This Guide is intended for the use of students who plan on transferring from East Central College (ECC) to the University of Missouri – St. Louis (UMSL) to pursue a Bachelor of Science in Mechanical Engineering through the UMSL/Washington University (WUSTL) Joint Engineering Program. This guide is intended for use under advisement of a UMSL Transfer Coordinator.

The UMSL/WUSTL Joint Engineering Program offers UMSL students the opportunity to pursue a variety of engineering degree options while taking advantage of the resources, facilities, and faculty provided at WUSTL. The upper-division engineering courses are offered in the evenings and on Saturdays on the WUSTL campus and are taught by WUSTL faculty. This schedule permits students to co-op during the day at local engineering firms. Tuition for the engineering courses is the UMSL tuition rate with a small additional fee. Students of this program are also able to utilize student services provided by both institutions. For more information on the UMSL/WUSTL Joint Engineering Program, please visit their website.

Students have the option to pursue the coursework listed in this guide through the ECC Associate of Arts in General Studies or the Associate of Science in Transfer Engineering, or can simply complete this coursework and then transfer.

**PRE-ENGINEERING SEQUENCE**

The following requirements must be completed for a student to be eligible to take formal Engineering courses through the UMSL/WUSTL Joint Engineering Program. These requirements may be completed at either UMSL or ECC and included here are any ECC courses that fulfill corresponding requirements. Unless stated otherwise, all pre-engineering courses must be completed with a C- grade or higher to fulfill the requirements of this program.

- A student must earn a 2.75 GPA over this sequence of pre-engineering courses.
- Chemistry - CH 1305 General Chemistry I Lecture & Lab (5)
- Calculus I, completed a C grade or higher - MT 1605 Analytic Geometry & Calculus I (5)
- Calculus II - MT 2105 Analytic Geometry & Calculus II (5)
- Calculus III - MT 2205 Analytic Geometry & Calculus III (5)
- Differential Equations - MT 2303 Differential Equations (3)
- Calculus-Based Physics I - PH 2103 General Physics I Lecture (3) and PH 2112 General Physics I Lab (2)
- Calculus-Based Physics II - PH 2203 General Phys II Lecture (3) and PH 2212 General Physics II Lab (2)
- Engineering-Dynamics - EG 2103 Engineering Mechanics-Dynamics (3)

**GENERAL EDUCATION**

The following are the general education requirements of the UMSL/WUSTL Joint Engineering Program. It is recommended that the student complete these requirements while completing those above in the pre-engineering sequence. Included here are any STLCC courses that fulfill corresponding requirements.

- First-Year Writing - Complete 1 course from the following with C- grade or higher:
  - EN 1333 English Comp II (3)
  - EN 1343 Honors English Comp II (3)
- Engineering Ethics - This course must be completed at UMSL.
- Philosophy of Science - This course must be completed at UMSL.

The information in this Transfer Guide is in accordance with the published 2015-2016 Course Catalogs of both UMSL and ECC.
- **American History** - Complete 1 course from the following:
  - HI 1103 U.S. History to 1865 (3)
  - HI 1203 US History 1865-1945 (3)

- **Humanities** - Complete 1 of the following courses in addition to those already completed for above requirements:
  - Any **EN** Course numbered 1413 and Above (Exceptions: Not **EN** 2012, 2032, or 2102)
  - Any **MU** Course
  - Any **PR** Course
  - AR 1203 Art Appreciation (3)
  - AR 1703 Art History I (3)
  - AR 1713 Art History II (3)
  - CT 1303 Theatre Appreciation (3)
  - CT 1403 Beginning Acting (3)
  - CT 2403 Acting I (3)

- **Cultural Diversity Social Science** - Complete 1 course from the following:
  - AN 1003 Introduction Cultural Anthropology (3)
  - CV 2023 Islamic Civilization (3)
  - CV 2303 Latin American Civilization (3)
  - CV 2613 East Asian Civilization to 1800 (3)
  - CV 2623 East Asian Civilization Since 1800 (3)
  - PS 2303 Introduction to Comparative Politics (3)

- **Additional Social Science** - Complete 1 of the following courses in addition to those already completed for above requirements:
  - Any **AN** Course
  - Any **CJ** Course
  - Any **CV** Course
  - Any **EC** Course
  - Any **GE** Course
  - Any **HI** Course
  - Any **PS** Course
  - Any **PY** Course
  - Any **SO** Course
  - BU 1003 Introduction to Business (3)
  - BU 1033 Principles of Advertising (3)
  - BU 2033 Legal Environment of Business (3)
  - CT 1033 Intro to Mass Media Communication (3)
  - CT 1103 Public Speaking (3)
  - CT 1123 Introduction to Film Studies (3)

For any questions regarding this guide please contact the UMSL Office of Transfer Services at (314) 516-5162.

---

The information in this Transfer Guide is in accordance with the published 2015-2016 Course Catalogs of both UMSL and ECC.