

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

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

See next page for additional information. Revised 5/08

UNIVERSITY OF MISSOURI- ST. LOUIS
AND
JEFFERSON COLLEGE

COURSE WORK leading to a BACHELOR OF SCIENCE in

CIVIL ENGINEERING
ELECTICAL ENGINEERING
MECHANICAL ENGINEERING

The following is a recommended list of Jefferson College courses for students who wish to pursue a Bachelor of Science in Engineering at the University of Missouri- St. Louis. It is also recommended that these also complete at least 3 hours in a Humanities.

Jefferson College Course (Hours)

UMSL Equiv.

CHM 111 General Chemistry I (5)

Chem 1111

*CHM 112 General Chemistry II (3)

**Chem 1121*

*CHM 113 Gen.Chemistry II Lab(2)

**Chem 1121*

ENG 101 English Composition I (3)

Approved Elective

MTH 180 Calculus I (5)

Math 1800

MTH 185 Calculus II (5)

Math 1900

MTH 201 Calculus III (5)

Math 2000

MTH 205 Differential Equations (3)

Math 2020

PHY 223 General Physics I (4)

Physcs 2111

PHY 224 General Physics II (4)

Physcs 2112

* For equivalency of UMSL's *CHEM 1121 Introductory Chemistry II* Jefferson College students must successfully complete both *CHM 112 General Chemistry II* & *CHM 113 General Chemistry II Laboratory*.

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

Students completing a degree from a Missouri community college that includes a CBHE approved general education core will be allowed transfer credit of more than 64 hours only if the additional lower division credits are applicable to the baccalaureate degree or are prerequisites for upper division courses in the major.

A maximum of 60 hours may transfer without the completion of a degree including a CBHE approved general education core.

Please seek advisement from your MAC Academic Advisor for assurance of Associate degree completion.

It is important to contact an UMSL Transfer Coordinator each semester: Susan Bateman, University of Missouri- St. Louis Transfer Coordinator, (573) 518-2309.

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