

**University of Illinois at Urbana-Champaign (UIUC)**  
**Engineering**  
**McHenry County College (MCC) Transfer Guide**  
(2018-2019 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

- **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.)
- **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. See course recommendations on this guide.

### Transfer Application

Application filing periods: **Fall**, December 15 – March 1; priority deadline is February 1. (**Application after Jan 1 and meeting priority deadline 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. Limited capacity majors cannot be chosen as both first and second choices.

### Transfer Admission

Admission is based on overall GPA, GPA in technical coursework, academic rigor of coursework, essay, and relevant activities & work experience. **Courses being completed over the summer prior to fall admission will not be considered as part of the application review.**

- **Junior Level Transfer** – (60 transferable credits) **Following prerequisites must be completed:** ENG151 & 152; MAT175, 245, & 255; PHY291, 292, & 293; CHM165 & 166. **NOTE: If PHY291, 292, & 293 are not completed prior to August 2018, you also must take PHY294.** Completing other courses required by desired program will enhance admissibility. **Refer to UIUC's Transfer [Handbook](#) for details and major-specific course recommendations.**
- **Sophomore Level Transfer** – (30-59 transferable semester hours) Admission also is based on high school academics and ACT or SAT scores. **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: Computer Science, Computer Engineering, Electrical Engineering, and Mechanical. **Following prerequisite courses must be completed:** ENG151 & 152; MAT175 & 245; PHY291; CHM165 & 166.
- **Limited Capacity & Highly Selective** – Admission is competitive and selective for Aerospace, Computer Science, Computer Engineering, Electrical, and Mechanical majors. For these programs, applications are reviewed together after each application deadline has passed. Admission is based on quality of applicant pool. First and second choice majors cannot both be from this list of limited capacity.
- **As and Bs in math and science courses are a must.**
- **Minimum Transfer GPA** – It generally is expected that applicants will have a minimum B grade in the required technical subjects (chemistry, math, physics, computer science, etc.) and for minimum 3.0 cumulative GPA of all coursework completed. **Please note that admission is competitive. Average admission GPAs by major are significantly higher.** The UIUC [Transfer Handbook](#) provides average admission GPAs by major.
- **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.**
- At least 60 hours of the bachelor’s degree requirements must be UIUC credit. Generally, UIUC engineering programs require a minimum of 128 credits.

**Course recommendations** For recommended semester course sequencing, see next page. **Please note that some courses are only offered one time each year.** Work with an academic advisor to plan your schedule.

