

Black Hawk 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 (ISU MATH 140; BHC MATH 112) and/or college trigonometry/precalculus/prep for calculus (ISU MATH 143; BHC MATH 116 or 118).
- The College of Engineering requires two years of a single foreign language in high school or the equivalent in college (typically two semesters). Students without the foreign language requirement completed can still be accepted to transfer to Iowa State; however, it is often helpful to complete prior to transferring.

Courses required in ALL engineering degree programs at ISU (focus on these courses first)				
Iowa State	Cr	ISU Course Name	BHC	Cr
CHEM 177 or 167	4	General Chemistry	CHEM 101	4
ENGL 150	3	Critical Thinking and Communication	ENG 101	3
ENGL 250	3	WOVE Composition	ENG 102	3
ENGR 101	R	Engineering Orientation		
ENGR 160	3	Engineering Problems		
LIB 160	1	Information Literacy		
MATH 165	4	Calculus I	MATH 124	4
MATH 166	4	Calculus II	MATH 225	4
PHYS 221	5	Classical Physics I	PHYS 201	5

Additional courses required in specific engineering degree programs at ISU					
Iowa State	Engineering Major(s) Requiring Course (see abbreviation key)	Cr	ISU Course Name	BHC	Cr
AGRON 181	AE(LW)	3	Principles of Agronomy	AG 138 or 283	3 or 4
AGRON 182	AE(LW,PM)	3	Soil Science	AG 131 or 282	4
AN S 114	AE(AP)	2	Survey of Animal Industry	AG 141 or 285	4
BIOL 211+	AE, CE(Envr)	3	Principles of Biology I	BIOL 105+	5
BIOL 212+	BSE	3	Principles of Biology II	BIOL 106+	5
CHEM 178/178L	ChE,CE,MatE (& AE,BSE if 177 completed)	4	General Chemistry II & Lab	CHEM 102	4
CHEM 331/333L	BSE(BR,Op), ChE	5	Organic Chemistry I	CHEM 203	5
CHEM 332/334L	BSE(BR,Op), ChE	5	Organic Chemistry II	CHEM 204	5
ECON 101 or ECON 102	ConE, ME, SE (also accepted as an elective by all other engineering majors)	3	Intro to Microeconomics (101) or Intro to Macroeconomics (102)	ECON 222 or ECON 221	3
ENGR 170	AE, BSE, CE, ConE, ME	3	Engr. Graphics & Intro to Design	GE 101	3
EM 274/CE 274	All except ChE,CprE,CybE,EE,MatE,SE	3	Engineering Statics	GE 201	3
EM 324	AerE, AE, BSE, CE, ConE, MatE, ME	3	Mechanics of Materials	GE 205	3
ME 345	AerE, AE(PM), CE, ME	3	Dynamics	GE 202	3
MATH 207	EE	3	Linear Algebra	MATH 230	3
MATH 265	Required (or accepted as math elective) in all majors except AE(LW), BSE	4	Calculus III	MATH 226	5
MATH 267	All	4	Differential Equations w/Laplace	MATH 235	3
PHYS 222	All except AE, BSE, CE(Envr), CybE, SE	5	Classical Physics II	PHYS 202	5
SP CM 212	CE,IE,SE (also accepted as an elective by AE, BSE, ChE, CprE, EE, MatE, ME)	3	Public Speaking	SPEC 101	3

*BHC BIOL 105 and BIOL 106 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 Resources option; Open option	CybE	Cyber Security Engineering
ChE	Chemical Engineering	EE	Electrical Engineering
CE <i>Envr</i>	Civil Engineering Environmental Option	IE	Industrial Engineering
		MatE	Materials Engineering
		ME	Mechanical Engineering
		SE	Software Engineering

General Education: Social Science/Humanities (SS/H) Requirements

- There is no requirement that *any* SS/H courses be completed prior to transfer. If a student chooses to complete SS/H courses at BHC, we recommend you contact Iowa State directly to ensure your intended engineering major accepts the specific course.
- Engineering degree programs require between 12 and 15 general education credits in social sciences and humanities (SS/H). The list below offers course options that are 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 3 credits of course work categorized as “International Perspective” (indicated below with ²). These can be included within the 12-15 credits of SS/H requirements.

Social science/humanities (SS/H) courses accepted in ISU engineering degree programs				
Iowa State	Cr	ISU Course Name	BHC	Cr
ANTHRO 201 ²	3	Intro to Cultural Anthropology	ANTH 102**	3
ECON 101	3	Principles of Microeconomics	ECON 222	3
ECON 102	3	Principles of Macroeconomics	ECON 221	3
ENGL 201	3	Intro to Literature	ENG 190	3
HD FS 240 ¹	3	Literature for Children	ENG 240	3
HIST 201 ²	3	Intro to Western Civilization I	HIST 125	3
HIST 202 ²	3	Intro to Western Civilization II	HIST 127	3
HIST 221	3	Survey of U.S. History I	HIST 105	3
HIST 222	3	Survey of U.S. History II	HIST 106	3
MUSIC 102 ²	3	Intro to Music Listening	MUSC 154	3
RELIG 205 ²	3	Intro to World Religions	HIST 222**	3
PHIL 201	3	Intro to Philosophy	PHIL 101	3
POL S 215	3	Intro to American Government	POLS 122	3
PSYCH 101	3	Intro to Psychology	PSYC 101	3
PSYCH 230	3	Developmental Psychology	PSYC 200 or 262	3
PSYCH 280	3	Social Psychology	PSYC 230	3
SOC 134	3	Intro to Sociology	SOC 101	3
SOC 219	3	Sociology of Intimate Relationships	SOC 251	3
SOC 235 ¹	3	Social Problems and American Values	SOC 102	3

**Also meets BHC’s non-western studies requirement

More information and resources

- Please use this transfer plan as a guide as you confirm course choices with an academic adviser in your major of interest.
- Additional transfer student resources are available at www.engineering.iastate.edu/transfer.
- Email questions to Iowa State Engineering: engrapp@iastate.edu or BHC: ADVQC@bhc.edu.