This Guide is intended for the use of students who plan on transferring from Southwestern Illinois College (SWIC) 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 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.

**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 SWIC and included here are any SWIC 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 - CHEM 105 General Chemistry I (5)
- Calculus I, completed a C grade or higher - MATH 203 Analytic Geometry & Calculus I (5)
- Calculus II - MATH 204 Analytic Geometry & Calculus II (5)
- Calculus III - MATH 205 Analytic Geometry & Calculus III (5)
- Differential Equations - MATH 290 Differential Equations (3)
- Calculus-Based Physics I - PHYS 204 Physics – Mechanics (4)
- Calculus-Based Physics II - PHYS 205 Physics – Heat, Elec & Magnetism (4)
- Engineering-Statics - ENGR 263 Analytical Mechanics-Statics (3)
- Engineering-Dynamics - ENGR 264 Analytical Mechanics-Dynamics (3)
- Geology - ES 102 Physical Geology (4)

**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 SWIC courses that fulfill corresponding requirements.

- First-Year Writing - Complete 1 course from the following with C- grade or higher:
  - ENG 101 Rhetoric & Composition I (3)
  - ENG 102 Rhetoric & Composition II (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:
  - HIST 180 U.S. History to 1865 (3)
  - HIST 181 U.S. History, 1865 to the Present (3)

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