



# Santa Clara University

## College of San Mateo Transfer Guide

### THE SCHOOL OF ENGINEERING

Thank you for your interest in Santa Clara University! This guide has been designed to help make the course-planning process easier for students who wish to transfer into the School of Engineering at SCU.

Prospective transfer students please note the following prior to using this document:

- This transfer guide represents the new core (general education) curriculum Santa Clara University implemented for its incoming freshmen class in Fall 2009. ***Students planning to transfer to Santa Clara University in Fall 2011 and later*** will need to refer to this guide only for planning purposes. Please find a footnote located on the bottom righthand side of this document, “Core 2009,” to differentiate this document from earlier versions of our transfer guides.
- Oftentimes schools will cross-list a single course separately under different departments. This guide will individually list cross-listed courses for each department they are found in. It is a student’s responsibility to notice whether or not a course is cross-listed as credit will only be issued one time from SCU.
- If a student takes an honors version of a course that is listed on this guide, SCU will accept that class as transferable.
- Math courses eligible for transfer to SCU to fulfill math requirements are listed on this guide. A Pre-Calculus course is eligible to receive general elective credit but will not satisfy SCU’s core math requirement.



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### THE SCHOOL OF ENGINEERING

#### Bachelor of Science in Engineering

**Majors:** Bioengineering, Civil Engineering, Computer Science & Engineering, Electrical Engineering, General Engineering, Mechanical Engineering, and Web Design & Engineering.

#### **Admission requirements:**

- 1) **Critical Thinking and Writing:** Two courses -- *English 100* and *English 110* **OR** *English 165*.
- 2) **Mathematics:** Two courses -- *Math 251* and *252*.
- 3) **Physical Science:** *Chemistry 210*; *Physics 250* and *260*. **Please note:** Web Design & Engineering majors **are not** required to complete these courses and can select one course from the following instead: *Astronomy 100/101, 100/103*; *Biology 110, 210, 220, 230, 240, 250, 260*; *Chemistry 192, 210, 220, 231, 232, 250*; *Geology 100/101, 210*; *Meteorology 100/101*; *Oceanography 100/101*; *Paleontology 110/111*; *Physics 210, 220, 250, 260, 270*.

#### **Recommended courses:**

**The following courses allow students to complete more of SCU's Core Curriculum (General Education) / School of Engineering requirements:**

**Please note:** *a) No courses taken from this guide may fulfill more than one requirement;*  
*b) Students must complete both Cultures and Ideas I and II prior to attending SCU otherwise they will be required to repeat this requirement in its entirety at SCU. It is strongly recommended to complete both Cultures and Ideas I and II prior to attending SCU.*

- 1) **Cultures and Ideas I (please see notation above):** One course in Western Culture from the following: *Art 100, 101, 102, 103, 104*; *History 100, 101*; *Humanities 101, 102*.
- 2) **Cultures and Ideas II (please see notation above):** One course focusing upon world cultures from the following: *Anthropology 110, 370*; *English Literature 320*; *Ethnic Studies 360*; *Geography 110, 150*; *Music 250*; *Philosophy 300*; *Political Science 110, 130*.
- 3) **Mathematics:** *Math 253* (Calculus III). *Math 275* (Differential Equations) is also needed for all majors except Bioengineering and Web Design & Engineering. *Math 268* (Discrete Math) and *Math 270* (Linear Algebra) are needed by Computer Science and Engineering majors only.
- 4) **Computer Science:** For students with no background in programming, *CIS 254* is recommended. Computer Science & Engineering, Electrical Engineering, Web Design & Engineering majors need *CIS 278* and *279*. Bioengineering and Mechanical Engineering majors need *CIS 278* only.
- 5) **Physical Science:** *Physics 270* is needed for Electrical Engineering majors only. Bioengineering majors need *Biology 130, 160* and *Chemistry 220, 231, 232*



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## College of San Mateo Transfer Guide THE SCHOOL OF ENGINEERING

### Bachelor of Science in Engineering (continued)

#### Recommended courses to complete more of SCU's Core Curriculum / School of Engineering requirements:

- 6) **Graphics:** *Engineering 210* is needed for Civil, Mechanical and General Engineering majors.
- 7) **Circuits:** *Engineering 260*. Not required for Web Design & Engineering majors.
- 8) **Statics:** *Engineering 230*. Not required for Computer Science & Engineering, Bioengineering and Web Design & Engineering majors.
- 9) **Properties of Materials:** *Engineering 270* is needed for Bioengineering, General and Mechanical Engineering majors only.
- 10) **Dynamics:** *Engineering 240* is needed for Civil Engineering majors only.
- 11) **Social Science:** One course from the following: *Anthropology 110, 180, 350; Economics 100, 102; Ethnic Studies 151, 152; Political Science 100, 110, 130, 150, 200, 212; Psychology 100, 110, 300; Sociology 100, 105, 110, 141, 200.*
- 12) **Diversity:** One course from the following: *Ethnic Studies 101, 102, 150, 265, 440; History 260; Political Science 250; Sociology 141.*
- 13) **Arts:** May be satisfied with a combination of courses totaling a minimum of three semester units from the following: *Art 124, 201, 202, 206, 207, 214, 223, 224, 225, 226, 231, 232, 245, 246, 301, 315, 351, 352, 353, 405, 406, 411, 412; English 161, 162, 163; Music 100, 101, 102, 103, 104, 131, 132, 133, 134, 301, 302, 303, 304, 371, 372, 373, 374, 401, 402, 403, 404, 430, 452, 470; Physical Education – Dance 117, 121, 131, 132, 141, 143, 151, 153, 161, 167.*
- 14) **Cultures and Ideas III:** *Please note--students can only transfer this requirement to SCU if they have already satisfied BOTH Cultures & Ideas I and II previously.* One additional course focusing upon world cultures from the following: *Anthropology 110, 370; English Literature 320; Ethnic Studies 360; Geography 110, 150; Music 250; Philosophy 300; Political Science 110, 130.*
- 15) **Ethics:** If students choose to take an Ethics class there is not a guarantee of transferability. However a student may submit a course syllabus to petition for possible core requirement credit.
- 16) **Civic Engagement, Religious Studies, Advanced Writing, and Science, Technology & Society are requirements that must be fulfilled at Santa Clara University.**
- 17) Consult the SCU Bulletin for additional freshmen and sophomore level requirements in your major. The Bulletin can be found on the SCU web site ([www.scu.edu](http://www.scu.edu)) under Academic Programs.

*The above information is to be used as a guide for the purpose of admissions into Santa Clara University. This information is reviewed periodically and the date of the most recent update is noted in the bottom left hand corner of this guide. Students are responsible to make sure that any courses taken are listed on this guide at the time of actual enrollment. Transferability is not guaranteed and is up to our discretion, largely based upon the Santa Clara University core curriculum in effect at the time of admission.*