

UM-St. Louis\Washington University Joint Undergraduate Engineering Program

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.

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 fairly 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 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 Southwestern Illinois 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.

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
SOUTHWESTERN ILLINOIS COLLEGE

ASSOCIATE IN SCIENCE LEADING TO BACHELOR OF SCIENCE IN

ENGINEERING
CIVIL
ELECTRICAL
MECHANICAL

FIRST SEMESTER

SWIC

ENG 101 English Comp I (3)
*Humanities (3)
** MATH 203 An Geo & Calc I (5)
US History Course (180 or 181) (3)
***CHEM 105 General Chem I (5)

Hours: (19)

UMSL Equiv.

Approved Elective
Gen Ed/CD
Math 1800
Hist 1001/1002
Chem 1111

SECOND SEMESTER

SWIC

ENG 102 English Comp II (3)
*Humanities (philosophy) (3)
ANTH 150 Cultural Anthrop. (3)
MATH 204 An Geo & Calc II (4)
CHEM 106 General Chem II (5)

Hours: (18)

UMSL Equiv.

Eng 1100
Gen Ed
Anth 1011
Math 1900
Chem 1121

THIRD SEMESTER

SWIC

POLS 150 Intro to Americ Gov (3)
MATH 205 An Geo & Calc III (4)
SPCH 151 Fund of Pub Speak (3)
PHYS 204 Engin. Phys (Mech) (4)
PHYS 263 Analyt Mech: Statics (3)

Hours: (17)

UMSL Equiv.

Psc 1100
Math 2000
Com 1040
Phys 2111
Phys 2310

FOURTH SEMESTER

SWIC

HLTH 151 Health (2)
MATH 290 Differen. Equations (3)
*Humanities (fine art) (3)
PHYS 205 Engineering Phys. II (4)
PHYS 264 Analyt Mech: Dynam.(3)

Hours: (15)

UMSL Equiv.

Math 2020
Gen Ed
Phys 2112
Phys 2320

* Courses that fulfill Non-western culture requirement: (Humanities) ART 103, LIT 205, MUS 110, PHIL 155; (Social Science) ANTH 150, HIST 114, 115, or 11

** Students begin their Math Sequence based on results of SWIC Math Placement Test.

*** MATH 112 College Algebra is the required prerequisite for CHEM 105 General Chemistry I.

Students completing an AA/AS degree from SWIC that includes the IAI 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.

Maximum of 60 hours may transfer without AA/AS degrees

Please seek advisement from your SWIC Counselor for assurance of completion of the Associate Degree

Students living in the Illinois counties of Madison, Monroe, St. Clair, and Jersey are eligible for the in-state tuition rate.

CONTACT INFORMATION:

NOTE: IT IS IMPORTANT TO CONTACT THE UM-ST. LOUIS TRANSFER COORDINATOR EACH SEMESTER
Maya Scruggs, UM-St. Louis Transfer Coordinator, 225 MSC, 314-516-5873 or mms966@umsl.edu.

For additional information, contact Mary McManus in the UMSL/Washington University Engineering Department, 228 Benton Hall, 314-516-7018.