

University of Illinois at Urbana-Champaign (UIUC)

Engineering

McHenry County College (MCC) Transfer Guide

(2016-2017 catalog)

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Transfer guides are produced as a service to MCC students. Every effort is made to maintain up-to-date and accurate information; however, this information is subject to change. Such changes take precedence over the information on this guide. Students should work with an MCC advisor and check with the four-year school as soon as the transfer decision is made. Responsibility for complying with all applicable requirements ultimately rests with the student.

Transfer Options

- **Illinois Articulation Initiative General Education Core Curriculum (IAI GECC)** - Completing the IAI GECC prior to transferring is not recommended. Students should focus on completing prerequisite math and science courses and some courses that fulfill UIUC general education requirements. Course recommendations on this guide provide guidance to UIUC's general education requirements that can be completed at MCC.
- **Associate in Engineering Science (AES) Degree** - Course recommendations on the following pages of this guide apply to MCC's AES degree and to specific engineering majors at UIUC. Engineering baccalaureate programs are highly structured and require extensive, sequential math and science courses at freshman and sophomore levels; some general education courses are postponed to junior and senior years. The AES degree allows students to take courses in this pattern. (The AES degree does not include the complete IAI GECC.)

Transfer Application

Application filing periods: **Spring**, August 24 – Oct 15; **Fall**, August 24 – March 1; priority deadline is February 1. (Application after Jan 1 is recommended.) Applicants can indicate a second choice major on the application for admission and in the essay, in the case of not being admitted to the first choice.

Transfer Admission

- **Junior Level Transfer** – (60 transferable credits) Admission is based on college performance and application essay. **Following prerequisites must be completed:** ENG151 & 152; MAT175, 245, & 255; PHY291, 292, & 293; CHM165 & 166. Completing other courses required by desired program will enhance admissibility. **Refer to UIUC's Transfer Handbook for major-specific course recommendations**
- **Sophomore Level Transfer** – (30-59 transferable semester hours) Admission mainly is based on grades in college, courses in college, high school academics, ACT or SAT scores and essays. **Sophomore transfer admission preference given to those who would have been admitted as freshmen.** The following are highly requested majors; sophomores are not being admitted at this time: Aerospace, Computer Science, and Mechanical. **Following prerequisite courses must be completed:** ENG151 & 152; MAT175 & 245; PHY291; CHM165 & 166.
- **Selective Majors** – Admission is competitive for Aerospace, Civil, Computer Science, Computer Engineering, Electrical, Industrial, and Mechanical majors. For these programs, applications are reviewed together after the application deadline has passed. Admission is based on quality of applicant pool.
- **Minimum Transfer GPA** is 3.0 in the required technical subjects (chemistry, math, and physics) and for minimum cumulative GPA of all coursework completed. Competitive standards for admission may be higher.
- **Calculation for Admission GPA** – UIUC uses all grades (including repeated) from transferable courses when calculating admission GPA. There is no grade forgiveness policy.
- **Foreign Language Requirement** – **For graduation**, students are required to complete three years of the same foreign language in high school or three semesters in college (Chemical and Biomolecular are in the College of Liberal Arts & Sciences and require four years in high school or four semesters in college). **It is strongly recommended that transfer applicants complete the foreign language graduation requirement before transfer.**

Additional Information

- At least 60 hours of the bachelor's degree requirements must be UIUC credit. Generally, UIUC engineering programs require a minimum of 128 credits.
- Effective Fall 2012, MCC's MAT255 articulates to UIUC's MATH241. For students who completed MCC's MAT255 prior to Fall 2012, a 2-credit online bridge calculus course must be completed through UIUC in order to satisfy UIUC's calculus sequence. (MTH292, Vector Calculus Supplement)

Course recommendations for AES degree completion and for specific engineering majors at UIUC (recommended sequencing – see last page of guide) Please refer to the following UIUC transfer tools:

- [Transfer Handbook](#) – course sequence recommendations
- [Transfer Requirements](#) – GPA and prerequisite requirements
- [Community College Transfer Articulation Guide](#) – guide specific to MCC
- [Course equivalency guide](#) – individual course equivalencies and degree audit feature

Associate in Engineering Science Degree Requirements

General Core and Support Courses

(Refer to MCC's catalog for approved IAI courses.) **Courses in bold print should be completed prior to transfer.**

Communications (6 credits)

- _____ **ENG151 Composition I, C or better (3 cr)**
 _____ **ENG152 Composition II, C or better (3 cr)**

Humanities & Fine Arts (3 credits)

- _____ IAI Humanities or Fine Arts (3 cr)

Social & Behavioral Sciences (3 credits)

- _____ IAI Social & Behavioral Sciences
 (ECO252 for Agricultural/Biological; ECO251 or 252 for Civil, Industrial, and Mechanical)

Non-Western Cultures or Minority Cultures within the United States

Select 1 course from following (3 credits):

- _____ ANT151; ART155, 165; ENG 276; GEG203; HIS165; MUS153;
 PHI160, 261

Mathematics (17 credits)

- _____ **MAT175 Calculus w/Analytic Geo I (5 cr)**
 _____ **MAT245 Calculus w/Analytic Geo II (5 cr)**
 _____ **MAT255 Calculus w/Analytic Geo III (4 cr)**
 _____ **MAT260 Differential Equations (3 cr)**

Science (13 credits)

- _____ **CHM165 General Chemistry I (5 cr)**
 _____ **PHY291 Principles of Physics I (4 cr)**
 _____ **PHY292 Principles of Physics II (4 cr)**

Computer Science (4 credits)

- _____ **CSC121 Comp Sci I (4 cr)**

Note: Comp Sci & Comp Eng majors should take CSC121 & 122.

