Industrial Engineering (Minor)

The minor in Industrial Engineering is designed to provide undergraduate engineering students and other science majors in curricula other than Industrial Engineering with the fundamentals of industrial engineering necessary for advanced study in the discipline and/or employment in industrial engineering related occupations. The minor in Industrial Engineering offers a structured program that allows students to acquire some level of expertise in areas common to all industrial engineers as well as a deeper knowledge in at least one specific area of interest.

Admissions and Certification of Minor

To be admitted to the program, a student must have a GPA of at least 2.0. Application for admission to any University minor program is now available via MyPack Portal. Admission will be based upon the student’s academic record, and in most cases no longer requires departmental review. Go to Add a Minor (https://studentservices.ncsu.edu/your-degree/coda-home/add-a-minor/) to apply. The minor must be completed no later than the semester in which the student expects to graduate from his or her degree program.

Contact Person

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Effective Date: 6/2011

SIS Code: 14IEM

Plan Requirements

• Complete a minimum of 15 credit hours of ISE designated courses.
• Students must complete 6 hours of required courses and 9 hours of elective courses.
• All courses must be completed with a grade of ‘C-‘ or higher.

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
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<tbody>
<tr>
<td>ISE 311</td>
<td>Engineering Economic Analysis</td>
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<tr>
<td>ISE 4XX</td>
<td>Any 400-level ISE Course</td>
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Elective Courses

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| ISE 135  | Computer-Based Modeling for Industrial Engineering  
or TE 110  | Computer-Based Modeling for Engineers  
ISE 216  | Product Development and Rapid Prototyping |

ISE 316 Manufacturing Engineering I - Processes
ISE 352 Fundamentals of Human-Machine Systems Design
ISE 361 Deterministic Models in Industrial Engineering
ISE 362 Stochastic Models in Industrial Engineering
ISE 408 Design and Control of Production and Service Systems
ISE 416 Manufacturing Engineering II - Automation
ISE 417 Database Applications in Industrial & Systems Engineering
ISE 441 Introduction to Simulation
ISE 443 Quality Design and Control
ISE 452 Advanced Human-Machine Systems Design
ISE 453 Modeling and Analysis of Supply Chains

Total Hours 15