

Santa Clara University

Undergraduate

School of Engineering

Foothill College Transfer Guide

For use by Transfer Applicants

Use the **TRANSFER CREDIT PLANNER** to map out your transfer credit.

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 to the School of Engineering at Santa Clara University.

Admission Recommendations for Transfer Students:

School of Engineering:

Bachelor of Science majors: Bioengineering, Civil Engineering, Computer Science & Engineering, Electrical Engineering, General Engineering, Mechanical Engineering, and Web Design & Engineering

Courses strongly recommended for admission:

- Two English composition courses (*aka: Critical Thinking & Writing 1 & 2*)
- Mathematics: MATH 1A and MATH 1B
- One natural science: CHEM 1A
- Two calculus-based physics courses: PHYS 4A and PHYS 4C and/or 4B
 - Web Design Engineering majors are not required to complete CHEM 1A, PHYS 4A & 4C and/or 4B. Complete one course in the Natural Science list.
- GPA 3.5

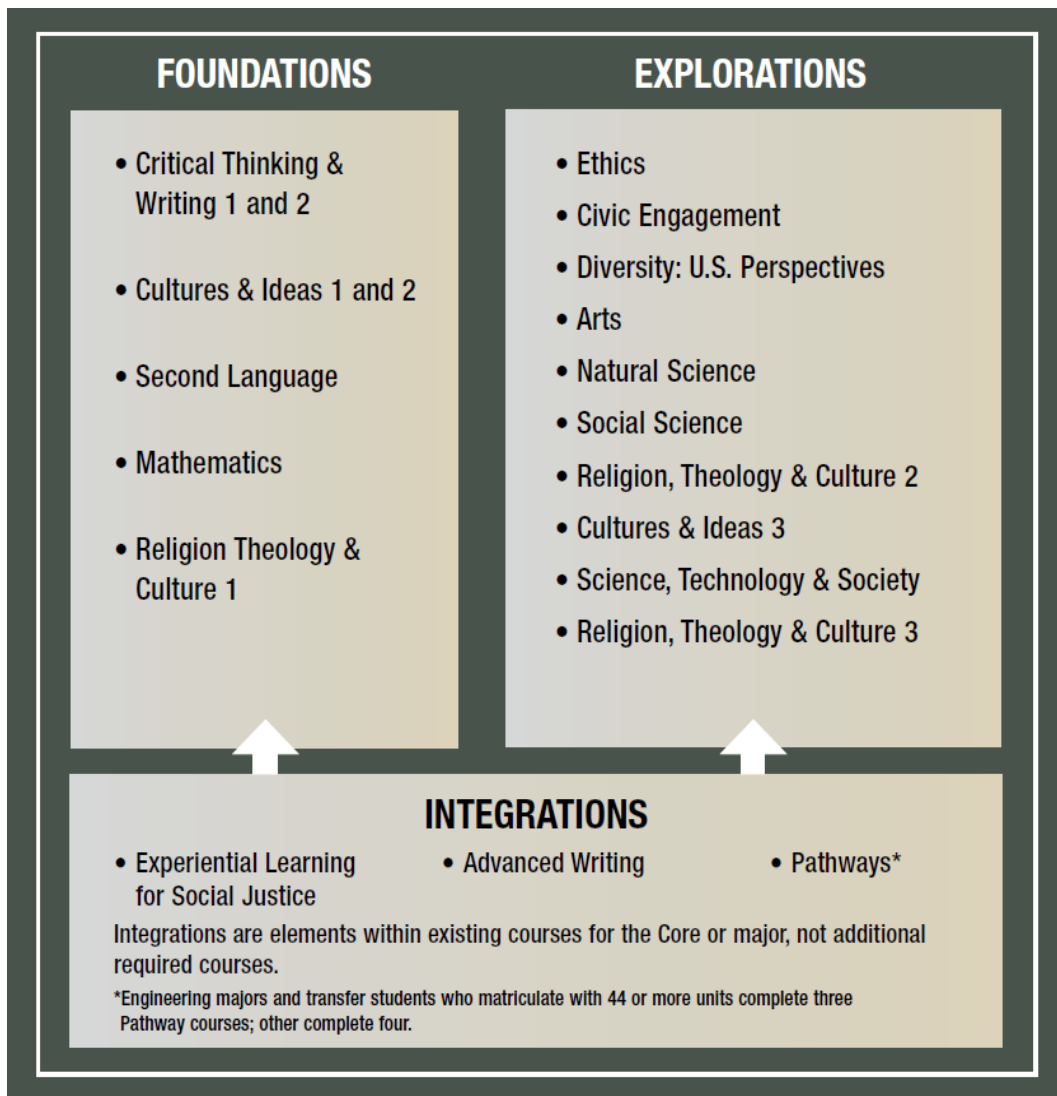
For additional SCU Transfer Admissions information:

<http://www.scu.edu/ugrad/transfer/>

The following information is provided to help transfer students understand and complete additional Santa Clara University Core Curriculum (General Education) and some major requirements.

