This Guide is intended for the use of students who plan on transferring from Mineral Area College (MAC) to the University of Missouri – St. Louis (UMSL) to pursue a Bachelor of Science in Civil Engineering through the UMSL/Washington University (WUSTL) Joint Engineering Program. This guide is intended for use under advisement of a UMSL Student Recruitment Specialist.

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 each 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 MAC and included here are any MAC 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 – PHS 1350 General Chemistry I (MOTR CHEM 150L) (5)
- Calculus I, completed with a C grade or higher – MAT 1650 Analytic Geometry and Calculus I (5)
- Calculus II - MAT 2150 Analytic Geometry and Calculus II (5)
- Calculus III - MAT 2250 Analytic Geometry and Calculus III (5)
- Differential Equations - MAT 2330 Differential Equations (3)
- Calculus-Based Physics I – PHS 2230 General Physics I (MOTR PHYS 200L) (4)
- Calculus-Based Physics II – PHS 2240 General Physics II (4)
- Engineering-Statics – EGN 2130 Engineering Mechanics I - Statics (3)
- Engineering-Dynamics – EGN 2230 Engineering Mechanics II - Dynamics (3)
- PHS 2410 Physical Geography (MOTR GEOL 100L) 5)

**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 SCCC courses that fulfill corresponding requirements.

- First-Year Writing – Complete the following courses (ENG 1340 English Composition II with a C- or better)
  - ENG 1330 English Composition I (MOTR ENGL 100) (3)
  - ENG 1340 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 1230 American History I (MOTR HIST 101) (3)
  - HIS 1240 American History II (MOTR HIST 102) (3)

- Cultural Diversity Social Science – SOC 1540 Intro to Cultural Anthropology (MOTR ANTH 201) (3)
- Additional Social Science – Complete 2 additional Science courses from MOTR list *If additional social science course is SOC the final must be from another area of study

*Students seeking to major in engineering are first designated as ‘Undeclared with an interest in Engineering majors’ until they have completed Math 1800 Analytical Geometry & Calculus I. Upon successful completion of Math 1800 with a grade of C or better, students will be allowed to declare pre-engineering as their major. Math 1800 must be completed successfully within two attempts.
BACHELOR OF SCIENCE IN CIVIL ENGINEERING

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