

INDUSTRIAL ENGINEERING



▶▶ LEVELS OF ACHIEVEMENT ■■■■■■■■■■ 1 = BEGINNER ■■■■■■■■■■ 2 = INTERMEDIATE ■■■■■■■■■■ 3 = ADVANCED

▶▶ CORE CREDITS 35 ▶▶ MANDATORY PROGRAM CREDITS 147 ▶▶ ELECTIVE CREDITS 18

COURSE NAME	CREDITS	COURSE TYPE	CORE COMPETENCIES										SPECIFIC COMPETENCIES										REQUIREMENTS
			Written Communication	Oral Communication	Critical Thinking	Quantitative Reasoning	Information Literacy	Citizenship	Innovative Thinking	A: Science Knowledge Application	B: Experiment Planning and Conducting	C: Process and System Design	D: Multidisciplinary Teamwork	E: Engineering Problem-solving	G: Effective Communication	H: Ethical and Professional Responsibility	I: Continuous and Independent Learning	J: Contemporary Knowledge	K: Use of Modern Engineering Tools				
▶▶ TERM 1 CRD 18																							
Language Comprehension and Production I	4	CORE	1																			HU24 Leveling of language or have approved Language PDN (level definition test)	
Fundamentals of Industrial Engineering	3	PROGRAM		1		1																MA393 Leveling Math or have approved Maths PDN (level definition test)	
Basic Mathematics	6	CORE			1																	MA393 Leveling Math or have approved Maths PDN (level definition test)	
Creativity Workshop	3	CORE																				Does not have requirements	
Ethics and Citizenship	2	CORE																				HU24 Leveling of language or have approved Language PDN (level definition test)	
▶▶ TERM 2 CRD 19																							
Language Comprehension and Production II	4	CORE	2		1																	HU03 Language Comprehension and Production I	
Calculus I	6	CORE				1																MA420 Basic Mathematics	
Engineering Drawing 1	3	PROGRAM				1																IN142 Fundamentals of Industrial Engineering and MA420 Basic Mathematics	
Chemistry	4	PROGRAM				1																MA393 Leveling Math or have approved Maths PDN (level definition test)	
Academic Research Seminar I	2	CORE	1		1		1															HU03 Language Comprehension and Production I	
▶▶ TERM 3 CRD 20																							
Calculus II	6	PROGRAM					1															MA262 Calculus I	
Engineering Drawing 2	3	PROGRAM				1																IN170 Engineering Drawing 1	
Applied Statistics I	4	CORE				1																MA262 Calculus I	
Physics I	4	CORE				1																MA262 Calculus I and MA95 Leveling of Physics or have approved Physics PDN (level definition test)	
Elective	3	ELECTIVE																				-	
▶▶ TERM 4 CRD 22																							
Management for Engineers	3	PROGRAM			1		1															40 approved credits	
Differential Equations and Linear Algebra	6	PROGRAM				2	2															MA263 Calculus II	
Applied Statistics II	4	PROGRAM				2	2															MA469 Applied Statistics I	
Physics 2	6	PROGRAM				2	2															MA466 Physics I	
Algorithms	3	PROGRAM				2																IN170 Engineering Drawing 1	
▶▶ TERM 5 CRD 23																							
Method Engineering	4	PROGRAM			2																	IN219 Management for Engineers and MA145 Applied Statistics II	
Operation Costing	4	PROGRAM					2															IN219 Management for Engineers	
Quality Tools	3	PROGRAM					2															MA145 Applied Statistics II	
Operations Research 1	3	PROGRAM				2																IN220 Algorithms	
Mechanics for Engineers	5	PROGRAM				2																IN171 Engineering Drawing 2 and MA462 Physics 2	
Applied Thermodynamics	4	PROGRAM	2	1																		MA264 Differential Equations and Linear Algebra and MA462 Physics 2	
▶▶ TERM 6 CRD 22																							
Science and Technology of Materials	4	PROGRAM				2																IN214 Mechanics for Engineers	
Plant Distribution	4	PROGRAM	2	1																		IN147 Method Engineering	
Total Quality Management	3	PROGRAM	2	1																		IN92 Quality Tools	
Operations Research 2	3	PROGRAM					2															IN176 Operation Costing and IN172 Operations Research 1	
Unitary Operations	4	PROGRAM				2																IN222 Applied Thermodynamics	
Strategic Operation Planning and Control	4	PROGRAM				2		2														IN219 Management for Engineers	
▶▶ TERM 7 CRD 20																							
Occupational Safety and Health	3	PROGRAM					2															IN96 Total Quality Management	
Maintenance Management	3	PROGRAM	2	2																		IN160 Plant Distribution	
Economics Engineering	3	PROGRAM					2															IN176 Operation Costing	
Tactical Operation Planning and Control	3	PROGRAM						2														IN173 Operations Research 2 and IN215 Strategic Operation Planning and Control	
Discrete System Simulation	4	PROGRAM				2																IN173 Operations Research 2	
Manufacturing Processes Technology	4	PROGRAM				2																IN175 Science and Technology of Materials and IN147 Method Engineering	
▶▶ TERM 8 CRD 21																							
Project Management	4	PROGRAM	2	2			2															IN178 Economics Engineering	
Process Management	3	PROGRAM				2																IN93 Occupational Safety and Health	
Energy Management	4	PROGRAM					2															IN177 Unitary Operations	
Integrated Logistics and Supply Chain	4	PROGRAM						2														IN58 Tactical Operation Planning and Control and IN213 Discrete System Simulation	
Academic Research Seminar II (Engineering)	3	PROGRAM	2	2			2															HU61 English 5, IN58 Tactical Operation Planning and Control and IN179 Manufacturing Processes Technology	
Innovation Management	3	PROGRAM						2														IN179 Manufacturing Processes Technology	
▶▶ TERM 9 CRD 18																							
Human Capital Management	3	PROGRAM					3	3	3													IN217 Process Management	
Environmental Engineering and Management	4	PROGRAM					3			3												IN134 Energy Management	
Applied Research Project 1	5	PROGRAM	3	3	3																	IN216 Project Management, IN97 Integrated Logistics and Supply Chain, IN210 Academic Research Seminar II (Engineering) and have approved 2 pre-professional internships credits and approval of the Program Director	
Elective	3	ELECTIVE																				-	
Elective	3	ELECTIVE																				-	
▶▶ TERM 10 CRD 17																							
Industrial Technology and Automation	3	PROGRAM	3	3	3																	IN195 Innovation Management and IN218 Environmental Engineering and Management	
Applied Research Project 2	5	PROGRAM	3	3		3		3	3	3												IN217 Process Management, IN45 Applied Research Project 1 and approval of the Program Director	
Elective	3	ELECTIVE																				-	
Elective	3	ELECTIVE																				-	
Elective	3	ELECTIVE																				-	

▶▶ COURSES 54 ▶▶ TOTAL CREDITS 200

