



SPECIALIST CERTIFICATIONS

- Technological Innovation
- Business Analytics
- Supply Chain Management
- Engineering Project Management
- Business Engineering

SCHOOL OF ENGINEERING



INDUSTRIAL ENGINEERING

The Industrial Engineering Undergraduate Program prepares well-rounded professionals capable of managing organizations efficiently through a strong culture of innovation, advanced skills, and knowledge of sustainable technologies. Graduates develop expertise in process optimization and organizational leadership, supported by ethical principles, a commitment to business competitiveness, and a perspective oriented toward societal advancement.

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	LEVEL 9	LEVEL 10
LANGUAGE AND COMMUNICATION I 4	LANGUAGE AND COMMUNICATION II 3	APPLIED ARTIFICIAL INTELLIGENCE * 3	STATISTICS AND PROBABILITY * 4	OPERATIONS RESEARCH I * 4	OPERATIONS RESEARCH II 4	FINANCIAL ENGINEERING 3	PROCESS SIMULATION 4	ETHICS AND HUMAN MANAGEMENT 3	APPLIED ENGINEERING PROJECT II 4
PSYCHOLOGICAL PROCESSES 3	APPLIED PHILOSOPHY 3	ORGANIZATIONAL SYSTEMS * 2	CALCULUS III * 3	OPERATIONS AND LOGISTICS FUNDAMENTALS 4	ERGONOMICS AND WORK DESIGN 4	BUILDING SYSTEMS DESIGN 3	PREDICTIVE DATA MODELING 3	APPLIED ENGINEERING PROJECT I 4	STRATEGIC MANAGEMENT 4
CIVIC ETHICS 2	FUNDAMENTALS OF ECONOMICS 3	COMPUTER-AIDED DESIGN 3	OPERATIONS COSTING * 3	ECONOMIC ENGINEERING 4	OPERATIONS CONTROL AND PLANNING 4	BUSINESS INTELLIGENCE 3	INTEGRATED MANAGEMENT SYSTEMS 3	COMMERCIAL ENGINEERING 3	ELECTIVE 3
INTRODUCTION TO ENGINEERING 3	INTRODUCTION TO INTERNATIONAL TRADE 3	GENERAL CHEMISTRY 4	PROGRAMMING FUNDAMENTALS 3	ELECTRICITY AND ELECTRONICS 3	ENGINEERING INNOVATION 3	LOGISTICS SYSTEMS MODELS 4	ENGINEERING PROBLEM ANALYSIS 3	ELECTIVE 3	ELECTIVE 3
RESEARCH METHODOLOGIES 3	LINEAR ALGEBRA 3	PHYSICS I 5	PHYSICS II 5	DESIGN OF EXPERIMENTS 4	INDUSTRIAL PROCESSES 4	QUALITY 3	INDUSTRIAL AUTOMATION 3	ELECTIVE 3	ELECTIVE 3
PRECALCULUS 5	CALCULUS I 5	CALCULUS II * 5	MECHANICS 4	DIFFERENTIAL EQUATIONS 3	ELECTIVE 3	MANUFACTURING PROCESSES 3	PROJECT MANAGEMENT * 3	MANDATORY CREDITS 10	MANDATORY CREDITS 8
MANDATORY CREDITS 20	MANDATORY CREDITS 20	MANDATORY CREDITS 22	MANDATORY CREDITS 22	MANDATORY CREDITS 22	MANDATORY CREDITS 19	ELECTIVE 3	ELECTIVE 3		
						MANDATORY CREDITS 19	MANDATORY CREDITS 19		

Elective Subjects:

SAFETY ENGINEERING 3	DESIGN PROJECT MANAGEMENT 3	SUPPLY CHAIN MANAGEMENT 3	PROJECT IMPLEMENTATION MANAGEMENT 3	DESIGN AND PROTOTYPE 3	ERP PROCESS WORKSHOP 3	B2B MANAGEMENT 3
LEADERSHIP WORKSHOP 3	MANUFACTURING MATERIALS 3	PROCUREMENT AND SUPPLY MANAGEMENT 3	INTERNATIONAL TRADE MANAGEMENT 3	ROBOTIC PROCESS AUTOMATION 3	TRANSPORTATION AND DISTRIBUTION ENGINEERING 3	DIGITAL MARKETING TOOLS 3
ENGINEERING PROGRAMMING 3	DIGITAL TRANSFORMATION 3	BUSINESS GAME 3	CREATIVITY, INNOVATION, AND ENTREPRENEURSHIP 3	MACHINE LEARNING 3	SERVICE OPERATION MANAGEMENT 3	INDUSTRIAL SUSTAINABILITY 3
MANAGEMENT INFORMATION SYSTEMS 3	INTRODUCTION TO DATABASE MANAGEMENT SYSTEMS 3	PROJECT EVALUATION AND FORMULATION 3	SUSTAINABLE PROJECT DESIGN 3	IT TOOLS 3	RESOURCES MANAGEMENT 3	OCCUPATIONAL SAFETY, HEALTH, AND ORGANIZATIONAL WELL-BEING * 3
MANAGERIAL SKILLS WORKSHOP 3	BUSINESS INTELLIGENCE STRATEGY 3	AGILE METHODOLOGIES 3	PROGRAMMING TECHNOLOGY 3	LEAN SIX SIGMA 3	RISK MANAGEMENT AND PORTFOLIO 3	

To choose these subjects, it is necessary to meet the requirements set out in this curriculum.

Mandatory subjects of the General Studies Program

Mandatory subjects of the Industrial Engineering Undergraduate Program

Elective subjects of the Industrial Engineering Undergraduate Program

Subjects in common among the undergraduate programs of the School**



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CREDIT SUMMARY

	CREDITS	TYPE OF CREDIT
General Studies	40	Mandatory
School	141	Mandatory
Total Elective Subjects	24	Elective
Total Credits	205	

** The School of Engineering comprises the Civil Engineering, Industrial Engineering, Systems Engineering, Mechatronics Engineering, and Environmental Engineering undergraduate programs.

Subject to curricular change.