STRUCTURE OF SANTA CLARA UNIVERSITY GENERAL CORE

Below is a visual representation of Santa Clara University Core Curriculum Requirements. Some Core requirements must be met at SCU: Civic Engagement, Religion, Theology & Culture 2, Science, Technology & Society, Religion, Theology & Culture 3, Experiential Learning for Social Justice, Advanced Writing, and Pathways. Moreover, no courses listed in this guide can fulfill more than one Core requirement.



To learn more about Santa Clara University's Core Curriculum learning goals and objectives, [click here](#).

Note: Current high school students applying as freshmen may not transfer courses to fulfill Core Critical Thinking & Writing 1 and 2 or Cultures & Ideas 1 and 2 in addition to the Core requirements listed above that must be met at SCU.

MAXIMUM NUMBER OF TRANSFER UNITS ACCEPTED:

- Santa Clara University is on a quarter system
 - 1 semester unit is equivalent to 1.5 quarter units
- It is recommended to transfer with 44 or more quarter units of transfer credit (not including AP/IB test credit).
- Students are allowed to transfer in a maximum of one-half of the total quarter units required to graduate in their specific program. The maximum number includes credit transferred from another institution and Advanced Placement and International Baccalaureate test credits.

Academic Division	Minimum number of units required for graduation	Maximum transferrable quarter units	Maximum transferrable Semester Unit equivalency
College of Arts and Sciences	175	87.5	58.33
Leavey School of Business	175	87.5	58.33
School of Engineering:			
<i>Bioengineering</i>	191	95.5	63.66
<i>Civil Engineering</i>	195	97.5	65
<i>Computer Science & Engineering and General Engineering</i>	189	94.5	63
<i>Electrical Engineering</i>	190	95	63.33
<i>Mechanical Engineering</i>	192	96	96
<i>Web Design and Engineering</i>	175	87.5	58.33

TRANSFER CREDIT ACCEPTED:

SCU does not give transfer credit for P/NP, CR, or courses with a grade of C- or lower. Grades are not transferable to SCU, only units. However, awarding of degrees with Latin honors is based on all graded undergraduate courses attempted at SCU and courses taken elsewhere that are used towards the fulfillment of a student's degree. Honors will not be awarded above those merited by the student's record at SCU.

The following courses are not transferrable: most first-year seminars, internships, professional development courses, independent study courses, workshops, most physical education courses, some criminal/administration of justice courses, remedial English and remedial mathematics courses.

Santa Clara University only accepts University of California transferable courses. In addition, SCU does not allow the following Foothill College UC transferrable courses to transfer for credit: Athletics, some Child Development, some Counseling, English as a Second Language, most Environmental Horticulture and Design, some Kinesiology, most Physical Education, Physical Education Adaptive, and Special Education courses. To view all Foothill College's UC transferable courses, visit www.assist.org. UC transferrable courses not listed in this guide and not listed above as excluded will be accepted as elective units. After acceptance, students may petition a course that received elective credit to be evaluated, and if approved, fulfill a Core and/or major requirement. Transfer credit evaluations for individual students are completed after admission to SCU. The following information will help students evaluate their own course work.

FOUNDATIONS Core requirements

Critical Thinking & Writing 1 and 2 Core Requirement:

To fulfill the Critical Thinking & Writing 1 and 2 Santa Clara University Core requirements, a student must complete one course from the Critical Thinking & Writing 1 course list, and one course from the Critical Thinking & Writing 2 course list below. If both requirements are not satisfied prior to enrollment at SCU, students who have completed fewer than 44 quarter units of transfer credit will be required to take the 2 quarter course sequence at SCU. Students who transfer with 44 or more quarter units of transfer credit and have fulfilled the CTW 1 but not the CTW 2 requirement will be required to complete an additional course at SCU to satisfy the CTW 2 requirement.

