

COLLEGE OF ENGINEERING, ARCHITECTURE AND TECHNOLOGY

# INDUSTRIAL ENGINEERING AND MANAGEMENT



# WHAT IS INDUSTRIAL ENGINEERING AND MANAGEMENT?

Industrial Engineering and Management (IEM) is an engineering discipline that focuses on designing, operating, managing, and continuously improving manufacturing and service systems so that they are effective and efficient.

### WHY INDUSTRIAL ENGINEERING AND MANAGEMENT AT OSU?

Industrial Engineering is the most people-oriented discipline within the engineering family. The IEM program at OSU is the third oldest industrial engineering program in the world and is highly ranked. Unique to Industrial Engineering is a program designed to enable IEM students to obtain a Masters of Business Administration (MBA) in one year after the undergraduate program is completed. Students from industrial engineering and other engineering disciplines also have an opportunity to pursue an accelerated one-year Master's degree in Industrial Engineering and Management or a Master's degree in Engineering and Technology Management, a 4+1 option.

# **HIGHLIGHTS**

- Alumni hold or have held top management positions for major corporations
- World-class faculty
- Gender-balanced classes
- IEM is a close-knit family of faculty, staff, students and alumni
- Modern facilities in the 3rd floor of Engineering North
- Graduate program ranked in the top 25 among public universities in the US by US News and World report

# **CAREER INDUSTRIES & FOCUS AREAS**

#### CAREER OPPORTUNITIES

Professions in, but not limited to, healthcare, oil and gas, transportation, manufacturing organizations, service enterprises and governmental organizations with the following possible job titles:

- Food Processing Engineer
  - Project Manager
- Health & Safety Engineer
- Manufacturing Engineer
- Process Engineer
- Supply Chain Engineer
- Transportation Engineer
  - Quality Engineer





COLLEGE OF ENGINEERING, ARCHITECTURE AND TECHNOLOGY

# BACHELOR OF SCIENCE INDUSRIAL ENGINEERING & MANAGEMENT

# **Typical Four-Year Curriculum**

#### **FIRST YEAR**

#### **Fall Semester**

HIST	1103	American History
ENGR	1111	Intro to Engineering
MATH	2144	Calculus I
CHEM	1414	Gen Chemistry
ENGL	1113	Composition I

#### **Spring Semester**

ENGR	1412	Intro Engr Comp Programming
POLS	1113	American Gov't
PHYS	2014	Gen Physics I
MATH	2153	Calculus II
XXXX	XXXX	"S/D/H/I" Elective

### **SECOND YEAR**

#### **Fall Semester**

ENSC	2113	Statics
PHYS	2114	Gen Physics II
MATH	2163	Calculus III
ENGR	1322	Engr Design with CAD
IEM	2903	Mfg & Service Sys Tools I
IEM	3103	Engineering Statistics

#### **Spring Semester**

IEM	3703	Mfg & Service Sys Tools II
SPCH	2713	Speech
MATH	3013	Linear Algebra
ENSC	Elective	
ENSC	Elective	
MATH ENSC	3013 Elective	

# **THIRD YEAR**

#### **Fall Semester**

IEM	3813	Ergonomics
IEM	3403	Project Management
ENSC	3313	Material Science
ENSC	Elective	

#### **Spring Semester**

IEM	4713	Intro to Sys Simulation Modeling
IEM	3523	Engr Cost Info & Control Sys
IEM	3303	Manufacturing Processes
IEM	3503	Engr Econ
ENGL	3323	Technical Writing

### **FOURTH YEAR**

#### **Fall Semester**

IEM	4113	Industrial Experimentation
IEM	4723	Info Sys Design and Development
IEM	4203	Fac & Material Handling Sys Dsgn
IEM	4613	Prod Planning and Control Sys
XXXX	XXXX	"H/D/I" Elective

#### **Spring Semester**

IEM	4413	Industrial Org Mgmt
IEM	4913	Senior Design
IEM	4103	Quality Control
IEM	Elective	
XXXX	XXXX	"H/D/I" Elective

# **TOTAL HOURS: 123**

Accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.



COLLEGE OF ENGINEERING, ARCHITECTURE AND TECHNOLOGY

This course plan is for general guidance only. An official course plan will be provided upon enrollment.

# Contact | ceat.recruitment@okstate.edu | (405)-744-5279