

Courses used in all engineering degree programs at ISU
>> If offered at your school, focus on these courses first <<

Iowa State	Cr	Iowa State Course Name	BHC	Cr
CHEM 1770 (or 1670)	4	General Chemistry I (for Engineers)	CHEM 101	4
ENGL 1500	3	Critical Thinking and Communication	ENG 101	3
ENGL 2500	3	WOVE Composition	ENG 102	3
ENGR 1010	R	Engineering Orientation	N/A	
ENGR 1600	3	Engineering Problems	N/A	
LIB 1600	1	Information Literacy	N/A	
MATH 1650	4	Calculus I	MATH 124	4
MATH 1660	4	Calculus II	MATH 225	4
PHYS 2310/2310L	5	Classical Physics I and Lab	PHYS 201	5

The College of Engineering only accepts grades of "C" or higher for transfer courses

Additional courses used in specific engineering degree programs at ISU

Iowa State	Engineering Major(s) Requiring Course (see abbreviation key below)	Cr	Iowa State Course Name	BHC	Cr
AGRON 1810	AE(LW)	3	Intro to Crop Science	AG 138 or 283	3,4
AGRON 1820	AE(LW,PM)	3	Intro to Soil Science	AG 131 or 282	4
BIOL 2110+	AE, BME	3	Principles of Biology I	BIOL 105+	5
BIOL 2120+	BSE, BME	3	Principles of Biology II	BIOL 106+	5
CE 2740	AerE, AE, BSE, CE, ConE, EnvE, IE, ME	3	Engineering Statics	GE 201	3
CHEM 1780+Lab	AE, BSE, BME, ChE,CE,EnvE,MatE	4	General Chemistry II and Lab	CHEM 102	4
CHEM 2310+Lab	BSE, BME, CE(Envr), EnvE	4	Elementary Organic Chemistry and Lab	CHEM 111	4
CHEM 3310+Lab	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHEM 203	5
CHEM 3320+Lab	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHEM 204	5
ECON 1010 or ECON 1020	ME, SE (also accepted as an elective by all other engineering majors)	3	Principles of Microeconomics (1010) or Principles of Macroeconomics (1020)	ECON 222 or ECON 221	3
EM 3240	AerE, AE, BSE, CE, ConE, EnvE, ME	3	Mechanics of Materials	GE 205	3
ENGR 1700	AE, BSE, CE, ConE, MatE, ME	3	Engineering Graphics & Intro to Design	GE 101	3
MATH 2070	EE, CprE	3	Matrices and Linear Algebra	MATH 230	3
MATH 2650	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MATH 226	5
MATH 2670	All	4	Differential Equations	MATH 235	3
ME 3450	AerE, AE(PM), CE, ME	3	Engineering Dynamics	GE 202	3
PHYS 2320+Lab	AerE,BME, ChE,ConE,EE,IE,MatE,ME	5	Classical Physics II and Lab	PHYS 202	5
SP CM 2120	AE,BSE,CE,EnvE,IE,ME,SE (also accepted as an elective by BME,ChE,CprE,CybE,EE,MatE)	3	Fundamentals of Public Speaking	SPEC 101	3

*BHC BIOL 105 AND BIOL 106 must both be completed in order to transfer as credit for ISU BIOL 2110 and BIOL 2120

Abbreviation key for majors listed above

AerE	Aerospace Engineering	ConE	Construction Engineering
AE	Agricultural Engineering	BE; EL; HH; MCH	Building Emphasis; Electrical Emphasis; Heavy/Highway; Mechanical Emphasis
LW;AP; PM	Land&Water Resources option; Animal Production Systems option; Power&Machinery option	CybE	Cyber Security Engineering
BSE	Biological Systems Engineering	EE	Electrical Engineering
BME	Biomedical Engineering	EnvE	Environmental Engineering
ChE	Chemical Engineering	IE	Industrial Engineering
CE	Civil Engineering	MatE	Materials Engineering
Envr	Environmental Specialization	ME	Mechanical Engineering
CprE	Computer Engineering	SE	Software Engineering

General Education: Social Science/Humanities (SS/H) Requirements

- Engineering degree programs require between 9 and 15 general education credits in social sciences and humanities (SS/H). The list below offers course options that are widely accepted by ISU engineering majors; however, each program has unique requirements—please confirm choices on an individual basis if you know your intended engineering major.
- Iowa State University requires each student to complete three credits of course work categorized as “U.S. Cultures and Communities” (indicated below with ¹); and three credits of course work categorized as “International Perspective” (indicated below with ²). These can be included within the SS/H requirements.

Social science/humanities (SS/H) courses widely accepted in ISU engineering degree programs				
Iowa State	Cr	Iowa State Course Name	BHC	Cr
ANTHRO 2010 ²	3	Intro to Cultural Anthropology	ANTH 102**	3
ECON 1010 / ECON 1020	3	Principles of Microeconomics / Macroeconomics	ECON 222 or 221	3
HD FS 2400 ¹	3	Literature for Children	ENG 240	3
HD FS 2760 ¹	3	Human Sexuality	PSYC 119	3
HIST 2010 ²	3	Intro to Western Civilization I	HIST 125	3
HIST 2020 ²	3	Intro to Western Civilization II	HIST 127	3
HIST 2210	3	Survey of U.S. History I	HIST 105	3
HIST 2220	3	Survey of U.S. History II	HIST 106	3
MUSIC 1020 ²	3	Intro to Music Listening	MUSC 113 or 154	3
PHIL 2010	3	Intro to Philosophy	PHIL 101	3
POL S 1110	3	Intro to American Government	POL S 122	3
PSYCH 1010	3	Intro to Psychology	PSYC 101	3
PSYCH 2300	3	Developmental Psychology	PSYC 262 or 200	3
PSYCH 2800	3	Social Psychology	PSYC 230	3
RELIG 2050 ²	3	World Religions	HIST 222**	3
SOC 1340	3	Intro to Sociology	SOC 101	3
SOC 2190	3	Sociology of Intimate Relationships	SOC 251	3
SOC 2350 ¹	3	Social Problems and American Values	SOC 102	3

**Also meets BHC’s non-western studies requirement

More information and resources

- Please use this transfer plan as a guide as you confirm course choices with an academic advisor in your major of interest.
- Additional transfer student resources are available at www.engineering.iastate.edu/transfer-students.
- Email questions to engineering@iastate.edu.

Sample Black Hawk course plan – Semester 1 and 2

BHC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 101	3	English/Composition I	ENGL 1500
MATH 124	4	Calculus I	MATH 1650
ANTH 102	3	Cultural Anthropology	ANTHRO 2010
CHEM 101	4	General Chemistry I	CHEM 1770 (or CHEM 1670)
	= 14 cr		

BHC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 102	3	English/Composition II	ENGL 2500
MATH 125	4	Calculus II	MATH 1660
GE 101	3	Engineering Graphics	ENGR 1700
PSYC 119	3	Human Sexuality	HD FS 2760
PHYS 201	5	Classical Physics I	PHYS 2310/2310L
	= 18 cr		