The Master of Science in Industrial Management is an interdisciplinary program that prepares graduates to assume leadership roles and positions in a variety of industrial, processing, and/or construction industries. The program will familiarize students with philosophies and strategies currently used for improving production and provide students with further technical knowledge in areas such as quality assurance, industrial safety, and automated production. Students will also become familiar with research methods and techniques commonly used to solve problems in industrial settings.

Faculty

Graduate Faculty

Heidari, Farzin  Associate Professor, Department of Industrial Management and Technology; Chair; B.S., St. Cloud State University; M.S., St. Cloud State University; Ph.D., University of Idaho.

Li, Xiaoia  Assistant Professor, Department of Industrial Management and Technology; B.S., Shaanxi University of Science and Technology (China); M.S., The University of Birmingham; Ph.D., North Dakota State University.

Marsh, Bruce  Associate Professor, Department of Industrial Management and Technology; B.S., University of Southwestern Louisiana; M.I.T., Bowling Green State University; D.I.T., University of Northern Iowa.

Associate Member

Marsh, Bruce  Associate Professor, Department of Industrial Management and Technology; B.S., University of Southwestern Louisiana; M.I.T., Bowling Green State University; D.I.T., University of Northern Iowa.

Courses

Industrial Management (IMEN)

IMEN 5300  Resrch Method & Project Devel  3 SCH  (3-1)
Examination of data collection and analysis with an emphasis on distributions, probability, simple and multiple regression, ANOVA and other statistical analysis technique. Statistical concepts are reinforced using industry-related data and a well known and widely used data analysis software program. Prerequisite: graduate standing.

IMEN 5301  Industrial Management  3 SCH  (3-0)
Concepts and techniques used by supervisors in industrial settings. Effective supervisory strategies to combat global competition will also be covered. Prerequisite: ITEN 1315 or ITEN 3300 or consent of instructor.

IMEN 5305  Graduate Research Project  3 SCH  (3)
Designed for project option students and requires completion of research project. Prerequisite: departmental approval. May be repeated for a maximum of 6 semester hours.

IMEN 5306  Thesis  3 SCH  (3)
Designed for thesis option students. The course requires completion of thesis research. Prerequisite: departmental approval. May be repeated for maximum of 6 semester hours.

IMEN 5315  Constrnt Mgmt and Mistake Prf  3 SCH  (3-0)
An examination of constraint management principles, strategies and concept as they relate to industrial settings. Also includes an exploration of the tools and techniques that can be used to: (a) measure production performance, (b) overcome core production problems and (c) integrate solutions into business planning and decision making.

IMEN 5320  Spec Tops in Industrial Mgmt  1-3 SCH  (1-3)
Courses will concentrate on themes not present in the current IMEN curriculum. May be repeated ro a maximum of 6 semester hours when topic changes.
IMEN 5322  Project Scheduling  3 SCH  (3-0)
Analysis of both industrial methods and managerial issues related to operations management. Topics will be tied to increasing efficiency, reducing time required to complete jobs and utilization of resources. Case studies and supplement readings are used to demonstrate real world issues and applications. Prerequisite: graduate standing.

IMEN 5330  Six Sigma Qual and Improvment  3 SCH  (3-1)
An examination of the various methods and approaches used to achieve, sustain and improve the quality of a product or service. Also includes an exploration into the principles and techniques used to evaluate both continuous and attribute data with an emphasis on the enhancement of skills in computer software that are used in quality assurance activities and/or data analysis. Prerequisite: ITEN 4352 or ITEN 4362 or instructor consent. Laboratory fee, $5.

Fee: $5.00

IMEN 5333  Hazardous Materials Management  3 SCH  (3-0)
Managerial techniques for effective handling and control of hazardous materials and fires. Standards, code compliance issues and the role of the industrial risk manager will also be examined. Prerequisite: graduate standing.

IMEN 5335  Industrial Safety and Risk Mgt  3 SCH  (3-0)
An examination of risk assessment and risk management principles, strategies and concept as they relate to industrial settings. Also includes an exploration of the tools and techniques that can be used to: (a) assess levels of risk, (b) communication risk in crisis and non-crisis situations and (c) integrate risk management into business planning and decision making. Industrial safety and health issues will also be addressed. Prerequisite: ITEN 2330 or ITEN 3300 or consent of instructor.

IMEN 5340  Manufacturing System Mgmt  3 SCH  (3-0)
Survey of current trends and approaches to automation and cellular manufacturing. Emphasis will be both on managerial issues and integration of automated cells. Topics include automation, cellular manufacturing, group technology and just-in-time philosophies. Case studies and supplemental articles are used to demonstrate real world issues and applications.

IMEN 5344  Lean Production  3 SCH  (3-0)
A study of the philosophy of lean production. Emphasis will be on designing strategies for implementation.

IMEN 5350  Supply Chain Management  3 SCH  (3-0)
Supply Chain Management focuses on managing the complexity of synchronizing an entire chain of activities performed by different organizations in order to deliver a product to the final customer. SCM involves the areas of marketing, operations management, logistics, procurement and distribution. Diverse simulation software are used for critical analysis of the business at hand and for managerial and decision making purposes. Prerequisite: graduate standing.

IMEN 5355  Project Management  3 SCH  (3-0)
Fundamental of project management with a wide assortment of business applications. The course takes a decision-making, business-oriented approach and explores both technical and managerial challenges in the management of projects. Course provides a strategic perspective, demonstrating means to manage projects at the program and portfolio levels. Prerequisite: graduate standing.

Degree Requirements

Industrial Hygiene, Transcribed Certificate

In order to get the certificate, students need to complete three courses (9 credit hours) with a B or better grade including three of the following courses. It is at the discretion of the graduate coordinator to advise students from different engineering majors to take which three courses to earn the industrial hygiene certificate.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEEN 5303</td>
<td>Advance Topics in Civil Eng</td>
<td>1-3</td>
</tr>
<tr>
<td>EVEN 5303</td>
<td>Advance Topics in Envir Eng</td>
<td>1-3</td>
</tr>
<tr>
<td>IMEN 5333</td>
<td>Hazardous Materials Management</td>
<td>3</td>
</tr>
<tr>
<td>IMEN 5335</td>
<td>Industrial Safety and Risk Mgt</td>
<td>3</td>
</tr>
</tbody>
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1  Topic must be Occupational Health & Regulations
2  Topic must be Air Quality Assessment