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

| <b>Associate in Engineering Science Degree Requirements</b>   |  |
|---|--|
| <b>General Core and Support Courses</b><br>(Refer to MCC’s catalog for approved IAI courses.) <b>Courses in bold print should be completed prior to transfer.</b>   |  |
| <b>Communications</b> (6 credits)<br>_____ <b>ENG151 Composition I, C or better (3 cr)</b><br>_____ <b>ENG152 Composition II, C or better (3 cr)</b><br><br><b>Humanities &amp; Fine Arts</b> (3-6 credits)<br>_____ IAI Humanities or Fine Arts (3 cr)<br><br><b>Social &amp; Behavioral Sciences</b> (3-6 credits)<br>_____ IAI Social & Behavioral Sciences (ECO251 strongly recommended)<br><br><b>Non-Western Cultures or Minority Cultures within the United States</b><br>Select 0-3 credit from the following. One non-western/minority cultures course required, which also can satisfy Hum/Fine Arts or Soc/Beh Sci requirement.<br>_____ ANT151; ART155, 165; ENG 276; GEG203; HIS165; MUS153; PHI160, 261 | <b>Mathematics</b> (17 credits)<br>_____ <b>MAT175 Calculus w/Analytic Geo I (5 cr)</b><br>_____ <b>MAT245 Calculus w/Analytic Geo II (5 cr)</b><br>_____ <b>MAT255 Calculus w/Analytic Geo III (4 cr)</b><br>_____ <b>MAT260 Differential Equations (3 cr)</b><br>(MAT260 is not required for Comp Sci & Eng Mech majors – a higher level course will be taken at UIUC)<br><br><b>Science</b> (13 credits)<br>_____ <b>CHM165 General Chemistry I (5 cr)</b><br>_____ <b>PHY291 Principles of Physics I (4 cr)</b><br>_____ <b>PHY292 Principles of Physics II (4 cr)</b><br><br><b>Computer Science</b> (4 credits)<br>_____ <b>CSC121 Comp Sci I (4 cr)</b> |
| <b>Total Credits for General Core and Support Courses credits</b>   | <b>46-53</b>   |
| <b>Engineering Specialty Courses</b> (It is <u>important</u> to complete sequence courses at MCC.)<br><br><b>NOTE:</b> Prerequisite for MAT175 is not included on this guide (MAT165 – 5 credits). If your math placements require you to take MAT165, <b>it is important</b> for you to take it the summer prior to your first semester at MCC in order to be in sequence for taking required calculus and physics courses.<br><br>Completion of courses in <b>bold</b> print prior to transfer will enhance admissibility.  | <b>Total AES Credits</b><br>(includes general core, support, & major-related courses)  |
| <b>Bioengineering (currently not accepting transfer students)</b>   |  |
| <b>Aerospace, Agricultural &amp; Biological, Civil &amp; Environmental, Engineering Mechanics, Industrial, Mechanical, Systems Eng, &amp; Design, and Nuclear, Plasma &amp; Radiological</b>  |  |
| _____ <b>CHM166 General Chemistry II (5)</b> (only Agr & Bio; Civil; Eng Mech)<br>_____ <b>CSC122 Computer Science II (4)</b><br>_____ <b>PHY293 Principles of Physics III (4)</b><br>_____ <b>PHY294 Thermal Physics (2)</b> <i>required only if PHY291, 292, &amp; 293 are not completed prior to Aug. 2018. (PHY294 applies to Aerospace, Agr &amp; Bio, Civil, Eng Mech, Industrial, &amp; Systems)</i><br><b>NOTE: Mechanical requires CHM166 or the full Physics which includes PHY294</b>  | _____ <b>EGR251 Statics (3)</b><br>_____ <b>EGR252 Dynamics (3)</b><br>_____ <b>EGR151 Eng. Graphics (4)</b><br><i>(only Agr &amp; Bio, Civil, Industrial, and Sys Eng &amp; Design)</i>   |
| <b>60-68</b>  |  |
| <b>Computer Science, Computer Engineering, Electrical Engineering, Engineering Physics, and Materials Science &amp; Engineering</b>   |  |
| _____ <b>CHM166 General Chemistry II (5)</b> (only Materials; Tech Elective for Comp Eng and Electrical)<br>_____ <b>PHY293 Principles of Physics III (4)</b><br>_____ <b>PHY294 Thermal Physics (2)</b> <i>required only if PHY291, 292, &amp; 293 are not completed prior to August 2018. (PHY294 applies to Comp Eng, Electrical, &amp; Eng Physics)</i>   | _____ <b>CSC122 Comp. Sci. II (4)</b><br>_____ <b>MAT253 Linear Algebra (3)</b><br><i>(Comp Sci, Comp Eng, EE)</i><br>_____ <b>EGR251 Statics (3)</b> <i>(Tech Elective for Comp Eng &amp; Electrical)</i>   |
| <b>Minimum 60</b>   |  |

**NOTE:** For Comp. Eng. and Electrical Eng, ECE110, Intro to Electronics, is a prerequisite to upper-level courses and is recommended for junior admission. MCC has no equivalent. The course can be taken at UIUC.

**Recommended Semester Course Sequencing (See AES degree requirements on previous page)**

Please note that some courses are only offered one time each year. Work with an academic advisor to plan your schedule.

**Summer 1**

MAT165 College Algebra & Trigonometry (5 cr)

**Note:** Based on your placement exam. Prereq for MAT175, not AES requirement. Take course summer prior to beginning coursework at MCC in order to complete the highly sequential pre-engineering courses.

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

| Fall I                                    | Spring I                                 | Summer                     |
|---|--|----------------------------|
| ENG151 Composition I 3                    | ENG152 Composition II 3                  | IAI Humanities/Fine Arts 3 |
| CHM165 General Chemistry I 5              | *CHM166 General Chemistry II 5           |                            |
| IAI Soc/Behavioral Science (ECO251) 3     | **EGR151 Engineering Graphics 4          |                            |
| MAT175 Calc w/Analytic Geo 5              | MAT245 Calculus w/Analytic Geometry II 4 |                            |
| Semester Hours 16                         | PHY291 Principles of Physics I 4         |                            |
|   | Semester Hours 19                        |                            |
| Fall II                                   | Spring II                                | Summer                     |
| CSC121 Computer Science I 4               | CSC122 Computer Science II 4             |                            |
| EGR251 Statics or Technical Elective 3    | EGR252 Dynamics 3                        |                            |
| MAT255 Calculus w/Analytic Geometry III 5 | MAT260 Differential Equations 3          |                            |
| PHY292 Principles of Physics II 4         | PHY293 Principles of Physics III 4       |                            |
| IAI Hum/Fine Arts or Social/Beh Sci 3     | *** PHY294 Thermal Physics 2             |                            |
| Semester Hours 19                         | Semester Hours 19                        |                            |

