

# *Santa Clara University*

*Undergraduate*

## **School of Engineering**

# **Chabot 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: MTH 1 and MTH 2
- One natural science: CHEM 1A
- Two calculus-based physics courses: PHYS 4A and PHYS 4B OR PHYS 4C
  - Web Design Engineering majors are not required to complete CHEM 1A, PHYS 4A & 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 30 or more semester units (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 <b>quarter</b> units	Maximum transferrable <b>Semester</b> Unit equivalency
<b>College of Arts and Sciences</b>	175	87.5	58.33
<b>Leavey School of Business</b>	175	87.5	58.33
<b>School of Engineering:</b>			
<i>Bioengineering</i>	191	95.5	63.66
<i>Civil Engineering</i>	195	97.5	65
<i>Computer Science &amp; 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, most 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 Chabot College UC transferable courses to transfer for credit: Adaptive Physical Education, most Architecture, Athletics, most Kinesiology, Physical Education Activity, and some Psychology – Counseling. To view all Chabot College's UC transferable courses, visit [www.assist.org](http://www.assist.org). UC transferable 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. However, 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 30 semester units (or 44 quarter units) of transfer credit will be required to take the 2 quarter course sequence at SCU. Students who transfer with 30 or more semester units (or 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 Advanced Writing 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 2<sup>nd</sup> college level English, 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.

<b>Chabot College Course</b>
ENGL 1A: Critical Reading and Composition

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

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

<b>Chabot College Course</b>
ENGL 4: Critical Thinking and Writing About Literature
ENGL 7: Critical Thinking and Writing Across Disciplines

## 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 30 semester units (or fewer than 44 quarter units) of transfer credit will be required to take the 2 quarter course sequence at SCU. Students who transfer with 30 or more semester units (or 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.

Chabot College Course
ADMJ 45: Law & Democracy
ADMJ 50L Intro to Admin Justice
ARTH 4: Art History- Ancient to Gothic
ARTH 5: Art History- Renaissance to Modern
ARTH 6: Art History – Renaissance to Modern
HIST 1: History of Western Civilization to 1600
HIST 2: History of Western Civilization since 1600
HIS 7: United States History
HIS 8: United States History
HIS 12: History of California
POSC 1: Intro to American Government
POSC 12: Intro to California State and Local

### CULTURES & IDEAS 2: 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.

Chabot College Course
ANTH 3: Social and Cultural Anthropology
ANTH 4: Language and Culture
ANTH 5: Cultures of the U.S. in Global Perspectives
ANTH 12: Magic, Religion, Witchcraft and Healing
COMM 11: Intercultural Communication
GEOG 2: Cultural Geography

GEOG 3: Economic Geography
GEOG 5: World Regional Geography
GEOG 10: Global Environmental Problems
HIS 3: World History
HIS 4: World History
HIS 19: History of Modern China and Japan from Late 19 <sup>th</sup> to Early 20 <sup>th</sup> Century
HUMN 68: World Mythology
MUSL 3: World Music
POSC 30: International Relations
PSCN 4: Multiethnic Cultural Communication
RELS 50: Religions of the World
RELS 64: The Nature of Islam
RELS 65: Religions of Asia
RELS 72: Contemporary Issues in Islam

## 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 1 and MATH 2***

*To fulfill the admissions mathematics requirement, complete MTH 1 and 2 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).*

Chabot College Course	SCU course equivalency
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & 2 completed, equates to SCU's MATH 11, 12 & 13)
MTH 3: Multivariable Calculus	MATH 14
MTH 4: Elementary Differential Equations	MATH 22
MTH 6: Elementary Linear Algebra	MATH 53
MTH 8: 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 30 semester units of transfer credit. Students transferring with more than 30 semester units of transfer credit will be exempt from this requirement.

Students transferring with less than 30 semester 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.

<b>Chabot College Course</b>
<i>No approved Chabot College course equivalencies at time of publication</i>

*Note: The 'transferring with more than 30 semester units (or more than 44 quarter units) of transfer credit for the RTC 1 exemption rule does not apply to freshmen applicants.*

## EXPLORATIONS Core requirements

**ETHICS:** Complete **one course** from the list below.

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

<b>Chabot College Course</b>
PHIL 60: Intro to Philosophy: 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.

Chabot College Course
ANTH 5: Cultures of the US in Global Perspective
ANTH 8: Native American Cultures
ARTH 7: Multicultural History of American Art
ECON 5: Economic History of the United States
ENGL 22: Mexican-American/Latino Lit of the U.S.
ENGL 25: Asian American Lit
ENGL 32: US Women's Literature
ENGL 33: Her Story- Women's Autobiographical Writing in Multicultural America
ES 1: Intro to Ethnic Studies
ES 2: Contemp Ethnic Minority United States Families
ES 3: Intro to Muslims in the United States
HIS 20: The African-American Experience in US History through Reconstruction
HIS 21: The African American Experience in US History since Reconstruction
HIS 22: Mexican American History in the Dev of U.S.
HIS 25: American Indian History and Culture
HIS 27: US Women's History
HUMN 65: The American Style
MUSL 5: American Cultures in Music
SOCI 3: American Cultural and Racial Minorities
SOCI 2: Social Problems
SOCI 3: American Cultural and Racial Minorities
SOCI 10: Intro to Asian American Studies

## 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 Arts core requirement.*



## NATURAL SCIENCE (WITH A LAB) Core Requirement:

Complete one course from list below.

