Joint Engineering Program

University of Missouri–St. Louis = Washington University in St. Louis
Almost all of the engineering classes are taught in the late afternoon or evening at Washington University by local industry professionals and WUSTL engineering professors using WUSTL teaching laboratories, computer laboratories, libraries and placement services. The afternoon and evening schedule allows our students to take advantage of local internship and co-op positions that provide income while the student is attending school, but, more importantly, these programs often lead to immediate job opportunities upon graduation.

Joseph A. O’Sullivan, Ph.D.
Dean, UMSL/WUSTL Joint Undergraduate Engineering Program
The Samuel C. Sachs Professor of Electrical Engineering

An affordable and convenient St. Louis engineering education that enables students to enrich communities, businesses and lives

To date, more than 600 students have graduated from the Joint Engineering Program.

18 average class size of upper-level engineering courses
Joint Engineering Program

All three engineering programs, B.S. in Civil Engineering, B.S. in Electrical Engineering and B.S. in Mechanical Engineering are accredited by the Engineering Accreditation Commission of ABET.

@ abet.org

CAREER OPPORTUNITIES
» Structural analysis and design
» Water resources and environmental engineering
» Construction operations and management
» Transportation and urban planning
» Geotechnical engineering

Civil Engineering

CAREER OPPORTUNITIES
» Communication networks
» Defense and aerospace electronics
» Energy generation and distribution
» Motor and actuator development
» Security systems

Electrical Engineering

CAREER OPPORTUNITIES
» Alternative energy
» Automotive engineering
» Biomechanics
» Environmental control
» Robotics developments and applications

Mechanical Engineering

Experienced faculty and access to resources from both UMSL and WUSTL

The program offers free tutoring for all science, mathematics and engineering courses. Financial aid is available to make every effort so that no student is prevented from graduating due to financial need.

Students have both a Washington University and an UMSL engineering adviser, who guide the students through registration of classes and co-op, internship and permanent job opportunities. The student engineering organization invites practicing engineers to speak, ensuring exposure to the current practice of engineering and motivation for engineering majors and courses.

Joint Engineering students also benefit from the UMSL’s Career Services and WUSTL’s Career Center. Both universities hold annual job fairs that provide students opportunities to meet with employers from across the country to discuss co-ops, internships and employment.
value & convenience

Flexible schedules with evening classes and internship opportunities make this program especially convenient for traditional and nontraditional students.

Pre-engineering core
Students who enter the program will take the pre-engineering core of mathematics, physics, chemistry, humanities, social sciences and some engineering subjects on the UMSL campus.
Many students join the Honors College to further strengthen their liberal arts education.

Core engineering curriculum
Success in engineering requires expertise in key theoretical and practical areas of each discipline. Students achieve this via the required engineering courses.
Upper-level engineering courses are taken on the Washington University campus.

Elective, laboratory and design courses
Today’s engineering jobs require the ability to apply core knowledge in novel ways and an awareness of the interplay between design and societal impact.
Elective, laboratory and design courses provide the students with examples of current applications and access to modern engineering tools.

A world-class education
UMSL’s tuition, faculty and facilities, combined with WUSTL’s reputation as a world-class engineering school, is a value that cannot be matched by any other university in the region. This is the only opportunity in the St. Louis area where students can choose to pursue an engineering degree on either a full-time or part-time basis.
The majority of Joint Engineering faculty are professional engineers who have first-hand knowledge of the skills and training that engineers need in today’s competitive workforce. These faculty also serve as mentors to students, providing career advice and insight.

Both UMSL and WUSTL campuses are centrally located and readily accessible using public transportation. The MetroLink has multiple stops on both UMSL and WUSTL campuses.

“The Joint Engineering Program provided a well-rounded engineering education during hours that met my needs with opportunities to engage in extracurricular activities. The professors and staff were supportive and always made themselves available.”
Siri Vikan
Airport Engineer, MidAmerica Airport
Civil Engineering, 2013

For a full-time student, the tuition is approximately $9,000 a year.
The tuition for engineering courses is the UMSL tuition plus a $67 engineering fee per student credit hour.
The majority of Joint Engineering students receive financial aid in the form of loans or scholarships through the help of UMSL’s financial aid office.

Tuition and fees based on the 2013-2014 academic year.
By offering coursework primarily during the evening hours, the majority of Joint Program students are able to jump-start their careers by working part time as interns at local engineering firms while attending classes. Students have access to career services at both UMSL and WUSTL.

