ST. CHARLES COMMUNITY COLLEGE TO THE UNIVERSITY OF MISSOURI – ST. LOUIS BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING TRANSFER GUIDE

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 Mechanical Engineering through the UMSL/Washington University (WUSTL) Joint Engineering Program. This guide is intended for use under advisement of a UMSL Transfer Advisor. 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.

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 any questions regarding this guide please contact the UMSL Office of Admissions at 314-516-5451 or by email at admissions@umsl.edu