

# INFORMATION SCIENCES AND TECHNOLOGY FOR INDUSTRIAL ENGINEERING, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Description

Collection and processing of information have increased in all sectors for solving engineering problems, including manufacturing and service related problems. Efficient and timely analysis of data is critical for the survival of companies. There is a need for industrial engineers with a strong background in information technology and systems. The minor in Information Sciences and Technology for Industrial Engineering will augment the skills of students in the Department of Industrial and Manufacturing Engineering in the information systems area. All students pursuing a baccalaureate degree in Industrial Engineering are eligible for this minor.

## What is Information Sciences and Technology for Industrial Engineering?

Collection and processing of information have increased in all sectors for solving engineering problems, including manufacturing and service related problems. Efficient and timely analysis of data is critical for the survival of companies. There is a need for industrial engineers with a strong background in information technology and systems.

## You Might Like This Program If...

The minor in Information Sciences and Technology for Industrial Engineering augments the skills of students in the Department of Industrial and Manufacturing Engineering in the information systems area. All students pursuing a baccalaureate degree in Industrial Engineering are eligible for this minor.

## Program Requirements

| Requirement                | Credits |
|----------------------------|---------|
| Requirements for the Minor | 21      |

## Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10>).

| Code  | Title                              | Credits |
|---|------------------------------------|---------|
| <b>Prescribed Courses</b>                                 |                                    |         |
| <i>Prescribed Courses: Require a grade of C or better</i> |                                    |         |
| IE 330  | Engineering Analytics              | 3       |
| IST 110   | Information, People and Technology | 3       |
| IST 210   | Organization of Data               | 3       |
| IST 220   | Networking and Telecommunications  | 3       |

## Additional Courses

*Additional Courses: Require a grade of C or better*

|                                      |  |   |
|--------------------------------------|--|---|
| Select 6 credits from the following: |  | 6 |
| IE 408                               | Cognitive Work Design                              |   |
| IE 418                               | Human/Computer Interface Design                    |   |
| IE 433                               | Regression Analysis and Design of Experiments      |   |
| Select 3 credits from the following: |  | 3 |
| IST 402                              | Emerging Issues and Technologies                   |   |
| IST 431                              | The Information Environment                        |   |
| IST 442                              | Information Technology in an International Context |   |
| IST 454                              | Computer and Cyber Forensics                       |   |
| MATH 451                             | Numerical Computations                             |   |
| MATH 455                             | Introduction to Numerical Analysis I               |   |

## Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

## University Park

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## Contact

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