

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING



UNIVERSITY OF MISSOURI – ST. LOUIS & MINERAL AREA COLLEGE TRANSFER GUIDE



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 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 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 (5)
- Calculus I, completed 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 (4)
- Calculus-Based Physics II - PHS 2240 General Physics II (4)
- Engineering-Statics - EGN 2130 Engineering Mechanics-Statics (3)
- Engineering-Dynamics - EGN 2230 Engineering 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 MAC courses that fulfill corresponding requirements.

- First-Year Writing - ENG 1340 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 1230 American History I (3)
 - HIS 1240 American History II (3)

- Cultural Diversity Social Science - SOC 1540 Introduction to Cultural Anthropology (3)

The information in this Transfer Guide is in accordance with the published 2017-2018 Course Catalogs of both UMSL and MAC.

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

Any **GEO** Courses

Any **POS** Courses

Any **PSY** Courses (Exceptions: Not *PSY 1040*, *1060*, and *1160*)

Any **SOC** Courses (Exceptions: Not *SOC 1060*)

Any **SWK** Courses

BUS 1330 Survey of Economics (3)

BUS 2530 Legal Environment of Business (3)

BUS 2930 Principles of Macroeconomics (3)

BUS 2940 Principles of Microeconomics (3)

COM 1000 Introduction to Mass Media (3)

COM 1020 Introduction to Broadcasting (3)

COM 2200 T.V. Production (3)

CRJ 1100 Introduction to Criminal Justice (3)

CRJ 1400 Criminal Law (3)

CRJ 1440 Criminal Courts-Process and Issues (3)

CRJ 1520 Criminology (3)

CRJ 1540 Criminal Procedure (3)

CRJ 1600 Juvenile Justice System (3)

CRJ 1710 Community Policing/Problem Solving(3)

CRJ 1800 Introduction to Corrections (3)

CRJ 1820 Corrections in America (3)

CRJ 1900 Police Administration (3)

CRJ 2320 Admin. of Correctional Service (3)

CRJ 2340 Concepts of Community Corrections (3)

CRJ 2380 Probation and Parole in America (3)

ENG 1440 Public Speaking (3)

ENG 1670 Interpersonal Communication (3)

IDS 1050 Interdisciplinary Studies (3)

MFL 1290 Culture of French Speaking World (3)

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