An arrangement between Macalester and Washington University in St. Louis makes it possible for students to receive a BA degree from Macalester and a BS degree in engineering from Washington University in only five years, with the first three spent at Macalester. For details, see macalester.edu/engineering or contact the Macalester 3-2 engineering liaison, Chad Topaz, professor of mathematics in the department of Mathematics, Statistics, and Computer Science.

About the Program
The engineering program provides a means for Macalester students to gain the benefits of a liberal arts education while preparing themselves for a professional career in any of several areas of engineering. Washington University participates in this program as a means of attracting strong students with diverse interests and backgrounds to engineering disciplines. The university recognizes that Macalester students receive an excellent background in science and mathematics that prepares them well for technical studies in engineering while at the same time developing a broad background in the humanities and social sciences. Students who participate in the program are well prepared to advance in technical management and to play major roles in solving increasingly complex societal problems. Other advantages of the dual degree program include the following:
The ability to study in diverse disciplines and still earn a professional engineering degree after only five years of study
The opportunity to pursue other academic, athletic, or extracurricular interests
The chance to study at a small liberal arts college in order to develop the skills and confidence needed for success in engineering
The opportunity to explore different areas of science and engineering before committing to a narrowly focused course of professional study

Courses
The courses required to enter the 3–2 program at Washington University are listed on the Washington University website and to some extent depend on the particular subfield of engineering. At the time of entry to the two-year engineering component of the program, students can choose a major from a variety of engineering fields:
Biomedical Engineering
Chemical Engineering
Computer Engineering
Computer Science
Electrical Engineering
Mechanical Engineering
Systems Science and Engineering

Special Opportunities
Students can take advantage of the many opportunities at Macalester to work closely with professors on research projects, and a few even co-author papers and present them at local, regional, or national meetings. All of the science departments at Macalester offer opportunities for intensive student summer projects, and extensive financial support is often provided through special grant programs.
The departments of Mathematics, Statistics, and Computer Science, and Physics and Astronomy offer courses in applied mathematics, circuit design, and various aspects of computer engineering. Many students benefit from the college’s internship program and work in industry full time during the summer or part time during the semester.

Resources
Through Macalester’s endowment and a variety of grants, the college has purchased state-of-the-art equipment for departments in the sciences as well as those in humanities and social sciences. Students benefit from labs for student-faculty research; fully equipped immunology, physiology, neuroscience, and molecular genetics labs; and outstanding teaching labs and classrooms.
Networked computer labs featuring UNIX, Windows, and Macintosh systems—configured for advanced technical computing—enable students to run simulations and conduct image and statistical analysis and general research.

Printed August 2016
macalester.edu/engineering