CRITICAL THINKING & WRITING 1: Complete one course from list below.

Admission recommendation: Complete Critical Thinking and Writing 1 Core requirement.

Exceptions for taking a course listed below to satisfy CTW 1: Students placed into the 2nd college level English (any course listed under CTW 2), or who scored a 4 or 5 on the AP English Language exam, may substitute the course placement or the test credit for CTW 1. Students are responsible for submitting the appropriate AP CollegeBoard Report at the time of acceptance to receive such credit.

Foothill College Course
ENGL 1A: Composition and Reading
ENGL 1AH: Honors Composition and Reading

CRITICAL THINKING & WRITING 2: Complete one course from list below.

Admission recommendation: Complete Critical Thinking and Writing 2 Core requirement.

Foothill College Course
ENGL 1B: Composition, Critical Reading and Thinking
ENGL 1BH: Honors Composition, Critical Reading and Thinking
ENGL 1C: Advanced Composition
ENGL 1CH: Honors Advanced Composition
PHIL 1: Critical Thinking
PHIL 30: Intro to Critical Thinking

CULTURES & IDEAS 1 and 2 Core Requirements:

To fulfill the Santa Clara University Cultures & Ideas 1 and 2 Core Curriculum requirements, a student must complete one course from the Cultures and Ideas 1 list, and one course from the Cultures and Ideas 2 course list. If both requirements are not satisfied prior to enrollment at SCU, students who have completed fewer than 44 quarter units of transfer credit will be required to take the 2 quarter course sequence at SCU. Students who transfer with 44 or more quarter units and fulfilled the Cultures & Ideas 1 but not the Cultures & Ideas 2 requirement, will be required to take one course instead of the 2-course sequence at SCU. **Although it is not listed as an admission recommendation, it is advised to fulfill the Cultures and Ideas 1 and 2 course sequence prior to enrollment at SCU.**

CULTURES & IDEAS 1: Complete one course from list below.

Transfer courses cannot fulfill more than one Santa Clara University Core requirement. If you already took a course listed below to satisfy a different requirement, you will want to choose a different course to complete.

Foothill College Course
ART 2A/2AH: History of Art: History of Western Art from Pre-History to Early Christianity
ART 2B/2BH: History of Western Art from Middle Ages to Renaissance
ART 2C/2CH: History of Western Art from Baroque to Post-Impressionism
ART 2J: American Art
ART 3: Modern Art and Contemporary Thought
BUSI 18: Business Law I
ENGL 48A: The Nature of American Literature (1492-1864)
ENGL 48B: American Literature in the Guilded Age (1865-1914)
ENGL 48C: Modern American Literature (1914-Present)
FA 2: Popular Culture and US History
HIST 4A: History of Western Civilization to 800AD
HIST 4B: History of Western Civilization: 700-1800
HIST 4C/4CH: History of Western Civilization: 1789 to Present/Honors
HIST 9: History of Contemporary Europe
HIST 16: Intro to Ancient Rome
HIST 17A: History of the United States to 1816
HIST 17B: History of the United States from 1816 to 1914
HIST 17C: History of the United States from 1900 to Present
HUMN 1A: Humanities and the Modern Experience
MDIA 12: Popular Culture and US History
MUS 2A: Great Composers and Music Masterpieces of Western Civilization
MUS 2B: Great Composers and Music Masterpieces of Western Civilization
MUS 2C: Great Composers and Music Masterpieces of Western Civilization
PHIL 20A: History of Western Philosophy from Socrates to St. Thomas
PHIL 20B: History of Western Philosophy from Renaissance through Kant
PHIL 20C: Contemporary Philosophy: 19 th and 20 th Century Thought
PHIL 25: Comparative World Religions: West

POLI 1: Intro to American Government and Politics
SOC 23: Race and Ethnic Relations

CULTURES & IDEAS 2: Complete one course from list below.

Transfer courses cannot fulfill more than one Santa Clara University Core requirement. If you already took a course listed below to satisfy a different requirement, you will want to choose a different course to complete.

