This Guide is intended for the use of students who plan on transferring from St. Charles Community College (SCC) 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 SCC 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 evening and on Saturdays on the WUSTL campus and are taught by the 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.

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**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 SCC and included here are any SCC 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 115 General Chemistry I (MOTR CHEM 150L) (5)
- Calculus I, completed with a C grade or higher – MAT 180 Calculus and Analytic Geometry I (5)
- Calculus II - MAT 230 Calculus and Analytic Geometry II (5)
- Calculus III - MAT 240 Calculus and Analytic Geometry III (5)
- Differential Equations - MAT 250 Differential Equations (3)
- Calculus-Based Physics I - PHY 250 Engineering Physics I (MOTR PHYS 200L) (5)
- Calculus-Based Physics II - PHY 251 Engineering Physics (5)
- Engineering-Statics - EGR 170 Engineering Mechanics I - Statics (3)
- Engineering-Dynamics - EGR 210 Engineering Mechanics II - 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 SCC courses that fulfill corresponding requirements.

- First-Year Writing – Complete 1 course from the following with a C- grade or higher:
  - ENG 101 English Composition I (MOTR ENGL 100) (3)
  - ENG 102 English Composition 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:
  - HIS 101 U.S. History to 1877 (MOTR HIST 101) (3)
  - HIS 102 U.S. History since 1877 (MOTR HIST 102) (3)

- Cultural Diversity Social Science – ANT 102 Introduction to Cultural Anthropology (MOTR ANTH 201) (3)
- Complete 2 additional Social Science courses from MOTR list.

For questions about this transfer guide please call the Office of Admissions at 314-516-5451