

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	Joliet	Cr
CHEM 1770 (or 1670)	4	General Chemistry I (for Engineers)	CHEM 101	5
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 170	5
MATH 1660	4	Calculus II	MATH 171	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	Joliet	Cr
AGRON 1810	AE(LW)	3	Intro to Crop Science	AGRI 105	4
AGRON 1820	AE(LW,PM)	3	Intro to Soil Science	AGRI 126	4
BIOL 2110*	AE, BME	3	Principles of Biology I	BIO 151	5
BIOL 2120*	BSE, BME	3	Principles of Biology II	BIO 152	5
CE 2740	AerE, AE, BSE, CE, ConE, EnvE, IE, ME	3	Engineering Statics	EGR 201	3
CHEM 1780+Lab	AE, BSE, BME, ChE, CE, EnvE, MatE	4	General Chemistry II and Lab	CHEM 102	5
CHEM 2310+Lab	BSE, BME, CE(Envr), EnvE	4	Elementary Organic Chemistry and Lab	CHEM 108	4
CHEM 3310+Lab	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHEM 209	5
CHEM 3320+Lab	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHEM 210	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 104 or ECON 103	3
MATH 2650	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MATH 172	4
MATH 2670	All	4	Differential Equations	MATH 220	3
ME 3450	AerE, AE(PM), CE, ME	3	Engineering Dynamics	EGR 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	COMM 101	3

*JJC BIO 151 & BIO 152 must both be completed in order to transfer as credit for ISU BIOL 2110 and BIOL 2120

Abbreviation key for majors listed above			
Abbreviation	Major	Abbreviation	Major
AerE	Aerospace Engineering	ConE	Construction Engineering
AE	Agricultural Engineering	BE; EL;	Building Emphasis; Electrical Emphasis;
LW;AP;	Land&Water Resources option; Animal Production	HH; MCH	Heavy/Highway; Mechanical Emphasis
PM	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	Joliet	Cr
ANTHRO 2010 ²	3	Intro to Cultural Anthropology	ANTH 275	3
ECON 1010 / ECON 1020	3	Principles of Microeconomics / Macroeconomics	ECON 104 or 103	3
HD FS 2400 ¹	3	Literature for Children	ENG 109	3
HD FS 2760 ¹	3	Human Sexuality	SOC 293	3
HIST 2010 ²	3	Intro to Western Civilization I	HIST 105 or 107	3
HIST 2020 ²	3	Intro to Western Civilization II	HIST 106 or 108	3
HIST 2210	3	Survey of U.S. History I	HIST 103	3
HIST 2220	3	Survey of U.S. History II	HIST 104	3
PHIL 2010	3	Intro to Philosophy	PHIL 101	3
POL S 1110	3	Intro to American Government	PSCI 101	3
POL S 1250 ²	3	Democracy and Dictatorship: Intro to Comparative Politics	PSCI 103	3
PSYCH 1010	3	Intro to Psychology	PSYC 101	3
PSYCH 2300	3	Developmental Psychology	PSYC 215	3
PSYCH 2800	3	Social Psychology	PSYC 208	3
RELIG 2050 ²	3	World Religions	SOC 240	3
SOC 1340	3	Intro to Sociology	SOC 101	3
SOC 2350 ¹	3	Social Problems and American Values	SOC 280	3

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 Joliet Junior College course plan – Year One

(Shown as an example only – please personalize when working with your academic advisor.)

SEMESTER 1

Joliet Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 101	3	English/Composition I	ENGL 1500
MATH 170	5	Calculus I	MATH 1650
HIST 105	3	Western Civilization I	HIST 2010 ²
CHEM 101	5	General Chemistry I	CHEM 1770 (or CHEM 1670)
	= 16 cr		

SEMESTER 2

Joliet Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 102	3	English/Composition II	ENGL 2500
MATH 171	4	Calculus II	MATH 1660
PHYS 201	5	Classical Physics I	PHYS 2310/2310L
ECON 104	3	Microeconomics	ECON 1010
	= 15 cr		