

IOWA STATE UNIVERSITY

College of Engineering

College of DuPage 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 and/or college trigonometry/prep for calculus.
- The College of Engineering requires two years of a single foreign language in high school or the equivalent in college.
- Beginning Fall 2023, ISU is offering a new degree program, Biomedical Engineering. This program requires a separate application and certain first-year course requirements. If you have interest in this degree, please consult with engineering@iastate.edu

Courses required in all engineering degree programs at ISU >> focus on these courses first <<				
Iowa State	Cr	Iowa State Course Name	COD	Cr
CHEM 177 (or 167)	4	General Chemistry I (for Engineers)	CHEMI 1551	5
ENGL 150	3	Critical Thinking and Communication	ENGLI 1101	3
ENGL 250	3	WOVE Composition	ENGLI 1102	3
ENGR 101	R	Engineering Orientation	n/a	
ENGR 160*	3	Engineering Problems	n/a	
LIB 160	1	Information Literacy	EDUCA 1116	1
MATH 165	4	Calculus I	MATH 2231	5
MATH 166	4	Calculus II	MATH 2232	5
PHYS 231/231L	5	Classical Physics I and Lab	PHYSI 2111 & 2115	9

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	COD	Cr
BIOL 211 ⁺	AE	3	Principles of Biology I	BIOLO 1151	5
BIOL 212 ⁺	BSE	3	Principles of Biology II	BIOLO 1152	5
CE 274	All except ChE, CprE, CybE, EE, MatE, SE	3	Engineering Statics	ENGIN 2201	3
CHEM 178/178L	ChE, CE, EnvE, MatE (possibly AE, BSE)	4	General Chemistry II and Lab	CHEMI 1552	5
CHEM 331/333L	ChE (possibly BSE)	5	Organic Chemistry I and Lab	CHEMI 2551	5
CHEM 332/334L	ChE (possibly BSE)	5	Organic Chemistry II and Lab	CHEMI 2552	5
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)	ECONO 2202 or ECONO 2201	3
EM 324	AerE, AE, BSE, CE, ConE, EnvE, ME	3	Mechanics of Materials	ENGIN 2203	3
MATH 207	EE, CprE	3	Matrices and Linear Algebra	MATH 2245	4
MATH 265	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MATH 2233	4
MATH 267 or 266	All	4	Differential Equations	MATH 2270	4
ME 231	AerE, AE, BSE, ConE(MCH), EnvE, IE, ME	3	Engineering Thermodynamics I	ENGIN 2205	3
ME 345	AerE, AE(PM), CE, ME	3	Engineering Dynamics	ENGIN 2202	3
PHYS 232/232L	AerE, ChE, ConE, EE, IE, MatE, ME	5	Classical Physics II and Lab	PHYSI 2112	5
SP CM 212	AE, BSE, CE, EnvE, IE, ME, SE (also accepted as an elective by ChE, CprE, CybE, EE, MatE)	3	Fundamentals of Public Speaking	SPEEC 1100	3

*COD BIOL 1151 & BIOL 1152 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;</i> <i>PM</i>	Agricultural Engineering Land&Water Resources option; Animal Production Systems option; Power&Machinery option	ConE <i>BE; EL;</i> <i>HH; MCH</i>	Construction Engineering Building Emphasis; Electrical Emphasis; Heavy/Highway; Mechanical Emphasis
BSE <i>EC; FB;</i> <i>OP</i>	Biological Systems Engineering Ecological option; Food & Bioprocess 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	COD	Cr
ANTHRO 201 ²	3	Intro to Cultural Anthropology	ANTHR 1100	3
ECON 101 or ECON 102	3	Principles of Microeconomics or Macroeconomics	ECONO 2202 or 2201	3
HD FS 240 ¹	3	Literature for Children	EDUCA 1157	3
HD FS 276 ¹	3	Human Sexuality	PSYCH 1140	3
HIST 201 ²	3	Intro to Western Civilization I	HISTO 1110	3
HIST 202 ²	3	Intro to Western Civilization II	HISTO 1120	3
HIST 221	3	Survey of U.S. History I	HISTO 1130	3
HIST 222	3	Survey of U.S. History II	HISTO 1140	3
MUSIC 102 ²	3	Intro to Music Listening	MUSIC 1100	3
PHIL 201	3	Intro to Philosophy	PHILO 1100	3
POL S 111	3	Intro to American Government	POLS 1100	3
POL S 125 ²	3	Democracy and Dictatorship: Intro to Comparative Politics	POLS 2203	3
POL S 121 ²	3	Intro to International Politics	POLS 2220	3
PSYCH 101	3	Intro to Psychology	PSYCH 1100	3
PSYCH 230	3	Developmental Psychology	PSYCH 2237	3
PSYCH 280	3	Social Psychology	PSYCH 2240	3
RELIG 205 ²	3	World Religions	RELIG 1150	3
SOC 134	3	Intro to Sociology	SOCIO 1100	3
SOC 219	3	Sociology of Intimate Relationships	SOCIO 2220	3
SOC 235 ¹	3	Social Problems and American Values	SOCIO 2210	3
SOC 241	3	Youth and Crime	CRIMJ 2240	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.

Last updated on 7/24/23 based on course listings in the ISU 2022-23 catalog and the COD 2021-23 catalog.

Sample College of DuPage course plan – Year One

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

SEMESTER 1

COD Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENGLI 1101	3	English/Composition I	ENGL 150
MATH 2231	5	Calculus I	MATH 165
PHYSI 2111	5	Classical Physics I and Lab	PHYS 231 and 231L
PHYSI 2115	4		
	= 17 cr		

SEMESTER 2

COD Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
ENGLI 1102	3	English/Composition II	ENGL 250
MATH 2232	5	Calculus II	MATH 166
PHYSI 2112	5	Classical Physics II and Lab	PHYS 232 and 232L
ECONO 2202	3	Microeconomics	ECON 101
	= 16 cr		

SUMMER 1

COD Course Number	Credits	Course Name/Topic	Equivalent course at Iowa State
CHEMI 1551	5	General Chemistry I	CHEM 177 (or CHEM 167)
	= 5 cr		