Foothill College Course
ANTH 2A/2AH: Cultural Anthropology/Honors Cultural Anthropology
ANTH 3: Prehistory- The Search for Lost Civilizations
ANTH 5: Magic, Science and Religion
ANTH 6: Peoples of Africa
ART 2D: African, Oceanic and Native American Art
ART 2F: Intro to Asian Art
ART 2G: Intro to Islamic Art
ECON 25: Intro to the Global Economy
ENGL 14: Traveling the World Through Contemp Lit
ENGL 47A: World Lit 1
ENGL 47B: World Lit 2
GEOG 2: Human Geography
GEOG 5: Intro to Economic Geography
GEOG 10: World Regional Geography
GERN 15: Issues in Death, Dying & Bereavement across Cultures Wor
HIST 8: History of Latin America
HIST 18: Intro to Middle Eastern Civilization
HIST 19: History of Asia
HIST 20: History of Russia and the Soviet Union
HUMN 1B: Humanities and the Modern Experience
HUMN 3/3H: World Myths in Lit, Art and Film/Honors
MUS 2D: World Music
PHIL 24: Comparative World Religions- East
POLI 2: Comparative Government and Politics
POLI 15: International Relations/ World Politics
PSYC 21: Psychology of Women
SOSC 21: Psychology of Women
WMN 11: Women in Global Perspective
WMN 21: Psychology of Women

SECOND LANGUAGE

Note: Students accepted in the School of Engineering are not required to fulfill the second language requirement. However, if a student is admitted in the School of Engineering and decides to change schools after enrollment, the student will be required to fulfill the second language requirement at SCU.

MATHEMATICS:

Admission recommendation: Complete MATH 1A and MATH 1B

To fulfill the admissions mathematics requirement, complete MATH 1A and MATH 1B listed below. A score of 4 or 5 on the Advanced Placement Calculus BC exams will satisfy the mathematics Admission recommendations. Engineering majors at SCU require the completion of more than one math course (see table at the end of this document for additional courses to complete per major).

Foothill College Course	SCU Course equivalency
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14
MATH 2A: Differential Equations	MATH 22
MATH 2B: Linear Algebra	MATH 53
MATH 22: Discrete Mathematics	MATH 51 or COEN 19

Note: SCU does not accept remedial mathematics courses. Although a Pre-calculus course is transferrable, it will not fulfill any general core, major or minor requirements.

RELIGION, THEOLOGY & CULTURE 1: Only needed if transferring with less than 44 quarter units of transfer credit. Students transferring with more than 44 quarter units of transfer credit will be exempt from this requirement.

Students transferring with less than 44 quarter units of transfer credit may complete **one course** from the list below to satisfy the RTC 1 Core requirement.

Transfer courses cannot fulfill more than one Santa Clara Core requirement. If you already took a course listed below to satisfy a different requirement, you will want to choose a different course to complete.

Foothill College Course
PHIL 24: Comparative World Religions- East
PHIL 25: Comparative World Religions- West

Note: The 'transferring with more than 44 quarter unit of transfer credit for the RTC 1 exemption rule does not apply to freshmen applicants.

ETHICS: Complete one course from the list below.

Note: Students accepted in the Leavey School of Business are required to fulfill the Ethics requirement at SCU. Refer to Leavey School of Business Transfer Guide for specific Core and School requirements.

Foothill College Course
PHIL 8: Ethics

CIVIC ENGAGEMENT: Must be completed at Santa Clara University.

DIVERSITY: US Perspectives: Complete one course from list below.

Transfer courses cannot fulfill more than one Santa Clara Core requirement. If you already took a course listed below to satisfy a different requirement, you will want to choose a different course to complete.

Foothill College Course
COMM 10: Gender, Communication and Culture
COMM 12: Intercultural Communication
ENGL 7: Native American Literature
ENGL 12: African American Literature
ENGL 31: Latino/a Lit
ENGL 40/40H: Asian American Literature/Honors Asian American Lit
ENGL 41: Literature of Multicultural America
ENGL 48B: American Literature in the Gilded Age (1865-1914)
FA 2: Popular Culture and US History
HIST 10: History of California- The Multicultural State
MDIA 12: Popular Culture and US History
MUS 8/8H: Music of Multicultural America/Honors of Multicultural America
PHOT 8: Photography of Multicultural America
SOC 23: Race and Ethnic Relations

ARTS

School of Engineering students will automatically fulfill the Arts by taking required courses within their major at SCU. However, if a student is admitted in the School of Engineering and decides to change schools after enrollment, the student will be required to fulfill the ARTS requirement by taking a course (s) at SCU. Refer to the College of Arts & Sciences or Leavey

School of Business transfer guides for a list of courses that could satisfy the Core Arts requirement.

