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 Electrical Engineering through the UMSL/Washington University (WUSTL) Joint Engineering Program. This guide is intended for use under advisement of a UMSL Transfer Coordinator. Students also have the option to pursue an Associate in Science at ECC prior to transferring to UMSL, although it is not the recommended option.

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, please visit our online Course Catalog.

**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 - CHM 111 General Chemistry I Lecture & Lab (MOTR CHEM 150L) (5)
- Calculus I, completed a C grade or higher - MTH 190 Analytic Geometry & Calculus I (5)
- Calculus II - MTH 210 Analytic Geometry & Calculus II (5)
- Calculus III - MTH 220 Analytic Geometry & Calculus III (5)
- Differential Equations - MTH 245 Differential Equations (3)
- Calculus-Based Physics I - PHY 211 General Physics I Lecture (MOTR PHYS 200L) (3)
- Calculus-Based Physics I - PHY 212 General Physics I Lab (MOTR PHYS 200L) (2)
- Calculus-Based Physics II - PHY 221 General Physics II Lecture (3)
- Calculus-Based Physics II - PHY 222 General Physics II Lab (2)
- Engineering-Dynamics - EGR 214 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 listed above the pre-engineering sequence. Included here are any ECC courses that fulfill corresponding requirements.

- First-Year Writing – Complete both courses from the following with a C- grade of higher:
  - ENG 101 or 114 English Comp I (MOTR ENGL 100) (3)
  - ENG 102 or 115 English Comp II (MOTR ENGL 200) (3)
- Engineering Ethics - This course must be completed at UMSL.
- Philosophy of Science – This course must be completed at UMSL.
- American History - Complete 1 course from the following:
  - HST 101 US History to 1877 (MOTR HIST 101) (3)
  - HST 102 US History since 1877 (MOTR HIST 102) (3)
- Cultural Diversity Social Science – ANT 110 Introduction Cultural Anthropology (MOTR ANTH 101) (3)
- Complete 2 additional courses in Social and Behavioral Sciences course from MOTR list (6)

For any questions regarding this guide please contact the UMSL Office of Admissions at (314) 516-5451.