

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING



UNIVERSITY OF MISSOURI – ST. LOUIS & ST. CHARLES COMMUNITY COLLEGE 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 Electrical 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 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 (5)
- Calculus I, completed 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 (5)
- Calculus-Based Physics II - PHY 251 Engineering Physics II (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 C- grade or higher:
 - ENG 101 English Composition I (3)
 - ENG 102 English 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:
 - HIS 101 U.S. History to 1877 (3)
 - HIS 102 U.S. History Since 1877 (3)

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

□ Cultural Diversity Social Science - Complete 1 course from the following:

- | | |
|---|---|
| ANT 102 Introduction to Cultural Anthropology (3) | GLC 133 Cultures of Central America and the Caribbean (1-3) |
| ANT 103 Introduction to Archaeology (3) | GLC 135 Cultures of the Amazon and Andes (1-3) |
| ANT 151 World Archaeology (3) | GLC 170 African Culture (1-3) |
| ANT 161 Archaeology of Religion (3) | GLC 180 Australian Culture (1-3) |
| ANT 171 Introduction to Egyptology (3) | GLC 290 Special Topics in Global Culture (3) |
| ANT 220 Middle East: People and Cultures (3) | GLS 101 Introduction to Global Studies (3) |
| ANT 224 People and Cultures of Africa (3) | POL 220 Middle Eastern Politics (3) |
| ANT 290 Topics in Anthropology (3) | |
| GEO 101 Geography: The Eastern World (3) | |

□ □ Additional Social Science - Complete 2 of the following courses in addition to those already completed for above requirements:

Any **ANT** Courses

Any **CRJ** Courses (Exceptions: Not *CRJ 104, 165, 230, 265, 266, 291, 292, and 298*)

Any **COM** Courses (Exceptions: Not *COM 120, 270, 290, and 296*)

Any **ECO** Courses

Any **GLC** Courses (Exceptions: Not *GLC 105, 145, 210, and 215*)

Any **GLS** Courses

Any **HMS** Courses (Exceptions: Not *HMS 298*)

Any **POL** Courses

Any **PSY** Courses

Any **SOC** Courses

ART 2170 Video Production (3)

BUS 101 Introduction to Business (3)

BUS 246 Legal Environment of Business (3)

GEO 100 Principles of Geography (3)

GEO 101 Geography: The Eastern World (3)

GEO 102 Geography: The Western World (3)

GEO 115 Geography of North America (3)

GEO 299 Topics in Geography (3)

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