**Admission recommendation: Complete CHEM 1A; PHYS 4A & 4B OR 4C.**

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

*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).*

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

The bulletin can be found at: <http://www.scu.edu/academics/bulletins/undergraduate/>

When a Chabot 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.

Chabot College Course	SCU course equivalency
ANAT 1: General Human Anatomy	TRCR 18
ANTH 1/1L: Biological/ Physical Anthropology w/ Lab	ANTH 1
ASTR 10/30: Intro to Astronomy- the Solar System w/ Lab	TRCR 18
ASTR 20/30: Intro to Astronomy- Stars and Universe w/ Lab	TRCR 18
BIOL 2: Principles of Cell/Molecular Biology and Genetics	TRCR 18
BIOL 4: Principles of Animal Biology and Evolution	TRCR 18
BIOL 6: Principles of Plant Biology and Ecology	TRCR 18
BIOL 10: Intro to the Science of Biology	TRCR 18
BIOL 31: Intro to College Biology	BIOL 21
BIOL 50: Anatomy and Physiology	TRCR 18
BIOT 20: Chemistry for Biotechnology	TRCR 18
BIOT 30: Basic Biotechnology/Intro to Cell and Molecular Biol	TRCR 18
CHEM 1A: General College Chemistry I	CHEM 11
CHEM 1B: General College Chemistry II	CHEM 13 (If CHEM 1A & 1B completed, equates to SCU's CHEM 11, 12 & 13)
CHEM 5: Quantitative Analysis	TRCR 18
CHEM 8: Survey of Organic Chemistry	TRCR 18
CHEM 10: Intro to Chemistry	TRCR 18
CHEM 12A: Organic Chemistry	CHEM 31
CHEM 12B: Organic Chemistry	CHEM 33 (If CHEM 12A & 12B completed, equates to SCU's CHEM 31, 32 & 33)
CHEM 30A: Intro to Applied Chemistry I	CHEM 11
CHEM 30B: Intro to Applied Chemistry II	CHEM 13 (If CHEM 30A & 30B completed, equates to SCU's CHEM 11, 12 & 13)
CHEM 31: Intro to College Chemistry	TRCR 18

ENSC 10/11: Humans and the Environment/Lab	TRCR 18
GEOG 1/1L: Intro to Physical Geography w/ Lab	TRCR 18
MICR 1: Microbiology	TRCR 18
PSCI 15: Descriptive Physical Science- Intro to Principles of Physical Science	TRCR 18
PHYS 2A: Intro to Physics I	PHYS 11
PHYS 2B: Intro to Physics II	PHYS 13 (If PHYS 2A & 2B completed, equates to SCU's PHYS 11, 12 & 13)
PHYS 4A: General Physics I	PHYS 31
PHYS 4B: General Physics II	PHYS 33
PHYS 4C: General Physics III	PHYS 32
PHYS 11: Descriptive Physics	TRCR 18
PHSI 1: Human Physiology	TRCR 18

**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.

<b>Chabot College Course</b>
ANTH 2: Intro to Archaeology
ANTH 3: Social and Cultural Anthropology
ANTH 5: Cultures of the US in Global Perspective
ECON 1: Principles of Microeconomics
ECON 2: Principles of Macroeconomics
GEOG 2: Cultural Geography
GEOG 3: Economic Geography
POSC 20: Comparative Government ( <i>RECOMMENDED</i> )**
POSC 30: International Relations
PSY 1: General Psychology
PSY 3: Social Psychology
SOCI 1: Principles of Sociology
SOCI 5: Intro to Social Research
SOCI 30: Social Gerontology

*\*\* (Engineering majors only: POSC 20 will fulfill both Social Science and Cultures and Ideas 3)*

**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.

<b>Chabot College Course</b>
ANTH 3: Social and Cultural Anthropology
ANTH 4: Language and Culture
ANTH 5: Cultures of the U.S. in Global Perspectives
ANTH 12: Magic, Religion, Witchcraft and Healing
COMM 11: Intercultural Communication
GEOG 2: Cultural Geography
GEOG 3: Economic Geography
GEOG 5: World Regional Geography
GEOG 10: Global Environmental Problems
HIS 3: World History
HIS 4: World History
HIS 19: History of Modern China and Japan from Late 19 <sup>th</sup> to Early 20 <sup>th</sup> Century
HUMN 68: World Mythology
MUSL 3: World Music
POSC 20: Comparative Government ( <i>RECOMMENDED</i> )**
POSC 30: International Relations
PSCN 4: Multiethnic Cultural Communication
RELS 50: Religions of the World
RELS 64: The Nature of Islam
RELS 65: Religions of Asia
RELS 72: Contemporary Issues in Islam

