possess knowledge of business practices such as project management, risk management and change management; awareness on innovation; knowledge of sustainable development.																						X	
12	Possess knowledge of impact of engineering solutions in a global, economic, environmental, health and societal context; knowledge of contemporary issues; awareness on legal outcomes of engineering solutions; knowledge of behavior according to ethical principles, understanding of professional and ethical responsibility.																				X			
13	Have the ability to write effective reports and comprehend written reports, prepare design and production reports, make effective presentations, and give and receive clear and intelligible instructions.																X	X						
14	Formulate and analyze problems in complex manufacturing and service systems by comprehending and applying the basic tools of industrial engineering such as modeling and optimization, stochastics, statistics.			X	X								X	X										
15	Design and develop appropriate analytical solution strategies for problems in integrated production and service systems involving human capital, materials, information, equipment, and energy.			X	X								X	X										
16	Implement solution strategies on a computer platform for decision-support purposes by employing effective computational and experimental tools.			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