

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	Waubonsee	Cr
CHEM 1770 (or 1670)	4	General Chemistry I (for Engineers)	CHM 121	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	MTH 131	4
MATH 1660	4	Calculus II	MTH 132	4
PHYS 2310/2310L	5	Classical Physics I and Lab	PHY 221 & 223 [^]	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	Waubonsee	Cr
BIOL 2110 ⁺	AE, BME	3	Principles of Biology I	BIO 120*	4
BIOL 2120 ⁺	BSE, BME	3	Principles of Biology II	BIO 122*	4
CE 2740	AerE, AE, BSE, CE, ConE, EnvE, IE, ME	3	Engineering Statics	EGR 220	3
CHEM 1780+Lab	AE, BSE, BME, ChE, CE, EnvE, MatE	4	General Chemistry II and Lab	CHM 122	4
CHEM 3310+Lab	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHM 231	4
CHEM 3320+Lab	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHM 232	4
ECON 1010 or ECON 1020	ME, SE (also accepted as an elective by all other engineering majors)	3	Principles of Microeconomics (1010) or Macroeconomics (1020)	ECN 201 ECN 202	3
MATH 2650	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MTH 233	4
MATH 2670	All	4	Differential Equations	MTH 240	3
ME 1700	ME	3	Engineering Graphics & Intro Design	EGR 101	3
ME 3450	AerE, AE(PM), CE, ME	3	Engineering Dynamics	EGR 230	3
PHYS 2320+Lab	AerE, BME, ChE, ConE, EE, IE, MatE, ME	5	Classical Physics II and Lab	PHY 222	5
SP CM 2120	AE, BSE, CE, EnvE, IE, ME, SE (also accepted as elective by ME, ChE, CprE, CybE, EE, MatE)	3	Fundamentals of Public Speaking	COM 200	3

*WCC BIO 120 and BIO 122 must both be completed in order to transfer as credit for ISU BIOL 2110 and BIOL 2120

[^]When both WCC PHY 221 and 223 are completed credit will transfer to ISU as PHYS 2310+Lab (5 cr) and 4 additional general PHYS credits

Abbreviation key for majors listed above			
Abbreviation	Major	Abbreviation	Major
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	Waubonsee	Cr
ANTHRO 2010 ²	3	Intro to Cultural Anthropology	ANT 101	3
ECON 1010 / ECON 1020	3	Principles of Microeconomics / Macroeconomics	ECN 122 or 201 or ECN 121 or 202	3
HD FS 2400 ¹	3	Literature for Children	ENG 228	3
HIST 2010 ²	3	Intro to Western Civilization I	HIS 101 and 111	6
HIST 2020 ²	3	Intro to Western Civilization II	HIS 102 and 112	6
HIST 2210	3	Survey of U.S. History I	HIS 121	3
HIST 2220	3	Survey of U.S. History II	HIS 122	3
MUSIC 1020 ²	3	Intro to Music Listening	MUS 100	3
PHIL 2010	3	Intro to Philosophy	PHL 100	3
POL S 1110	3	Intro to American Government	PSC 100	3
POL S 1250 ²	3	Democracy and Dictatorship: Intro to Comparative Politics	PSC 220	3
POL S 1210 ²	3	Intro to International Politics	PSC 260	3
PSYCH 1010	3	Intro to Psychology	PSY 100	3
PSYCH 2800	3	Social Psychology	PSY 235	3
RELIG 2050 ²	3	World Religions	PHL 120 or RLG 120	3
SOC 1340	3	Intro to Sociology	SOC 100	3
SOC 2350 ¹	3	Social Problems and American Values	SOC 210	3
WGS 2010 ¹	3	Intro to Women’s and Gender Studies	IDS 110	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 WCC course plan – Year One

SEMESTER 1

WCC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 101	3	English/Composition I	ENGL 1500
MTH 131	4	Calculus I	MATH 1650
MUS 100	3	Music Listening	MUSIC 1020
CHM 121	4	General Chemistry I	CHEM 1770 (or CHEM 1670)
	= 14 cr		

SEMESTER 2

WCC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 102	3	English/Composition II	ENGL 2500
MTH 132	4	Calculus II	MATH 1660
PHY 221 [^]	5 [^]	Classical Physics I	PHYS 2310/2310L [^]
ECN 201	3	Microeconomics	ECON 1010
	= 15 cr		