NATURAL SCIENCE (WITH A LAB) Core Requirement: *Complete one course from list below.*

Admission recommendation: *Complete CHEM 1A; PHYS 4A & 4C and/or 4B. It is recommended to complete the PHYS series prior to enrollment at SCU.*

(Note: Web Design & Engineering major completes one course to satisfy Core Natural Science requirement. It is recommended to complete CHEM 1A)

To satisfy the Core Natural Science requirement, the course must have a lab component.

Engineering majors at SCU require the completion of more than one science course (see table at the end of this document for additional courses to complete per major).

When a Foothill College course does not have a direct SCU course equivalent, but fulfills the Natural Science Core requirement, a transfer credit (TRCR) code of TRCR 18 is assigned.

Foothill College Course	SCU Course equivalency
ANTH 1/1L: Intro to Physical Anthropology/ Lab	ANTH 1
ANTH 8/8L or LX or LY: Intro to Archaeology/Lab	ANTH 2
ANTH 13/13L: Intro to Forensic Anthropology/Lab	TRCR 18
ASTR 10A/10L: General Astronomy- Solar System/ Lab	TRCR 18
ASTR 10B or 10BH/10L: General Astronomy- Stars, Galaxies, Cosmology/ Lab	TRCR 18
BIOL 1A: Principles of Cell Biology	BIOL 24
BIOL 1B: Form and Function in Plants and Animals	BIOL 21
BIOL 1C: Evolution, Systematics and Ecology	BIOL 22/23
BIOL 1D: Molecular Genetics	BIOL 25
BIOL 9/9L: Environmental Biology/ Lab	TRCR 18
BIOL 10: General Biology- Basic Principles	TRCR 18
BIOL 13: Marine Biology	TRCR 18
BIOL 14: Human Biology	TRCR 18
BIOL 15: California Ecology/ Natural History	TRCR 18
BIOL 23: Intro to Biotechnology	TRCR 18
BIOL 40A: Human Anatomy and Physiology I	BIOL 21
BIOL 40B: Human Anatomy and Physiology II	BIOL 24
BIOL 40C: Human Anatomy and Physiology III	BIOL 25
BIOL 41: Microbiology	TRCR 18
BTEC 51A/51AL Cell Biology for Biotechnology/Lab	TRCR 18
CHEM 1A: General Chemistry	CHEM 11
CHEM 1B: General Chemistry	CHEM 12
CHEM 1C: General Chemistry & Qualitative Analysis	CHEM 13
CHEM 12A: Organic Chemistry	CHEM 31

CHEM 12B: Organic Chemistry	CHEM 32
CHEM 12C: Organic Chemistry	CHEM 33
CHEM 25: Fundamentals of Chemistry	TRCR 18
CHEM 30A: Survey of Inorganic and Organic Chem	TRCR 18
CHEM 30B: Survey of Organic Biochemistry	TRCR 18
GEOG 1: Physical Geography	TRCR 18
HORT 10: Environmental Horticulture & the Urban L	TRCR 18
PHYS 2A: General Physics	PHYS 11
PHYS 2B: General Physics	PHYS 12
PHYS 2C: General Physics	PHYS 13
PHYS 4A: General Physics: Calculus	PHYS 31
PHYS 4B: General Physics: Calculus	PHYS 33
PHYS 4C: General Physics: Calculus	PHYS 32
PHYS 4D: General Physics: Calculus	PHYS 34

SOCIAL SCIENCE: Complete one course from list below.

Note: Students accepted in the Leavey School of Business take ECON 1A or ECON 1B to satisfy the Social Science requirement. Refer to Leavey School of Business Transfer Guide for specific core and school requirements.

Transfer courses cannot fulfill more than one Santa Clara Core requirement. If you already took a course listed below to satisfy a different requirement, you will want to choose a different course to complete.

Foothill College Course
ANTH 2A: Cultural Anthropology
ANTH 3: Prehistory- The Search for Lost Civilizations
ANTH 4: First Peoples of North America
ANTH 8: Intro to Archaeology
ECON 1A: Principles of Economics (Macro)
ECON 1B: Principles of Economics (Micro)
ECON 9/9H: Political Economy/Honors Political Economy
ECON 18: Contemporary Economic Issues
POLI 2: Comparative Government and Politics
POLI 9/9H: Political Economy/Honors Political Economy
POLI 15: International Relations/ World Politics
PSYC 1: General Psychology
PSYC 10: Research Methods and Designs
PSYC 30: Social Psychology
SOC 1: Intro to Sociology
SOC 10: Research Methods and Designs
SOC 20: Major Social Problems
SOC 30: Social Psychology

RELIGION, THEOLOGY & CULTURE 2: Must be completed at Santa Clara University.

