



# COLLEGE OF ENGINEERING – TRANSFER GUIDE

## IOWA STATE UNIVERSITY

Course work completed at a regionally *accredited* college will transfer when it is approximately equivalent to required course work at U of I. Transfer courses must have a grade of "C-" or above to be applied toward degree. Please have an official transcript sent to: The University of Iowa, Department of Admissions, 107 Calvin Hall, Iowa City, IA 52242 when you have completed the course.

### CORE ENGINEERING CURRICULA AND EQUIVALENTS

The University of Iowa Course	UI Sem Hrs	Iowa State Equivalent	ISU Sem Hrs
RHET:1030 Rhetoric (4sh limit of rhetoric applies to degree)	4	Engl 150 Critical Thinking & Communication Engl 250 Written, Oral, Visual & Electrical Computation SpCm 212 Fundamentals of Public Speaking	3 3 3
CHEM:1110 Principles of Chemistry I	4	Chem 167 General Chemistry for Engineering Students <b>AND</b> Chem 167L General Chemistry for Engineers Lab	4 1
PHYS:1611 Introductory Physics I	4	Phys 221 Introduction to Classical Physics I	5
PHYS:1612 Introductory Physics II	4	Phys 222 Introduction to Classical Physics II	5
MATH:1550 Eng. Math I – Single Variable Calculus***	4	Math 165 Calculus I <b>AND</b> Math 166 Calculus II	4 4
MATH:1560 Eng. Math II – Multiple Variable Calculus***	4	Math 265 Calculus III	4
MATH:2550 Eng. Math III – Matrix Algebra	2	Math 207 Matrices & Linear Algebra <b>OR</b> Math 510 Linear Algebra	3 3
MATH:2560 Eng. Math IV – Differential Equations	3	Math 266 Elementary Differential Equations <b>OR</b> Math 267 Elementary Differential Equations with LaPlace Trans	4 4
ENGR:1100 Engineering Problem Solving I	3	Aer E 160 Aerospace Engineering Problems with Computer Lab	3
ENGR:1300 Engineering Problem Solving II	3	Engr 160 Engineering Problems with Computer Lab <b>OR</b> E E 185 Introduction E E & Problem Solving <b>OR</b> Cpr E 185 Introduction to Problem Solving I	3 3 3
ENGR:2110 Engineering Fundamentals I - Statics	2	E M 274 Statics of Engineering	3
ENGR:2120 Engineering Fundamentals II – Electrical Circuits	3	E E 442 Introduction to Circuits and Instrumentals	2
ENGR:2130 Engineering Fundamentals III - Thermodynamics	3	M E 231 Thermodynamics I	3

\*\*\*Students must have completed Calculus I, II, and III to receive credit for Engineering Math II.

The following courses **may be required** depending upon the major selected: *Biomedical* and *chemical* majors require a year of college-level chemistry. *Industrial* engineering majors require an introductory psychology course.

CHEM:2210 Organic Chemistry I	3	Chem 331 Organic Chemistry I	3
CHEM:2220 Organic Chemistry II	3	Chem 332 Organic Chemistry II	3
CHEM:2410 Organic Chemistry Lab	3	Chem 331L Laboratory in Organic Chemistry* Chem 332L Laboratory in Organic Chemistry* (short 1sh for CHEM:2410)	1 1 1
ENGR:2710 Dynamics	3	E M 345 Dynamics	3
ENGR:2750 Mechanics of Deformable Bodies	3	Mat E 273 Mechanics of Materials	3
ENGR:2720 Materials Science	3	E M 324 Principles of Material Science & Engineering	3

### GENERAL EDUCATION COMPONENT (GEC)

Students must earn at least 15 semester hours of approved course credit. The requirements are the following: Complete 3 s.h. of an Engineering Be Creative class, 3 s.h. from one of the approved CLAS GEC categories, and 9 s.h of Approved Course Subjects. For a list of all approved courses go to <https://www.engineering.uiowa.edu/general-education-component-starting-summer-2015>.

### TRANSFER ADMISSIONS REQUIREMENTS

The College of Engineering is looking for an overall GPA that indicates likely success in engineering. To transfer into the College of Engineering, students must have demonstrated success in math, science and engineering courses (grades of A's and B's in these foundation subjects with no grade lower than a C). At a minimum, transfer students must have completed Calculus I and the equivalent of either Iowa's Principles of Chemistry I or Introductory Physics I (e.g. the first semester of Chemistry designed for majors or the first semester of Calculus-based Physics). Students may transfer into engineering upon the successful completion of the Calculus and Chemistry or Physics; it is not necessary to have 24 hours earned.

### ADDITIONAL INFORMATION

The University of Iowa College of Engineering  
2134 Seamans Center Iowa City, IA 52242  
Phone: (319) 335-5763 or (800) 553-4692  
Email: [engineering-admissions@uiowa.edu](mailto:engineering-admissions@uiowa.edu)

Iowa State University  
Engineering Admissions  
314 Alumni Hall  
Ames, IA 50011