

IOWA STATE UNIVERSITY

College of Engineering

Illinois Central College Transfer Plan

Iowa State University College of Engineering Requirements

- Courses must be completed with a grade of “C” or better in order to be considered for transfer credit into the College of Engineering.
- Students not adequately prepared for success in Calculus I may need to take courses in addition to those listed below. Some students may first need to successfully complete college algebra (MATH 140; ICC MATH 115) and/or college trigonometry/prep for calculus (MATH 143; ICC MATH 120 or 165).
- The College of Engineering requires two years of a single foreign language in high school or the equivalent in college (typically two semesters).

Courses required in all engineering degree programs at ISU				
>> focus on these courses first <<				
Iowa State	Cr	Iowa State Course Name	ICC	Cr
CHEM 177 (or 167)	4	General Chemistry I (for Engineers)	CHEM 130	4
ENGL 150	3	Critical Thinking and Communication	ENGL 110	3
ENGL 250	3	WOVE Composition	ENGL 111	3
ENGR 101	R	Engineering Orientation	n/a	
ENGR 160	3	Engineering Problems	n/a	
LIB 160	1	Information Literacy	n/a	
MATH 165	4	Calculus I	MATH 222	5
MATH 166	4	Calculus II	MATH 223	4
PHYS 221 (or 231/231L)*	5	Classical Physics I and Lab	PHYS 211 & 212	(5)*

Additional courses required 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 182	AE(LW,PM)	3	Intro to Soil Science	AGRI 112	3
BIOL 211 ⁺	AE, CE(Envr)	3	Principles of Biology I	BIOL 160	4
BIOL 212 ⁺	BSE	3	Principles of Biology II	BIOL 161	4
CE 274	All except ChE,CprE,CybE,EE,MatE,SE	3	Engineering Statics	ENGR 251	3
CHEM 178/178L	ChE,CE,EnvE,MatE (possibly AE,BSE)	4	General Chemistry II and Lab	CHEM 132	4
CHEM 331/333L	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHEM 220	5
CHEM 332/334L	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHEM 230	4
ECON 101 or ECON 102	ME, SE (also accepted as an elective by all other engineering majors)	3	Principles of Microeconomics (101) or Principles of Macroeconomics (102)	ECON 111 or ECON 110	3
MATH 265	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MATH 224	4
MATH 267 or 266	All	4	Differential Equations	MATH 250	3
ME 345	AerE, AE(PM), CE, ME	3	Engineering Dynamics	ENGR 252	3
PHYS 232/232L*	AerE,ChE,CprE,ConE,EE,IE,MatE,ME	5	Classical Physics II and Lab	PHYS 212&213	(5)*
SP CM 212	CE,EnvE,IE,SE (also accepted as an elective by AE,BSE,ChE,CprE,CybE,EE,MatE,ME)	3	Fundamentals of Public Speaking	COMM 212	3

*When ICC PHYS 211, PHYS 212, and PHYS 213 are all taken the courses will transfer as ISU PHYS 231/231L (5) and PHYS 232/232L (5)
⁺ICC BIOL 160 and BIOL 161 must both be completed in order to transfer as credit for ISU BIOL 211 and BIOL 212

Abbreviation key			
Abbreviation	Major	Abbreviation	Major
AerE	Aerospace Engineering	CprE	Computer Engineering
AE <i>LW; AP; PM</i>	Agricultural Engineering Land&Water Resources option; Animal Production Systems option; Power&Machinery option	ConE <i>BE; EL; HH; MCH</i>	Construction Engineering Building Emphasis; Electrical Emphasis; Heavy/Highway; Mechanical Emphasis
BSE <i>BE; FE; BR; Op</i>	Biological Systems Engineering Bioenvironmental option; Food Engineering option; Biorenewable Resource option; Open option	CybE	Cyber Security Engineering
ChE	Chemical Engineering	EE	Electrical Engineering
CE	Civil Engineering	EnvE	Environmental Engineering
<i>Envr</i>	Environmental Specialization	IE	Industrial Engineering
		MatE	Materials Engineering
		ME	Mechanical 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 “US Diversity” (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	ICC	Cr
ANTHRO 201 ²	3	Intro to Cultural Anthropology	SOC 213	3
ECON 101 or ECON 102	3	Principles of Microeconomics or Macroeconomics	ECON 111 or 110	3
HD FS 240 ¹	3	Literature for Children	CHILD 231	3
HD FS 276 ¹	3	Human Sexuality	PSY 118	3
HIST 201 ²	3	Intro to Western Civilization I	HIST 117	3
HIST 202 ²	3	Intro to Western Civilization II	HIST 118	3
HIST 221	3	Survey of U.S. History I	HIST 201	3
HIST 222	3	Survey of U.S. History II	HIST 202	3
MUSIC 102 ²	3	Intro to Music Listening	MUS 150	3
PHIL 201	3	Intro to Philosophy	PHIL 110	3
POL S 215	3	Intro to American Government	POLSC 115	3
POL S 241 ²	3	Democracy and Dictatorship: Intro to Comparative Politics	POLSC 124	3
POL S 251 ²	3	Intro to International Politics	POLSC 122	3
PSYCH 101	3	Intro to Psychology	PSY 110	3
PSYCH 230	3	Developmental Psychology	PSY 202	3
PSYCH 280	3	Social Psychology	SOC 218 or PSY 210	3
RELIG 205 ²	3	World Religions	PHIL 112	3
SOC 134	3	Intro to Sociology	SOC 110	3
SOC 219	3	Sociology of Intimate Relationships	SOC 120	3
SOC 235 ¹	3	Social Problems and American Values	SOC 114	3
SOC 241	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 www.engineering.iastate.edu/transfer.
- Email questions to enrapp@iastate.edu.

Sample Illinois Central College course plan – Year One

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

SEMESTER 1

ICC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENGL 110	3	English/Composition I	ENGL 150
MATH 222	5	Calculus I	MATH 165
PHYS 211	4	Classical Physics I	PHYS 221 (aka PHYS 231/231L)
PHYS 213	2		
	= 14 cr		

SEMESTER 2

ICC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENGL 111	3	English/Composition II	ENGL 250
MATH 223	4	Calculus II	MATH 166
PHYS 212	4	Classical Physics II	PHYS 232/232L
ECON 111	3	Microeconomics	ECON 101
	= 14 cr		

SUMMER 1

ICC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
CHEM 130	4	General Chemistry I	CHEM 177/177L
	= 4 cr		