CULTURES & IDEAS 3: Complete one course from the list below.

Transfer courses cannot fulfill more than one Santa Clara Core requirement. If you already took a course listed below to satisfy a different requirement, you will want to choose a different course to complete.

Note: Students accepted in the Leavey School of Business fulfill the Cultures and Ideas 3 requirement at SCU. Refer to Leavey School of Business Transfer Guide for specific core and school requirements.

Foothill College Course
ANTH 2A/2AH: Cultural Anthropology/Honors Cultural Anthropology
ANTH 3: Prehistory- The Search for Lost Civilizations
ANTH 5: Magic, Science and Religion
ANTH 6: Peoples of Africa
ART 2D: African, Oceanic and Native American Art
ART 2F: Intro to Asian Art
ART 2G: Intro to Islamic Art
ECON 25: Intro to the Global Economy
ENGL 14: Traveling the World Through Contemp Lit
ENGL 47A: World Lit 1
ENGL 47B: World Lit 2
GEOG 2: Human Geography
GEOG 5: Intro to Economic Geography
GEOG 10: World Regional Geography
GERN 15: Issues in Death, Dying & Bereavement across Cultures Wor
HIST 8: History of Latin America
HIST 18: Intro to Middle Eastern Civilization
HIST 19: History of Asia
HIST 20: History of Russia and the Soviet Union
HUMN 1B: Humanities and the Modern Experience
HUMN 3/3H: World Myths in Lit, Art and Film/Honors
MUS 2D: World Music
PHIL 24: Comparative World Religions- East
POLI 2: Comparative Government and Politics
POLI 15: International Relations/ World Politics
PSYC 21: Psychology of Women
SOSC 21: Psychology of Women
WMN 11: Women in Global Perspective
WMN 21: Psychology of Women

SCIENCE, TECHNOLOGY & SOCIETY: Must be completed at Santa Clara University.

RELIGION, THEOLOGY & CULTURE 3: Must be completed at Santa Clara University.

INTEGRATIONS Core requirements

EXPERIENTIAL LEARNING FOR SOCIAL JUSTICE: Must be completed at Santa Clara University.

ADVANCED WRITING: Must be completed at Santa Clara University.

PATHWAYS: Must be completed at Santa Clara University.

Transfer students who matriculate with less than 44 quarter units of transfer credit must take 4 courses to fulfill the pathways requirement. However, students transferring in with more than 44 quarter units will complete 3 courses to fulfill the Core Pathways requirement.

ADDITIONAL SCHOOL OF ENGINEERING REQUIREMENTS PER MAJOR

The following courses allow students to complete additional School of Engineering requirements.

BIOENGINEERING MAJOR REQUIREMENTS

Foothill College Course	SCU course equivalency
Natural Science:	
BIOL 1B: Form and Function (or BIOL 40A)	BIOL 21
BIOL 1C: Evolution, Systematics & Ecology	BIOL 22/23
BIOL 1A: Prin of Cell Biol (or BIOL 40B)	BIOL 24
BIOL 1D: Molecular Genetics (or BIOL 40C)	BIOL 25
CHEM 1A: General Chemistry	CHEM 11
CHEM 1B: General Chemistry	CHEM 12
CHEM 1C: General Chemistry & Qualitative Analy	CHEM 13
CHEM 12A: Organic Chemistry	CHEM 31
CHEM 12B: Organic Chemistry	CHEM 32
CHEM 12C: Organic Chemistry	CHEM 33
PHYS 4A: General Physics: Calculus	PHYS 31
PHYS 4C: General Physics: Calculus	PHYS 32
PHYS 4B: General Physics: Calculus	PHYS 33
Engineering:	
ENGR 10: Intro to Engineering	ENGR 1
ENGR 37/37L: Intro to Circuit Analysis/Lab	ELEN 50/50L
ENGR 45: Properties of Materials	MECH 10/10L
<i>No approved Foothill equivalency at time of publication</i>	COEN 45 or 44
Mathematics:	
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14
MATH 2A: Differential Equations	MATH 22