Total Credits for General Core and Support Courses

49 credits

Engineering Specialty Courses (It is important to complete sequence courses at MCC.)

NOTE: Prerequisite for MAT175 is not included on this guide (MAT165 – 5 credits). Credits for this prerequisite may count toward free electives at UIUC. UIUC allows 6 credits of free electives.

60 hours of the bachelor's degree requirements must be UIUC credit. Generally, UIUC engineering programs require a minimum of 128 credits. **Completion of courses in bold print prior to transfer will enhance admissibility.**

Total AES Credits
(includes general core, support, & major-related courses)

Bioengineering (currently not accepting transfer students)

Aerospace, Agricultural & Biological, Civil & Environmental, Engineering Mechanics, Industrial, Mechanical, Systems Eng, & Design, and Nuclear, Plasma & Radiological

- _____ ****CHM166 General Chemistry II (5)** _____ **EGR252 Dynamics (3)**
 _____ **PHY293 Principles of Physics III (4)** _____ EGR151 Engineering Graphics (4) (only Agr & Biological, Civil, Industrial, and Systems Eng & Design)
 _____ **EGR251 Statics (3)** _____ *Select 1 course (3) (Aerospace, Env, Mechanical, Nuclear)

60-68

Computer Science, ***Computer Engineering, ***Electrical Engineering, Engineering Physics, and Materials Science & Engineering

- _____ ****CHM166 General Chemistry II (5)** _____ **CSC122 Comp. Sci. II (4)** (Comp. Eng. and El. Eng.)
 _____ **PHY293 Principles of Physics III (4)** _____ *Select 1-3 courses (Comp. Sci, Eng. Physics, & Materials Sci.)

61-62

*The asterisk designates courses not ordinarily found in MCC'S AES degree. To assist students in completing the associate degree and transferring smoothly into UIUC's engineering baccalaureate programs, MCC allows for these course substitutions. (see chart on following page) You will need a substitution waiver for these courses. Please ask your MCC academic advisor about the substitution waiver process.

****CHM166 is only required for Agri & Biological, Civil, Engineering Mechanics, and Materials Science.**

******* UIUC's ECE120 is required for Comp. Eng. and Electrical Eng.– no MCC equivalent. UIUC recommends students take a programming course at the community college in preparation for ECE120. ECE110, Intro to Electronics, is a prerequisite to upper-level courses and is recommended for junior admission. MCC has no equivalent.

UIUC Social Science and Humanities Course Options

The College of Engineering requires 18 hours of social sciences and humanities coursework. Select courses from list on following page (Take into consideration courses chosen to satisfy AES requirements in Humanities, Social Sciences, and Non-Western/Minority Cultures in US). You will need an MCC substitution waiver for these courses. Please ask your MCC academic advisor about the substitution waiver process.

<u>Humanities (6 credits)</u> ANT155; ART150, 151, 155, 165, 171, 172, 175; ENG240, 251, 253, 254, 255, 256, 260, 261, 270, 271, 272, 275, 276; HIS130, 131, 132, 141, 165, 170, 172, 180; JRN180; MUS151, 153, 154, 171, 172; PHI151, 155, 160, 240, 251, 252, 261, 262; PLT281; THE151	<u>Social Science (6 credits)</u> ANT151, 160, 170; ECO150, 251, 252; GEG202, 203, 204; PLT150, 151, 155, 251, 255; PSY151, 250, 251, 255, 260, 265, 275; SOC151, 175, 251, 260, 261	<u>Western/Comparative Cultures (3 credits)</u> ANT151, 170; ENG253, 254, 255, 256, 260, 261, 271; HIS131, 132, 170, 172 <u>Non-Western/US Minority Cultures (3 credits)</u> ANT151, 170; ART155, 165; ENG276; GEG203; HIS165; MUS153; PHI160, 261; PLT281
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Recommendation for Sequencing of Courses to Complete AES Degree

Aerospace, Agricultural, Civil, Engineering Mechanics, Industrial, Mechanical, Nuclear Engineering, and Systems Eng & Design

Summer	Fall 1	Spring 1	Summer	Fall 2	Spring 2
MAT165	ENG151 CHM165 MAT175 Gen Ed	ENG152 CHM166 MAT245 PHY291	EGR151 (Agr & Biological, Civil, Industrial, and Systems Eng & Design)	CSC121 EGR251 MAT255 PHY292	EGR252 MAT260 PHY293 Gen Ed Gen Ed

Computer Science, Engineering Physics, Electrical, Material Science, and Computer Engineering

Summer	Fall 1	Spring 1	Summer	Fall 2	Spring 2
MAT165	ENG151 CHM165 MAT175 Gen Ed	ENG152 CHM166 MAT245 PHY291		CSC121 MAT255 PHY292 Gen Ed	CSC122 (Comp. Eng. and El. Eng) MAT260 PHY293 Gen Ed Gen Ed