Industrial Engineering Technology, B.S.

Program Description

If you like to be at the center of the action, designing creative solutions that make business and industry work safer, faster, and leaner, making organizations more efficient, productive, and cost-effective then the career for you is Industrial Engineering Technology.

This Bachelor of Science degree offers the graduate a challenging career in business, industry, or government. Graduates deal primarily with the process management of money, materials, and labor in a business and industrial environment.

Career opportunities involve problem solving in the fields of:

- Quality Control
- Production/Materials Management
- Information Systems
- Process Improvement
- Logistics and Supply Chain Management
- Systems Simulation
- Salary and Compensation Plans
- Workplace Design
- Personnel Management
- Occupational Safety, Health and Ethics
- Project Management
- Economic Analysis/Cost Control

 This program is a part of the Southern Polytechnic College of Engineering and Engineering Technology.

Accreditation

The Bachelor of Science with a major in Industrial Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, http://www.abet.org.

Admission, Enrollment, and Graduation Policies

Admissions Requirements

This program does not have specific admission requirements and only admission to

Kennesaw State University is required. For more information, please visit the Admissions section of the section of the Catalog.

Graduation Requirements

Each student is expected to meet the requirements outlined in Academic Policies 5.0 PROGRAM REQUIREMENTS & GRADUATION.

Program Course Requirements

Core IMPACTS Curriculum (42 Credit Hours)

General Education Core IMPACTS Curriculum

Core IMPACTS Curriculum Requirements Specific to This Major

Science Majors: Must take MATH 1113 or higher in Mathematics & Quantitative Skills and MATH 1179 or higher in Applied Math under Technology, Mathematics, and Science.

Science and Engineering Majors: Must take two four-hour laboratory sciences in Natural Sciences under Technology, Mathematics, and Science. Students must choose from CHEM 1211 / L , CHEM 1212 / L , PHYS 1111 / L *, PHYS 1112 / L , PHYS 2211 /L *, PHYS 2212 / L , BIOL 1107 / L , or BIOL 1108 / L.

*Students cannot take both PHYS 1111/L and PHYS 2211/L nor PHYS 1112/L and PHYS 2212/L.

Core Field of Study (18 Credit Hours)

Students must earn a grade of "C" or better in these courses.

- ENGR 1000: Introduction to Engineering
- IET 2000: Introduction to Industrial Engineering Design
- TCOM 2010: Technical Writing
- IT 1113: Introduction to Programming
- EDG 1210: Survey of Engineering Graphics
- PHYS 1111: Introductory Physics I
- PHYS 1111L: Introductory Physics Laboratory I
  Or
- PHYS 1112: Introductory Physics II
- PHYS 1112L: Introductory Physics Laboratory II
  Or
- PHYS 2211: Principles of Physics I
- PHYS 2211L: Principles of Physics Laboratory I

Or

- PHYS 2212: Principles of Physics II
- PHYS 2212L: Principles of Physics Laboratory II

  Or
- CHEM 1152: Survey of Chemistry II
- CHEM 1152L: Survey of Chemistry Laboratory II

  Or
- CHEM 1211: Principles of Chemistry I
- CHEM 1211L: Principles of Chemistry Laboratory I

  Or
- CHEM 1212: Principles of Chemistry II
- CHEM 1212L: Principles of Chemistry Laboratory II

  Or
- BIOL 1107: Principles of Biology I
- BIOL 1107L: Principles of Biology I Laboratory

  Or
- BIOL 1108: Principles of Biology II
- BIOL 1108L: Principles of Biology II Laboratory

  Or
- SCI 1101: Science, Society, and the Environment I

  Two (2) credit hours carried over from Technology, Mathematics, and Science.

Major Requirements (51 Credit Hours)

Students must earn a grade of "C" or better in these courses.

- IET 1001L: Industrial Engineering Technology Lab
- ACCT 2101: Principles of Accounting I

  or
- IET 2432: Introduction to Managerial Costing (not equivalent to ACCT 2100)
- IET 2227: Probability and Statistics I
- IET 2449: Logistics and Supply Chain Management
- IET 3322: Work Measurement and Ergonomics
- IET 3339: Statistical Quality Control
- IET 3356: Quality Concepts and Systems Design
- IET 3403: Probability and Statistics II
- IET 3424: Engineering Economy
- IET 3433: Product and Process Costing
- IET 4115: Human Resources Management for Engineers

- IET 4135: IET Project Management
- IET 4151: Operations Management for Engineers
- IET 4405: Operations Research - Concepts, Models and Methods
- IET 4422: Facilities Design, Plant Layout, and Materials Handling
- IET 4451: Systems Simulation
- IET 4475: Senior Project

Major Electives or Concentration (9 Credit Hours)
Select 9 credit hours of IET 3000-4000 coursework OR select one of the following major concentrations.

In addition to completion of the Major Requirements of IET 3339, IET 3356, and IET 3403, students who successfully complete ENGR 3407 with a grade of "C" or better may declare a Six Sigma Green Belt certificate.

Major Electives (9 Credit Hours)
Select 9 credits of 3000-4000 level IET coursework.

Quality Principles Concentration
The primary objective of the Quality Principles Concentration is to provide training and education to students interested in quality system principles, methodology, elements and standards.

- ENGR 3407: Lean Six Sigma
  Select 3 credits of 3000-4000 level IET coursework
- IET 3410: Principles of Team Dynamics

Logistics Concentration
The primary objective of the Logistics Concentration is to provide training and education to students interested in entering the Supply Chain industry.

- IET 3320: Advanced Logistics
- IET 3511: Sustainability Engineering
  or
  Select 3 credits of 3000-4000 level IET coursework
- IET 3620: Warehousing Systems

Program Total (120 Credit Hours)