CIVIL ENGINEERING MAJOR REQUIREMENTS

Foothill College Course	SCU course equivalency
Natural Science:	
CHEM 1A: General Chemistry	CHEM 11
PHYS 4A: General Physics: Calculus	PHYS 31
PHYS 4C: General Physics: Calculus	PHYS 32
PHYS 4B: General Physics: Calculus	PHYS 33

<i>No approved Foothill course equivalent</i>	CENG 20/20L
Engineering:	
ENGR 10: Intro to Engineering	ENGR 1
ENGR 37/37L: Intro to Circuit Analysis/Lab	ELEN 50/50L
ENGR 35: Statics	CENG 41
<i>No approved Foothill course equivalent</i>	CENG 7
Mathematics:	
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14
MATH 2A: Differential Equations	MATH 22

COMPUTER SCIENCE & ENGINEERING

Foothill College Course	SCU course equivalency
Natural Science:	
CHEM 1A: General Chemistry	CHEM 11
PHYS 4A: General Physics: Calculus	PHYS 31
PHYS 4C: General Physics: Calculus	PHYS 32
PHYS 4B: General Physics: Calculus	PHYS 33
Engineering:	
ENGR 10: Intro to Engineering	ENGR 1
ENGR 37/37L: Intro to Circuit Analysis/Lab	ELEN 50/50L
CS 1A or CS 2A or CS 20A	COEN 10/10L (or CSCI 10)
CS 1B or CS 2B	COEN 11/11L (or CSCI 60)
CS 1C or CS 1M or CS 2C	COEN 12/12L (or CSCI 61)
CS 10	COEN 20/20L
MATH 22: Discrete Mathematics	COEN 19
Mathematics:	
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14
MATH 2A: Differential Equations	MATH 22
MATH 2B: Linear Algebra	MATH 53

ELECTRICAL ENGINEERING

Foothill College Course	SCU course equivalency
Natural Science:	
CHEM 1A: General Chemistry	CHEM 11
CHEM 1B: Gen Chem OR (BIOL 1B or BIOL 40A)	CHEM 12 (OR complete BIOL 21)
PHYS 4A: General Physics: Calculus	PHYS 31
PHYS 4C: General Physics: Calculus	PHYS 32
PHYS 4B: General Physics: Calculus	PHYS 33
PHYS 4D: General Physics: Calculus	PHYS 34

Engineering:	
ENGR 10: Intro to Engineering	ENGR 1
ENGR 35: Statics	CENG 41
ENGR 37/37L: Intro to Circuit Analysis/Lab	ELEN 50/50L
CS 1B or CS 2B	COEN 11/11L
CS 1C or CS 1M or CS 2C	COEN 12/12L
Mathematics:	
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14
MATH 2A: Differential Equations	MATH 22

GENERAL ENGINEERING

Foothill College Course	SCU course equivalency
Natural Science:	
CHEM 1A: General Chemistry	CHEM 11
PHYS 4A: General Physics: Calculus	PHYS 31
PHYS 4C: General Physics: Calculus	PHYS 32
PHYS 4B: General Physics: Calculus	PHYS 33
Engineering:	
ENGR 10: Intro to Engineering	ENGR 1
ENGR 35: Statics	CENG 41
ENGR 37/37L: Intro to Circuit Analysis/Lab	ELEN 50/50L
CS 1A or CS 2A or CS 20A or CS 21A	COEN 10/10L
ENGR 6: Engineering Graphics	MECH 10/10L
<i>No approved Foothill course at time of publicaiton</i>	MECH 11
ENGR 45: Properties of Materials	MECH 15/15L
Mathematics:	
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14
MATH 2A: Differential Equations	MATH 22

MECHANICAL ENGINEERING

Foothill College Course	SCU course equivalency
Natural Science:	
CHEM 1A: General Chemistry	CHEM 11
PHYS 4A: General Physics: Calculus	PHYS 31
PHYS 4C: General Physics: Calculus	PHYS 32
PHYS 4B: General Physics: Calculus	PHYS 33
Engineering:	
ENGR 10: Intro to Engineering	ENGR 1
ENGR 37/37L: Intro to Circuit Analysis/Lab	ELEN 50/50L
ENGR 35: Statics	CENG 41
<i>No approved course equivalent at time of publication</i>	CENG 43

<i>No approved course equivalent at time of publication</i>	COEN 44/44L
ENGR 6: Engineering Graphics	MECH 10/10L
<i>No approved course equivalency at time of publication</i>	MECH 11
ENGR 45: Properties of Materials	MECH 15/15L
No approved Foothill course equivalency	MECH 140
Mathematics:	
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14
MATH 2A: Differential Equations	MATH 22

Entering as a Mechanical Engineering major, it is recommended to complete the following prior to enrollment at SCU: MATH series, PHYS series, COEN 44/44L, CENG 41, 43 and a course equivalent to MECH 140: Strength of Materials.

