Courses used in all engineering degree programs at ISU >> focus on these courses first <<					
Iowa State	Cr	Iowa State Course Name	ICC	Cr	
CHEM 1770 (or 1670)	4	General Chemistry I (for Engineers)	CHEM 130	4	
ENGL 1500	3	Critical Thinking and Communication	ENGL 110	3	
ENGL 2500	3	WOVE Composition	ENGL 111	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 222	5	
MATH 1660	4	Calculus II	MATH 223	4	
PHYS 2310/2310L*	5	Classical Physics I and Lab	PHYS 211	4	

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	ICC	Cr	
AGRON 1820	AE(LW,VS)	3	Intro to Soil Science	AGRI 112	3	
BIOL 2110+	AE, BME	3	Principles of Biology I	BIOL 160	4	
BIOL 2120+	BSE, BME	3	Principles of Biology II	BIOL 161	4	
CE 2740	AerE, AE, BSE, CE, ConE, EnvE, IE, ME	3	Engineering Statics	ENGR 251	3	
CHEM 1780+Lab	AE, BSE, BME, ChE, CE, EnvE, MatE	4	General Chemistry II and Lab	CHEM 132	4	
CHEM 3310+Lab	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHEM 220	5	
CHEM 3320+Lab	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHEM 230	4	
ECON 1010 or ECON 1020	ME, SE (also accepted as an elective by all other engineering majors)	3	Principles of Microeconomics or Principles of Macroeconomics	ECON 111 or ECON 110	3	
MATH 2650	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MATH 224	4	
MATH 2670	All	4	Differential Equations	MATH 250	3	
ME 3450	AerE, AE(VS), CE, ME	3	Engineering Dynamics	ENGR 252	3	
PHYS 2320+Lab*	AerE,BME,ChE,ConE,EE,IE,MatE,ME	5	Classical Physics II and Lab	PHYS 212	4	
SP CM 2120	AE,BSE,CE,EnvE,IE,ME, SE (or an elective by AerE,BME,ChE,CprE,CybE,EE,MatE)	3	Fundamentals of Public Speaking	COMM 212	3	

<sup>+</sup>ICC BIOL 160 and BIOL 161 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	нн; мсн	Heavy/Highway; Mechanical Emphasis		
VS	Systems option; Vehicle Systems 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 <sup>1</sup>); and three credits of course work categorized as "International Perspective" (indicated below with <sup>2</sup>). 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	ICC	Cr
ANTHRO 2010 <sup>2</sup>	3	Intro to Cultural Anthropology	SOC 213	3
ECON 1010 / ECON 1020	3	Principles of Microeconomics / Macroeconomics	ECON 111 or 110	3
HD FS 2400 <sup>1</sup>	3	Literature for Children	CHILD 231	3
HD FS 2760 <sup>1</sup>	3	Human Sexuality	PSY 118	3
HIST 2010 <sup>2</sup>	3	Intro to Western Civilization I	HIST 111 or 117	3
HIST 2020 <sup>2</sup>	3	Intro to Western Civilization II	HIST 112 or 118	3
HIST 2210	3	Survey of U.S. History I	HIST 201	3
HIST 2220	3	Survey of U.S. History II	HIST 202	3
MUSIC 1020 <sup>2</sup>	3	Intro to Music Listening	MUS 150	3
PHIL 2010	3	Intro to Philosophy	PHIL 110	3
POL S 1110	3	Intro to American Government	POLSC 115	3
POL S 1250 <sup>2</sup>	3	Democracy and Dictatorship: Intro to Comparative Politics	POLSC 124	3
POL S 1210 <sup>2</sup>	3	Intro to International Politics	POLSC 122	3
PSYCH 1010	3	Intro to Psychology	PSY 110	3
PSYCH 2300	3	Developmental Psychology	PSY 202	3
PSYCH 2800	3	Social Psychology	SOC 218 or PSY 210	3
RELIG 2050 <sup>2</sup>	3	World Religions	PHIL 112	3
SOC 1340	3	Intro to Sociology	SOC 110	3
SOC 2190	3	Sociology of Intimate Relationships	SOC 120	3
SOC 2350 <sup>1</sup>	3	Social Problems and American Values SOC 114		3
SOC 2410	3	Youth and Crime	CRJ 118	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 <a href="www.engineering.iastate.edu/transfer-students">www.engineering.iastate.edu/transfer-students</a>.
- Email guestions to engineering@iastate.edu

## Sample Illinois Central College course plan – Year One SEMESTER 1

ICC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENGL 110	3	English/Composition I	ENGL 1500
MATH 222	5	Calculus I	MATH 1650
CHEM 130	4	General Chemistry I	CHEM 1770 (or CHEM 1670)
HIST 117	3	Western Civ I	HIST 2010
	= 15 cr		

## **SEMESTER 2**

ICC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENGL 111	3	English/Composition II	ENGL 2500
MATH 223	4	Calculus II	MATH 1660
PHYS 211	4	Classical Physics I	PHYS 2310/2310L
ECON 111	3	Microeconomics	ECON 1010
	= 14 cr		