



Prepare for a career in Industrial Engineering. Industrial engineers figure out how to do things better. They engineer processes and systems that improve quality and productivity. They work to eliminate waste of time, money, materials, energy and other commodities. This is why many industrial engineers end up being promoted into management positions.

From: Engineering (Transfer)

Pre-Engineering Program (AES Associate in Engineering Science)

First Year

First Semester — 16 hours (14 BU credits)

MTH	145	Calculus and Analytic Geometry I (MTH 121)	5
CHM	121	General Chemistry I (CHM100+101)	5
ENG	121	English Composition I (ENG 101)	3
ECO	221	Principles of Macroeconomics (ECO 222)	3

Second Semester — 18 hours (16 BU credits)

MTH	146	Calculus and Analytic Geometry II (MTH 122)	4
ECO	222	Principles of Microeconomics (ECO 221)	3
PHY	123	Physics for Science and Engineering I (PHY 110)	5
EGR	121	Engineering Graphics (IME 103)	3
CMM	121	Fundamentals of Speech (COM 103)	3

Summer Session — 6 hours (6 BU credits)

Gen. Ed.	3
Gen. Ed.	3

Second Year

First Semester — 17 hours (14 BU credits)

MTH	246	Calculus and Analytic Geometry I (MTH 223)	4
PHY	124	Physics for Science and Engineering I (PHY 201)	5
EGR	221	Statics and Dynamics (CE 150)	5
Gen. Ed.	3		3

Second Semester — 16 hours (15 BU credits)

MAT	243	Analytic Geometry/Calculus III (MTH 223)	4
MCS	140	Comp Programming for Engr and Scientists (IME105)	3
MTH	227	Differential Equations (MTH 224)	3
EGR	2222	Engineering Mechanics of Materials (CE 270)	3
Gen Ed.	3		3

For Information Contact: Rob Twardock at (847) 543-2903 or rtwardock@clcollinois.edu

**See College of Lake County or BU advisor for a list of approved Gen. Ed. Courses. If students should complete the IAI General Education Core Curriculum at ICC, before transferring, they would not be required to take any general education courses work at Bradley University.

To: Industrial Engineering

BSIE – Bachelors of Science in Industrial Engineering

Summer Session – 6 hours (Online)

IME	311	Introduction to Engineering Statistical Methods	3
IME	386	Industrial and Managerial Engineering	3

Third Year

First Semester – 15 hours

IME	313	Operations Research I	3
IME	312	Engineering Statistical Methods	3
IME	301	Engineering Economics I	3
IME	331	Fundamental of Material Science	3
CE	270	Mechanics of Materials	3

Second Semester – 17 hours

IME	314	Operations Research II	3
IME	385	Introduction to Logistics Engineering	3
IME	466	Facilities Planning	3
IME	522	Manufacturing Quality Control	3
IME	341	Manufacturing Process	3
IME	117	Computer Numerical Applications	2

Fourth Year

First Semester – 15 hours

IME	561	Simulation of Human/Machine Systems	3
IME	583	Production Planning & Control	3
IME	585	Occupational Ergonomics	3
PSY	310	Industrial & Organizational Psychology	3
Technical Elective			3

Second Semester - 12 hours

IME	499	Senior Design Project	4
ENG	305	Technical Writing	3
IME	325	Transport Phenomena	3
IME	305	Engineering Economy II	2

*Additional courses may be required.

For Information Contact: Dr. Gary C. Lin at (309) 677-2740 or clin@bradley.edu

This plan is subject to change by Department of Industrial & Manufacturing Engineering & Technology at Bradley University.