

INDUSTRIAL ENGINEERING MINOR

Industrial engineering is concerned with the efficient operation of complex processes, systems, or organizations. The industrial engineering minor focal areas include work design, production planning and control, statistical quality control, facilities design and operations management.

The industrial engineering minor is targeted at other engineering majors, and programs that address complex operations such as forestry, and food production.

Minor Code: 076

- Identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- Apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- Communicate effectively with a range of audiences.
- Recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- Function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- Acquire and apply new knowledge as needed, using appropriate learning strategies.
- Design, develop, implement, and improve integrated systems that include people, materials, information, equipment and energy.
- Accomplish the integration of systems using appropriate analytical, computational, and experimental practices.

Code	Title	Credits
ECON 201	*INTRODUCTION TO MICROECONOMICS	4
or ECON 202	*INTRODUCTION TO MACROECONOMICS	
or IE 212	COMPUTATIONAL METHODS FOR INDUSTRIAL ENGINEERING	
ENGR 390	ENGINEERING ECONOMY	3
IE 255	INTRODUCTORY QUANTITATIVE ANALYSIS OF INDUSTRIAL AND MANUFACTURING SYSTEMS	3
or ST 314	INTRODUCTION TO STATISTICS FOR ENGINEERS	
or CBEE 213	PROCESS DATA ANALYSIS	
IE 112	SPREADSHEET SKILLS FOR INDUSTRIAL & MANUFACTURING ENGINEERS	1
IE 355	STATISTICAL QUALITY CONTROL	4
IE 366	WORK SYSTEMS ENGINEERING	4
IE 367	PRODUCTION PLANNING AND CONTROL	4
IE 368	FACILITY DESIGN AND OPERATIONS MANAGEMENT	4
Total Credits		27

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Baccalaureate Core Course (BCC)

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