The following are St. Louis firms that have supported Joint Engineering students through internships and cooperative employment:

- Abeinsa EPC
- Air Products and Chemicals Inc.
- Ameren Corp.
- Anheuser-Busch InBev
- Bernardin, Lochmuller & Associates
- Boeing Co.
- bioMérieux Inc.
- Burns & McDonnell
- Code 3 Inc.
- Cardinal Surveying & Mapping Inc.
- City of Clayton
- Clayco
- ControlTech Automation
- Emerson Climate Technologies
- Hermetic Motor
- Hunter Engineering Co.
- Innoventor Inc.
- Lickenbrock Technologies
- LMI Aerospace Inc.
- Metropolitan St. Louis Sewer District
- Microgrid Solar
- National Cart Co.
- Natoli Engineering Co.
- Nidec Motor Corp.
- Pandjiris
- Peabody Energy Corp.
- Power Engineering
- Schweitzer Engineering Laboratories Inc.
- UMSL Planning and Construction
- Watlow
- Hunter Engineering Co.
- Innoverentor Inc.
- Lickenbrock Technologies
- LMI Aerospace Inc.
- Metropolitan St. Louis Sewer District
- Microgrid Solar
- National Cart Co.
- Natoli Engineering Co.
- Nidec Motor Corp.
- Pandjiris
- Peabody Energy Corp.
- Power Engineering
- Schweitzer Engineering Laboratories Inc.
- UMSL Planning and Construction
- Watlow

Starting salaries for 2013 entry-level engineering jobs in the St. Louis area:

- Civil Engineering: $58,517
- Electrical Engineering: $62,616
- Mechanical Engineering: $61,547

Regardless of career path, our students have the confidence, credibility and resources needed to succeed. Most Joint Engineering graduates remain in the St. Louis region as employees of local engineering firms.

Engineers are in high demand, and their employment in the St. Louis region enriches the community. Estimates by the U.S. Department of Labor project an 11 percent overall growth in the number of engineering jobs in St. Louis over the next decade.

As a student, T. Christopher Peoples applied for an entry-level position at Pizman’s Company of Surveyors and Engineers based in St. Louis. In 2010, he purchased a majority stake in the firm and became president and CEO. He was honored by the St. Louis Business Journal’s “40 Under 40.”

T. CHRISTOPHER PEOPLES
Civil Engineering, 2008

“The Joint Engineering Program helped me to be a good steward of my time, money and abilities. The evening schedule enabled me to take a part-time engineering position at Nidec Motor Corp. during my last school year.”

JONAS KERSULIS
PhD student, University of Michigan–Ann Arbor
Electrical Engineering, 2013
Doors open for students of this program because it is powered by a unique partnership of two of the most respected educational institutions in the region.

**University of Missouri–St. Louis**

The University of Missouri–St. Louis is a public metropolitan research university located in Missouri’s most populous and economically important region. UMSL is the largest university in the St. Louis area and the third largest in Missouri, conferring more than 3,000 degrees in 2010. UMSL is ranked 14th nationally in a survey of “Best College and University Civic Partnerships.” The survey measures economic, social and cultural impact on metro regions.

UMSL was one of 115 colleges and universities selected by the Carnegie Foundation for the foundation’s 2010 Community Engagement Classification. The classification recognizes exceptional collaboration between institutions of higher education and their larger communities for the mutually beneficial exchange of knowledge and resources.

umsl.edu

**Washington University School of Engineering & Applied Science**

Washington University is a global leader in research and education with nearly 12,000 full-time students, more than 3,000 full- and part-time faculty members and more than half a billion dollars in annual research expenditures. Nearly 60 of the university’s graduate and undergraduate programs currently hold a top 25 ranking by U.S. News & World Report.

Through the convergence of WUSTL’s strengths in medicine, the life and physical sciences, architecture, engineering and international partnerships, the School of Engineering & Applied Science is positioned to become one of the world’s best private, research-intensive engineering schools. By discovering knowledge and preparing students for leadership roles, the school has the potential to make a profound and significant difference in the world.

engineering.wustl.edu

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**by the numbers**

- **50** UMSL received a TOP 50 Award from the St. Louis Regional Chamber for its contributions in “shaping the future of St. Louis.”
- **$135 m** amount in financial aid students received from UMSL and other sources during the 2010-11 academic year.
- **61,000+** alumni living in the St. Louis area. That means UMSL has the largest university alumni population in the region.

- **95%+** of Joint Engineering graduates were either employed or pursuing a graduate degree, according to the 2010-11 graduate survey results.
- **$150 m** recently invested in a new complex of state-of-the-art engineering facilities at Washington University.
- **No. 2** St. Louis’ ranking for the fastest-growing city for tech jobs according to Fortune Magazine, March 2013.
- **61,000+** alumni living in the St. Louis area.

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umsl.edu/divisions/engineering