WEB DESIGN AND ENGINEERING

Admission recommendation: Web Design & Engineering major completes one course to satisfy Core Natural Science requirement. It is recommended to complete CHEM 1A.

Foothill College Course	SCU course equivalency
Natural Science:	
CHEM 1A: General Chemistry	CHEM 11
Engineering:	
ENGR 10: Intro to Engineering	ENGR 1
CS 1A or CS 2A or CS 20A or CS 21A	COEN 10/10L
CS 1B or CS 2B	COEN 11/11L
CS 1C or CS 1M or CS 2C	COEN 12/12L
Mathematics:	
MATH 1A: Calculus	MATH 11
MATH 1B: Calculus	MATH 12
MATH 1C: Calculus	MATH 13
MATH 1D: Calculus	MATH 14

Additional notes:

- Consult the current Undergraduate Bulletin for Advanced Placement and International Baccalaureate test credit equivalencies at:
<http://www.scu.edu/academics/bulletins/undergraduate/>
- Consult the Santa Clara University Undergraduate Bulletin for additional requirements in a major. The Bulletin can be found at: <http://www.scu.edu/academics/bulletins/undergraduate/>
- Once students are admitted to Santa Clara University, they must abide by the policies, regulations and other requirements outlined in the Undergraduate Bulletin for their cohort year.
- **Per policy, transfer credit earned after enrollment at SCU cannot satisfy University Core, major or minor requirements.** Refer to the SCU Undergraduate Bulletin for additional transfer credit restrictions at:
<http://www.scu.edu/academics/bulletins/undergraduate/>

- This guide is to be used by transfer applicants, not freshmen applicants. Admitted freshmen must complete the following Core requirements at SCU: Critical Thinking & Writing 1 and 2; Cultures & Ideas 1 and 2; Religion Theology & Culture 1 (unless transfer credit for a course was preapproved to fulfill the Core RTC 1 requirement); Civic Engagement; Religion, Theology & Culture 2 and 3 (taken in sequence order after RTC 1 is completed); Science, Technology & Society; Experiential Learning for Social Justice; Advanced Writing; and four Pathway courses.

For questions regarding transfer credit or AP/IB test Credit, contact Sheli Whiting, Transfer Record Analyst at: swhiting@scu.edu.

Disclosure: The information contained in this document 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 right-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.

Santa Clara University

School of Engineering

TRANSFER CREDIT PLANNER CHECK-SHEET

*Admission recommendations

University Core Requirement Course Completed or IP (In Progress)

FOUNDATIONS

- Critical Thinking & Writing 1*
Critical Thinking & Writing 2*
Cultures & Ideas 1
Cultures & Ideas 2
Mathematics*
Religion Theology & Culture 1

(Students transferring with more than 44 quarter units of transfer credit will be exempt from this requirement.)

EXPLORATIONS

- Ethics
Civic Engagement
Diversity: U.S. Perspectives
Arts
Natural Science w/Lab*
Social Science
Religion, Theology & Culture 2
Cultures & Ideas 3
Science, Technology & Society
Religion, Theology & Culture 3

INTEGRATIONS

- E LSJ
Advanced Writing
Pathways

SCHOOL OF ENGINEERING REQUIREMENTS

Refer to the individual major charts for specific requirements:

- Bioengineering
Civil Engr
Computer Science & Engr
Electrical Engr
General Engr
Mechanical Engr
Web Design & Engr

MATHEMATICS*

- Calculus (1st Qtr)*
Calculus (2nd Qtr)*
Calculus (3rd Qtr)
Calculus (4th Qtr)
Differential Equations

NATURAL SCIENCE*

- General Chemistry*
General Chemistry
Physics for Scientists*
Physics for Scientists*
Physics for Scientists
Modern Physics

ADDITIONAL ENGINEERING MAJOR Requirements

- Intro to Engineering
Intro to Circuit Analysis
Engineering Graphics
Programming

Total Quarter UNITS

Note: Refer to the chart listing the maximum number of units allowed to transfer (including AP/IB test credit) per major.