

## Engineering Graduate Programs

Founded in 1912, the School of Engineering educates tomorrow's technical leaders in small, rigorous classes taught by expert faculty members. Our outstanding graduate programs offer master's and Ph.D. degrees, as well as open university, and professional certificate programs.

## Education Fitting Your Work Schedule and at Your Own Pace

Santa Clara University provides full-time students and busy working professionals in Silicon Valley with various education options to match their personal needs and working schedules, including

- **Degree Programs**—full-time and part-time
- **Certificate Programs**—full-time and part-time
- **Open University**—take only the courses that interest you

To accommodate our students' busy work and internship schedules, all of our graduate engineering classes are held outside of normal business hours, with early morning classes from 7 a.m. to 9 a.m., evening classes starting at 5 p.m. and 7 p.m., and weekend classes. Our flexibility allows you to complete the program at your own pace.



For further information, please contact

Graduate Engineering Services  
Santa Clara University  
500 El Camino Real  
Santa Clara, CA 95053  
408-554-4313

[www.scu.edu/engineering/graduate](http://www.scu.edu/engineering/graduate)  
[www.scu.edu/engineering/bioengineering](http://www.scu.edu/engineering/bioengineering)



The Jesuit University in Silicon Valley

SANTA CLARA UNIVERSITY

GRADUATE PROGRAMS

# Bioengineering



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# Bioengineering Graduate Program



Bioengineering is the fastest growing segment of engineering today and holds the promise of improving the lives of all people in very direct and diverse ways. A graduate education from Santa Clara University prepares our students to ethically tackle challenging problems at the interface of engineering, the life sciences, and the health professions to promote human health and environmental sustainability—two of the greatest challenges of our times.

## Our Graduate Program

Designed to meet the needs of both busy working professionals taking classes part time and full-time students focused solely on study, our program offers a full array of courses during early morning, evening, and weekend hours to accommodate the busiest schedules while allowing daytime hours for work or study.

Flexibility extends to our course offerings. Because we draw from a rich pool of highly qualified adjunct lecturers from industry, we are able to offer the latest information on cutting-edge technologies, techniques, and trends to ensure our students stay current.

## Master of Science Program

The master's program is designed to accommodate the needs of students interested in advanced study in the areas of medical devices/bioinstrumentation and molecular and cellular bioengineering. An individual may pursue the degree of Master of Science (M.S.) either as a full-time or part-time student through a customized balance of coursework, directed research, and/or thesis research. All students admitted to the master's program are expected to be competent in the fundamental subjects required within an accredited program for a B.S. in bioengineering.

Courses for the master's degree must result in a total of 45 units, and must satisfy the requirements of the graduate core—a group of classes designed to enrich a student's understanding of global responsibilities and ethical decision making. The core courses of the bioengineering graduate program require that students also take foundational classes in advanced mathematics and cellular and molecular biology.

Applicants who have taken graduate-level courses at other institutions may qualify to transfer a maximum of 9 quarter units of approved credit to their graduate program at Santa Clara University.

## Certificate Programs

Certificate programs are designed to provide intensive background in a focused area at the graduate level. With 16 to 20 required units for completion, each certificate may be completed in a short period of time. These certificate programs are appropriate for students working in industry who wish to enhance their skills or for those interested in changing their career path. All SCU courses applied to the completion of a certificate program earn graduate credit that may also be applied toward a graduate degree.

## Unique Program Features

**Faculty from Industry.** Seventy-five graduate engineering faculty members work in Silicon Valley and maintain a strong industry connection. In addition to their business perspective, they are also instrumental in helping students connect with Bay Area engineering companies for internship and job opportunities.

**Teaching Methodology.** SCU faculty members use a wide variety of teaching methods to maximize students' learning experience, including discussion sessions, small-group coaching, problem-driven seminars, individual and "just-in-time" instruction in the form of online materials, learning guides, and short tutorials.

**Project-Based Curriculum.** The program features a heavy reliance on project-based learning, case analyses, and industrial practices, so coursework is immediately applicable to responsibilities at work.

**Team Orientation.** Teamwork is fundamental to the program, just as it is in the workplace. Collaborative learning equips students with the technical, communication, and management skills necessary to succeed in any career path.

**Student Services for Working Professionals.** SCU recognizes the pressures that part-time students experience in balancing competing demands on their time. We are dedicated to streamlining the administrative processes by providing students with the highest level of student services.

