BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

UNIVERSITY OF MISSOURI – ST. LOUIS & SOUTHWESTERN ILLINOIS COLLEGE TRANSFER GUIDE

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 Mechanical 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)

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 2017-2018 Course Catalogs of both UMSL and SWIC.
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- Humanities: Complete 1 of the following courses in addition to those already completed for above requirements:
  - Any ART Courses (Exceptions: Not ART 230, 231, 290, 291)
  - Any HIST Courses
  - Any LIT Courses
  - Any MUS Courses (Exceptions: Not MUS 154, 155, 201, 250, 251, 252, and 255)
  - Any THEA Courses
    - ENG 107 Creative Writing (3)
    - ENG 207 Advanced Creative Writing (3)
    - ENG 299 Special Topics in English (1-4)
    - FILM 115 Film Appreciation (3)
    - FILM 205 Screenwriting II (3)
    - FILM 215 Film History (3)
    - FILM 225 Film & Literature (3)
    - FILM 299 Special Topics in Film Study (3)
    - FREN 202 Intermediate French II (4)
    - GERM 202 Intermediate German II (4)
    - SPAN 202 Intermediate Spanish II (4)
    - SPAN 211 Conversational Spanish I (3)
    - FILM 299 Special Topics in Film Study (3)
- Cultural Diversity Social Science: Complete 1 course from the following:
  - ANTH 150 Cultural Anthropology (3)
  - ANTH 210 Native American Cultures (3)
  - ANTH 250 Introduction to Archaeology (3)
  - HIST 114 Latin American History (3)
  - HIST 115 Mid-East History (3)
  - HIST 117 African History (3)
  - HIST 118 Asian History (3)
- Additional Social Science: Complete 1 of the following courses in addition to those already completed for above requirements:
  - Any ANTH Courses
  - Any ECON Courses
  - Any HMS Courses
  - Any POLS Courses
  - Any PSYC Courses (Exceptions: Not PSYC 200 and PSYC 252)
  - Any SOC Courses
    - AOJ 100 Intro to Administration of Justice (3)
    - AOJ 103 Introduction to Corrections (3)
    - AOJ 105 Police Administration (3)
    - AOJ 153 Juvenile Delinquency (3)
    - AOJ 155 Community Policing (3)
    - AOJ 156 Issues in Criminal Justice (3)
    - AOJ 160 Criminology (3)
    - AOJ 203 Criminal Law & Admin. of Justice (3)
    - AOJ 251 Rules of Criminal Evidence (3)
    - AOJ 252 Organized Crime (3)
    - AOJ 261 Probation and Parole (3)
    - AOJ 299 Spec Topics In Admin of Justice (1-4)
    - GEOG 151 Geography of the United States and Canada (3)
    - GEOG 152 World Regional Geography (3)
    - GEOG 202 Economic Geography (3)
    - MGMT 117 Personal Finance (3)

For any questions regarding this guide please contact the UMSL Office of Transfer Services at (314) 516-5162.