

# INDUSTRIAL AND SYSTEMS ENGINEERING, BACHELOR OF SCIENCE IN INDUSTRIAL AND SYSTEMS ENGINEERING/ MASTER OF BUSINESS ADMINISTRATION

Minimum Total Credit Hours: 154

Overall GPA - Combined and OU: 3.00

Major GPA - Combined and OU: 3.00

Curriculum GPA - Combined and OU: 3.00

Program Code: A530/F140 Q340

In order to progress in your curriculum in the Gallogly College of Engineering, and as a specific graduation requirement, a grade of C or better is required in each course in the curriculum, including all prerequisite courses.

Two college-level courses in a single foreign language are required; this may be satisfied by successful completion of 2 years in a single foreign language in high school. Students who must take foreign language at the University will have an additional 6-10 hours of coursework.

Students must take the GMAT and apply for the MBA program during the third year; minimum OU GPA and combined GPA of 3.0 is required.

Students should submit an application to the School of Industrial and Systems Engineering for the accelerated program during the fall semester of the junior year.

Students must also apply to the Price College of Business during the spring semester of the junior year to be admitted by that college to the MBA program.

Students may enter the accelerated program based on the undergraduate degree pattern offered in the year they first enrolled in the Oklahoma State System of Higher Education or later. Students must maintain a 3.0 GPA from the time of entering the accelerated program until graduation.

Course	Title	Credit Hours
<b>Freshman</b>		
<b>First Semester</b>		
ENGL 1113	Principles of English Composition (Core I)	3
CHEM 1315	General Chemistry (Core II) <sup>1</sup>	5
MATH 1914	Differential and Integral Calculus I (Core I) <sup>2</sup>	4
P SC 1113	American Federal Government (Core III)	3
ENGR 1411	Freshman Engineering Experience <sup>3</sup>	1
Credit Hours		16
<b>Second Semester</b>		
ENGL 1213	Principles of English Composition (Core I) or EXPO 1213 or Expository Writing	3
MATH 2924	Differential and Integral Calculus II <sup>2</sup>	4

HIST 1483 or HIST 1493	United States, 1492 to 1865 (Core IV) or United States, 1865 to the Present	3
PHYS 2514	General Physics for Engineering and Science Majors (Core II)	4
Credit Hours		14

## Sophomore

### First Semester

MATH 2934	Differential and Integral Calculus III <sup>2</sup>	4
PHYS 2524	General Physics for Engineering and Science Majors	4
CEES 2113	Statics	3
ENGR 2002	Professional Development	2
ISE 2823	Enterprise Engineering	3
Credit Hours		16

### Second Semester

CEES 2153	Mechanics of Materials	3
ISE 3293	Applied Engineering Statistics	3
ISE 2303	Design and Manufacturing Process	3
ISE 2311	Computer Aided Design and Graphics Laboratory for Industrial Engineers	1
C S 1323 or C S 1313	Introduction to Computer Programming for Programmers or Programming for Non-Majors with C	3
MATH Elective (p. 2)		3
Credit Hours		16

## Junior

### First Semester

ISE 3304	Design and Manufacturing II	4
ISE 4113	Spreadsheet Dec Support Sys	3
ISE 4553	Data-Driven Decision Making I	3
ISE 4623	Deterministic Systems Models	3
ENGR 2431	Electrical Circuits	1
Approved Elective: Social Science (Core III) <sup>4</sup>		3
Credit Hours		17

### Second Semester

ISE 4223	Fundamentals of Engineering Economy	3
ISE 4633	Probabilistic Systems Models	3
ISE 4804	Ergonomics in Systems Design <sup>5</sup>	4
ISE 5563	Quality & Reliability Engineering <sup>5</sup>	3
ENGR 2461	Thermodynamics	1
ENGR 3441	Fluid Mechanics	1
Credit Hours		15

## Senior

### First Semester

ISE 4333	Production Systems/Operations <sup>5</sup>	3
ISE 4663	Systems Analysis Using Simul	3
ISE 5383	Systems Evaluation (Slashlisted with 4383)	3
ISE 5853	Data-Driven Decision Making II <sup>5</sup>	3
ACCT 5202	Financial Accounting	2
FIN 5302	Financial Markets and Securities	2
B AD 5010	Foundations of MBA Success <sup>6</sup>	0
Credit Hours		16

**Second Semester**

MKT 5402	Marketing Management	2
FIN 5312	Corporate Finance	2
ISE 4393	Capstone Design Project (Capstone)	3
Approved Elective: Non-Western Culture (Core IV) <sup>4</sup>		3
Approved Elective: Artistic Forms (Core IV) <sup>4</sup>		3
Approved Elective: Western Civ. & Culture (Core IV) <sup>4</sup>		3
Credit Hours		16

**Fifth Year****First Semester**

B AD 5001	Quantitative Methods and Modeling I	1
B AD 5101	MBA - Professional Development	1
B AD 5102	Managerial Economics	2
MGT 5702	Organizational Behavior	2
MIT 5602	Management Information Systems	2
B AD 5832	Applied Field Project	2
MBA Elective <sup>7</sup>		2
MBA Elective <sup>7</sup>		2
Credit Hours		14

**Second Semester**

ACCT 5212	Managerial Accounting	2
B AD 5822	Business Consulting Practicum	2
B AD 5201	MBA - Professional Development II	1
B AD 5812	Global Business Experience	2
B AD 5902	Strategic Management	2
L S 5802	Business Ethics/Legal	2
MBA Elective <sup>7</sup>		2
MBA Elective <sup>7</sup>		1
Credit Hours		14
Total Credit Hours		154

<sup>1</sup> CHEM 1315 can be substituted with CHEM 1335 (Fall only).

<sup>2</sup> MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.

<sup>3</sup> Engineering transfer students may take ENGR 3511 in place of ENGR 1411.

<sup>4</sup> To be chosen from the University-Wide General Education Approved Course List. Three of these 12 hours must be upper-division (3000-4000). See list in the Class Schedule.

<sup>5</sup> These courses are dual-counted, fulfilling requirements for both the undergraduate degree and the graduate business degree.

<sup>6</sup> A student who actively and satisfactorily participates in all Prelude activities will receive a grade of 'S' for B AD 5010. A student who does not satisfactorily participate in 75% of Prelude Week will be required to participate in a make-up session within the first two weeks of the semester. Failure to complete a make-up session will result in a grade of 'U' for B AD 5010, resulting in cancellation of the student's enrollment in the MBA program.

<sup>7</sup> To be chosen from an approved list of MBA electives available in the ISE office, CEC 116.

<sup>8</sup> To be chosen from an approved list of ISE electives available in the ISE office, CEC 116.

Courses designated as Core I, II, III, IV or Capstone are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list.

**Approved Math Electives**

Code	Title	Credit Hours
MATH 2513	Discrete Mathematical Structures	3
MATH 3113	Introduction to Ordinary Differential Equations	3
MATH 3333	Linear Algebra I	3
MATH 3413	Physical Mathematics I	3
MATH 3513		
MATH 3613	Modern Geometry	3
MATH 4433	Introduction to Analysis I	3
C S 1813		