

**UNIVERSITY OF MISSOURI- ST. LOUIS / WASHINGTON UNIVERSITY
JOINT UNDERGRADUATE ENGINEERING PROGRAM GUIDE**

**Bachelor of Science in Electrical Engineering
Bachelor of Science in Mechanical Engineering**

The University of Missouri-St. Louis\Washington University Joint Undergraduate Engineering Program was established December 28, 1992, to expand the opportunities for undergraduate engineering education available in the St. Louis area by combining the strengths and resources of the University of Missouri-St. Louis and Washington University. The program now offers Bachelor of Science degrees in Civil, Mechanical, and Electrical Engineering, as well as a Minor in Environmental Engineering Science. All degree programs are ABET accredited.

The program is consistent with the mission of UM-St. Louis; to provide high quality education that will enhance the occupational and professional careers of citizens in the entire region, including minorities and the economically disadvantaged, and to provide a well-trained, sophisticated work force for the St. Louis area. The partnership also continues Washington University's strong tradition of working with a diversity of institutions in education, government, and the private sector; it is also a way for Washington University to share its campus, resources, and personnel with the citizens of Missouri.

This joint engineering degree program is new, but it rests on solid foundations laid years ago. At the University of Missouri-St. Louis, a pre-engineering curriculum has been in place for well over a decade. At Washington University, the School of Engineering and Applied Science is has had over 100 years of experience in engineering research and education. By working together in a unique public/private partnership, the two universities offer an innovative degree path found nowhere else in the country.

Students who enter the program will take about one-half of the course work required for their engineering degrees -- mathematics, physics, chemistry, humanities, and social science, and some elementary engineering subjects -- on the campus of St. Louis Community College. The remaining half of the degree program, consisting of 66-72 semester hours in upper-level engineering courses and laboratories, is offered in the evening on the campus of Washington University and taught by Washington University engineering faculty members. At Washington University, the excellent laboratory facilities and equipment are extensively used by the roughly 1,000 full-time undergraduate engineering students during the daytime hours. However, the same facilities remain virtually unused by Washington University students in the evening hours. The Joint Undergraduate Engineering Program makes these facilities available in the evening to students in civil, electrical, and mechanical engineering. Students register for all their upper-level engineering courses at UM-St. Louis and pay educational fees at UM-St. Louis rates. Students may attend part-time or full-time.

Each upper-division student has an engineering faculty advisor at Washington University. Students have access to a wide range of facilities and services on the Washington University campus, as well as to the full range of facilities and services at UM-St. Louis. In addition to classrooms and laboratories, students in this program rely on the Washington University library system, engineering computing facilities, and engineering placement offices. Students receive their undergraduate engineering degrees from the University of Missouri-St. Louis.

UNIVERSITY OF MISSOURI- ST. LOUIS
AND
ST. LOUIS COMMUNITY COLLEGE

COURSE WORK leading to a BACHELOR OF SCIENCE in

ELECTICAL ENGINEERING OR MECHANICAL ENGINEERING

FIRST SEMESTER

SLCC Course (Hours)

*MTH 210 Analytic Geo.& Calc.I(5)
CHM 105 General Chemistry I (5)
ENG 101 College Composition I (3)

UMSL Equivalent

Math 1800
Chem 1111
English 1100

SECOND SEMESTER

SLCC Course (Hours)

MTH 220 Analytic Geo.& Calc.II (5)
CHM 106 General Chemistry II (5)
PSC 101 Intro to Americ. Pol. (3) **or**
ECO 152 Microeconomics (3)
HST 101 American History I (3) **or**
HST 102 American History II (3)

UMSL Equivalent

Math 1900
Chem 1121
Pol Sc 1100
Econ 1001
Hist 1001/State Rq.
Hist 1002/State Rq.

Semester Hours: (13)

Semester Hours: (16)

THIRD SEMESTER

SLCC Course (Hours)

MTH 230 Analytic Geo.& Calc.III(5)
PHY 122 Engineering Physics I (5)
ANT 102 Intro to Cultural Anthro.(3)

UMSL Equivalent

Math 2000
Physcs 2111
Anthro 1011/CD

FOURTH SEMESTER

SLCC Course (Hours)

MTH 240 Differential Equations (3)
PHY 223 Engineering Physics II (5)
ESC 203 Engineering Mechanics I (3)
**Humanities (3)

UMSL Equivalent

Math 2020
Physcs 2112
Enginr 2310
Gen Ed

Semester Hours: (13)

Semester Hours: (14)

SUMMER SESSION

SLCC Course (Hours)

ESC 204 Engineer. Mechanics II (3)

UMSL Equivalent

Enginr 2320

Session Hours: (3)

DEGREE NOTES:

* Students begin their Math sequence based on their results on the SLCC Math Placement Test.

** Course should be chosen based on the University of Missouri- St. Louis General Education list.

Candidates for the Joint Engineering Program must have a minimum GPA of 2.75 in their pre-engineering core to be admitted.

IT IS IMPORTANT TO CONTACT AN UMSL TRANSFER COORDINATOR EACH SEMESTER:

SLCC- Florissant Valley

Maya Scruggs, UMSL Transfer Coordinator: First Floor Administration Bldg., (314) 513-4260.

SLCC- Forest Park

Maya Scruggs, UMSL Transfer Coordinator: Student Center E228, (314) 644-9729.

SLCC- Meramec

Krystal Lang, UMSL Transfer Coordinator: Counseling & Advising, 201 Clark Hall, (314) 984-7575.

For additional information contact Mary McManus in the University of Missouri- St. Louis/Washington University Engineering Department: 228 Benton Hall, (314) 516-7018.

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