\* Agricultural & Biological, Civil & Environmental, and Engineering Mechanics

\*\* Agri & Biol; Civil & Environ; Industrial; and Systems

\*\*\* Aerospace, Agricultural & Biological, Civil & Environmental, Engineering Mechanics, Industrial, and Systems, Eng. & Design.

Only required if PHY291, 292, & 293 are not completed prior to August 2018.

**Note for Mechanical Engineering:** Requires CHM166 or the full Physics sequence, which includes PHY294

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

| Fall I                                     | Spring I                                 | Summer                     |
|--|--|----------------------------|
| ENG151 Composition I 3                     | ENG152 Composition II 3                  | IAI Humanities/Fine Arts 3 |
| CHM165 General Chemistry I 5               | *CHM166 General Chemistry II 5           |                            |
| IAI Social & Behavioral Science (ECO251) 3 | MAT245 Calculus w/Analytic Geometry II 4 |                            |
| MAT175 Calculus w/Analytic Geometry 5      | PHY291 Principles of Physics I 4         |                            |
| Semester Hours 16                          | Semester Hours 16                        |                            |
|  |  |                            |
| Fall II                                    | Spring II                                | Summer                     |
| CSC121 Computer Science I 4                | CSC122 Computer Science II 4             |                            |
| MAT255 Calculus w/Analytic Geometry III 5  | MAT260 Differential Equations 3          |                            |
| PHY292 Principles of Physics II 4          | PHY293 Principles of Physics III 4       |                            |
| IAI Hum/Fine Arts or Social/Beh Sci 3      | ** PHY294 Thermal Physics 2              |                            |
| Semester Hours 16                          | Semester Hours 16                        |                            |
|  |  |                            |

\* Materials Science & Engineering; technical elective for Computer Engineering and Electrical Engineering

\*\* Computer Engineering, Electrical, and Engineering Physics. Only required if PHY291, 292, & 293 are not completed prior to August 2018.

**Note:** If additional credits are needed to reach the minimum 60 required for the AES degree, select general education courses that will satisfy both AES and UIUC requirements. Use IAI course options found in the MCC academic catalog and UIUC options noted below.

**UIUC Social Science and Humanities Course Options**

The College of Engineering requires 18 hours of social sciences and humanities coursework. (When selecting courses, take into consideration courses chosen to satisfy AES requirements in Humanities, Social Sciences, and Non-Western/Minority Cultures in US).

|  |   |
|--|---|
| <p><b><u>Humanities (6 credits)</u></b><br/>ANT155; ART150, 151, 155, 165, 171, 172, 174, 175, 176; EDU253; ENG240, 251, 253, 254, 255, 256, 260, 261, 270, 271, 272, 275, 276, 277; HIS130, 131, 132, 141, 165, 170, 172, 180; JRN180; MUS151, 153, 154, 171, 172; PHI151, 155, 160, 240, 251, 252, 261, 262; PLT281; THE151</p> <p><b><u>Social Science (6 credits)</u></b><br/>ANT151, 160, 170; ECO150, 251, 252; GEG202, 203, 204; PHI255; PLT150, 151, 155, 251, 255; PSY151, 250, 251, 255, 260, 265, 275; SOC151, 175, 251, 260, 261; SPE251</p> | <p><b><u>Cultures</u></b><br/><b>NOTE: These courses may fulfill other curricular requirements (e.g., in the major, or in one of the other General Education categories)</b></p> <p><b><u>Western/Comparative Cultures (3 credits)</u></b><br/>ANT151; ENG253, 254, 255, 256, 260, 261, 271; HIS131, 132, 170, 172</p> <p><b><u>Non-Western Cultures (3 credits)</u></b><br/>ANT170; ART155; ENG276; GEG203; HIS165; MUS153; PHI160, 261; PLT281; SPE251</p> <p><b><u>US Minority Cultures (3 credits)</u></b><br/>ART165; EDU255; SOC260</p> |
|--|---|