

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	CLC	Cr
CHEM 1770 (or 1670)	4	General Chemistry I (for Engineers)	CHM 121	5
ENGL 1500	3	Critical Thinking and Communication	ENG 121	3
ENGL 2500	3	WOVE Composition	ENG 122	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 145	5
MATH 1660	4	Calculus II	MTH 146	4
PHYS 2310/2310L	5	Classical Physics I and Lab	PHY 123 & 124	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	CLC	Cr
BIOL 2110+	AE, BME	3	Principles of Biology I	BIO 161	4
BIOL 2120+	BSE, BME	3	Principles of Biology II	BIO 162	4
CE 2740	AerE, AE, BSE, CE, ConE, EnvE, IE, ME	3	Engineering Statics	EGR 125	3
CHEM 1780+Lab	AE, BSE, BME, ChE, CE, EnvE, MatE	4	General Chemistry II and Lab	CHM 123	5
CHEM 2310+Lab	BSE, BME, CE(Envr), EnvE	4	Elementary Organic Chemistry & Lab	CHM 125	5
CHEM 3310+Lab	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHM 222	5
CHEM 3320+Lab	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHM 223	5
ECON 1010 or ECON 1020	ME, SE (also accepted as an elective by all other engineering majors)	3	Principles of Microeconomics (1010) Principles of Macroeconomics (1020)	ECO 222 or ECO 221	3
EM 3240	AerE, AE, BSE, CE, ConE, EnvE, ME	3	Mechanics of Materials	EGR 222	3
MATH 2070	EE, CprE	3	Matrices and Linear Algebra	MTH 225	3
MATH 2650	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MTH 246	5
MATH 2670	All	4	Differential Equations	MTH 227	3
ME 3450	AerE, AE(PM), CE, ME	3	Engineering Dynamics	EGR 225	3
MICRO 2010+Lab	AE(LW), CE(Envr), EnvE	3	Intro to Microbiology and Lab	BIO 246	4
PHYS 2320+Lab	AerE, BME, ChE, ConE, EE, IE, MatE, ME	5	Classical Physics II and Lab	PHY 124&221*	8
SP CM 2120	AE, BSE, CE, EnvE, IE, ME, SE (also accepted as elective by BME, ChE, CprE, CybE, EE, MatE)	3	Fundamentals of Public Speaking	CMM 121	3

\*When CLC PHY 123, PHY 124 and PHY 221 are all taken the courses will transfer as credit for ISU PHYS 2310/2310L (6) and PHYS 2320/2320L (6)

\*CLC BIO 161 & BIO 162 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

Last updated on 9/31/24 based on ISU's 2023-24 catalog and CLC's 2023-24 catalog. Degree requirements can change every year.

## 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	CLC	Cr
ANTHRO 2010 <sup>2</sup>	3	Intro to Cultural Anthropology	ANT 221	3
ECON 1010 / ECON 1020	3	Principles of Microeconomics / Macroeconomics	ECO 222 or 221	3
HD FS 2400 <sup>1</sup>	3	Literature for Children	ENG 249	3
HD FS 2760 <sup>1</sup>	3	Human Sexuality	PSY 228	3
HIST 2010 <sup>2</sup>	3	Intro to Western Civilization I	HST 121	3
HIST 2020 <sup>2</sup>	3	Intro to Western Civilization II	HST 122	3
HIST 2210	3	Survey of U.S. History I	HST 221	3
HIST 2220	3	Survey of U.S. History II	HST 222	3
MUSIC 1020 <sup>2</sup>	3	Intro to Music Listening	MUS 124	3
PHIL 2010	3	Intro to Philosophy	PHI 121	3
POL S 1110	3	Intro to American Government	PSC 121	3
POL S 1250 <sup>2</sup>	3	Democracy and Dictatorship: Intro to Comparative Politics	PSC 221	3
POL S 1210 <sup>2</sup>	3	Intro to International Politics	PSC 222	3
PSYCH 1010	3	Intro to Psychology	PSY 121	3
PSYCH 2300	3	Developmental Psychology	PSY 220 or 222	3
PSYCH 2800	3	Social Psychology	PSY 225	3
RELIG 2050 <sup>2</sup>	3	World Religions	PHI 126	3
SOC 1340	3	Intro to Sociology	SOC 121	3
SOC 2350 <sup>1</sup>	3	Social Problems and American Values	SOC 222	3
SOC 2410	3	Youth and Crime	CRJ 229	3
WGS 2010 <sup>1</sup>	3	Intro to Women’s and Gender Studies	GXS 121	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](http://www.engineering.iastate.edu/transfer-students).
- Email questions to [engineering@iastate.edu](mailto:engineering@iastate.edu).

### Sample CLC course plan – Year One

#### SEMESTER 1

CLC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 121	3	English/Composition I	ENGL 1500
MTH 145	5	Calculus I	MATH 1650
CHM 121	5	General Chemistry I	CHEM 1770 (or CHEM 1670)
HST 121	3	Western Civ I	HIST 2010
	= 16 cr		

#### SEMESTER 2

CLC Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENG 122	3	English/Composition II	ENGL 2500
MTH 146	4	Calculus II	MATH 1660
PHY 123	6	Classical Physics I	PHYS 2310/2310L
ECO 222	3	Microeconomics	ECON 1010
	= 16 cr		