

Courses used in all engineering degree programs at ISU >> focus on these courses first <<				
Iowa State	Cr	Iowa State Course Name	MCC	Cr
CHEM 1770 (or 1670)	4	General Chemistry I (for Engineers)	CHM 165	5
ENGL 1500	3	Critical Thinking and Communication	ENG 151	3
ENGL 2500	3	WOVE Composition	ENG 152	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	MAT 175	5
MATH 1660	4	Calculus II	MAT 245	5
PHYS 2310/2310L	5	Classical Physics I and Lab	PHY 291&292*	8*

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	MCC	Cr
AGRON 1820	AE(LW,PM)	3	Intro to Soil Science	HRT 105	4
BIOL 2110+	AE, BME	3	Principles of Biology I	BIO 157	4
BIOL 2120+	BSE, BME	3	Principles of Biology II	BIO 158	4
CE 2740	AerE, AE, BSE, CE, ConE, EnvE, IE, ME	3	Engineering Statics	EGR 251	3
CHEM 1780+Lab	AE, BSE, BME,ChE,CE,EnvE,MatE	4	General Chemistry II and Lab	CHM 166	5
CHEM 3310+Lab	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHM 265	5
CHEM 3320+Lab	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHM 266	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)	ECO 251 or ECO 252	3
EE 2010	ConE(EL), CprE, EE	4	Electric Circuits	EGR 260	4
MATH 2070	EE, CprE	3	Matrices and Linear Algebra	MAT 253	4
MATH 2650	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MAT 255	3
MATH 2670	All	4	Differential Equations	MAT 260	3
MICRO 2010+Lab	AE(LW), CE(Envr), EnvE	3	Intro to Microbiology and Lab	BIO 255	4
PHYS 2320+Lab	AerE,BME,ChE,ConE,EE,IE,MatE,ME	5	Classical Physics II and Lab	PHY 292&293	6*
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	SPE 151	3

*When MCC PHY 291, PHY 292 and PHY 293 are all taken the courses will transfer as credit for ISU PHYS 2310/2310L (6) and PHYS 2320/2320L (6)
*MCC BIO 157 & BIO 158 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 LW;AP; PM	Agricultural Engineering	BE; EL; HH; MCH	Building Emphasis; Electrical Emphasis; Heavy/Highway; Mechanical Emphasis
	Land&Water Resources option; Animal Production Systems option; Power&Machinery option		CybE
BSE	Biological Systems Engineering	EE	Electrical Engineering
BME	Biomedical Engineering	EnvE	Environmental Engineering
ChE	Chemical Engineering	IE	Industrial Engineering
CE Envr	Civil Engineering	MatE	Materials Engineering
	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	MCC	Cr
ANTHRO 2010 ²	3	Intro to Cultural Anthropology	ANT 170	3
ECON 1010 / ECON 1020	3	Principles of Microeconomics / Macroeconomics	ECO 251 or 252	3
HD FS 2400 ¹	3	Literature for Children	ENG 277 or EDU 252	3
HD FS 2760 ¹	3	Human Sexuality	PSY 175	3
HIST 2010 ²	3	Intro to Western Civilization I	HIS 131	3
HIST 2020 ²	3	Intro to Western Civilization II	HIS 132	3
HIST 2210	3	Survey of U.S. History I	HIS 170	3
HIST 2220	3	Survey of U.S. History II	HIS 172	3
MUSIC 1020 ²	3	Intro to Music Listening	MUS 151	3
PHIL 2010	3	Intro to Philosophy	PHI 151	3
POL S 1110	3	Intro to American Government	PLT 151	3
POL S 1250 ²	3	Democracy and Dictatorship: Intro to Comparative Politics	PLT 255	3
POL S 1210 ²	3	Intro to International Politics	PLT 251	3
PSYCH 1010	3	Intro to Psychology	PSY 151	3
PSYCH 2300	3	Developmental Psychology	PSY 250	3
PSYCH 2800	3	Social Psychology	PSY 265	3
RELIG 2050 ²	3	World Religions	PHI 261	3
SOC 1340	3	Intro to Sociology	SOC 151	3
SOC 2190	3	Sociology of Intimate Relationships	SOC 175	3
SOC 2350 ¹	3	Social Problems and American Values	SOC 251	3
WGS 2010 ¹	3	Intro to Women’s and Gender Studies	PHI 158	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 MCC course plan – Year One

SEMESTER 1

MCC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 151	3	English/Composition I	ENGL 1500
MAT 175	5	Calculus I	MATH 1650
HIS 131	3	Western Civilization	HIST 2010 ²
CHM 165	5	General Chemistry I	CHEM 1770 (or CHEM 1670)
	= 16 cr		

SEMESTER 2

MCC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 152	3	English/Composition II	ENGL 2500
MAT 245	5	Calculus II	MATH 1660
PHY 291*	(4)*	Classical Physics I	PHYS 2310/2310L
ECO 251	3	Microeconomics	ECON 1010
	= 15 cr		