\*\*(*Engineering majors only: POSC 20 will fulfill both Social Science and Cultures and Ideas 3*)

**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 fewer than 30 semester units (or 44 quarter units) of transfer credit must take 4 courses to fulfill the pathways requirement. However, students transferring in with more than 30 semester units (or 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

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
BIOL 31: Intro to College Biology	BIOL 21
<i>No approved course equivalency at time of publication</i>	BIOL 24/25
CHEM 1A: General College Chemistry I	CHEM 11
CHEM 1B: General College Chemistry II	CHEM 13 (If CHEM 1A & 1B completed, equates to SCU's CHEM 11,12, 13 sequence)
CHEM 12A: Organic Chemistry	CHEM 31
CHEM 12B: Organic Chemistry	CHEM 33 (If CHEM 12A & 12B completed, equates to SCU's CHEM 31, 32, 33 sequence)
PHYS 4A: General Physics I	PHYS 31
PHYS 4B: General Physics II	PHYS 33

PHYS 4C: General Physics III	PHY 32
<b>Engineering:</b>	
ENGR 10: Intro to Engineering	ENGR 1 (optional)
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
ENGR 22: Engineering Design Graphics	MECH 10/10L
ENGR 25: Computational Methods for Engineers	COEN 44/44L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & 2 completed, equates to SCU's MATH 11, 12, 13)
MTH 3: Multivariable Calculus	Math 14
MTH 4: Elem Differential Equations	Math 22

### CIVIL ENGINEERING MAJOR REQUIREMENTS

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
CHEM 1A : General College Chemistry I	CHEM 11
PHYS 4A: General Physics I	PHYS 31
PHYS 4B: General Physics II	PHYS 33
PHYS 4C: General Physics III	PHYS 32
<b>Engineering:</b>	
ENGR 10: Intro to Engineering	ENGR 1 (optional)
ENGR 36: Engineering Mech - Statics	CENG 41
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
<i>No approved course equivalency at time of publication</i>	CENG 7/7L
<i>No approved course equivalency at time of publication</i>	CENG 10
<i>No approved course equivalency at time of publication</i>	CENG 15
<i>No approved course equivalency at time of publication</i>	CENG 20
<i>No approved course equivalency at time of publication</i>	CENG 44A/44B
<i>No approved course equivalency at time of publication</i>	CENG 115
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & MTH 2 completed, equates to SCU's MATH 11, 12, 13)
MTH 3: Multivariable Calculus	MATH 14
MTH 4: Elem Differential Equations	MATH 22

### COMPUTER SCIENCE & ENGINEERING

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
CHEM 1A : General College Chemistry I	CHEM 11
PHYS 4A: General Physics I	PHYS 31
PHYS 4B: General Physics II	PHYS 33
PHYS 4C: General Physics III	PHYS 32
<b>Engineering:</b>	

ENGR 10: Intro to Engineering	ENGR 1 (optional)
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
CSCI 10: Intro to Progr OR CSCI 14: Intro to Struct	COEN 10/10L
CSCI 14: Intro to Structured Programming in C++	COEN 11/11L
CSCI 20: Intro to Data Structures	COEN 12/12L
CSCI 21: Computer Organization	COEN 20
<i>No approved course equivalency at time of publication</i>	COEN 21
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & 2 completed, equates to SCU's MATH 11, 12, 13)
MTH 3: Multivariable Calculus	MATH 14
MTH 4: Elem Differential Equations	MATH 22
MTH 6: Elem Linear Algebra	MATH 53
MTH 8: Discrete Mathematics	COEN 19

## ELECTRICAL ENGINEERING

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
CHEM 1A : General College Chemistry I	CHEM 11
CHEM 1B : General College Chemistry I <b>OR</b> BIOL 31: Intro to College Biology <b>OR</b> MTH 6: Intro to Linear Algebra	CHEM 12 <b>OR</b> BIOL 21 <b>OR</b> MATH 53
PHYS 4A: General Physics I	PHYS 31
PHYS 4B: General Physics II	PHYS 33
PHYS 4C: General Physics III	PHYS 32
PHYS 5: Modern Physics	PHYS 34
<b>Engineering:</b>	
ENGR 10: Intro to Engineering	ENGR 1 (optional)
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
ENGR 36: Engineering Mech - Statics	CENG 41
CSCI 20: Intro to Data Structures	COEN 12/12L
<i>No approved course equivalency at time of publication</i>	COEN 44/44L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & 2 completed, equates to SCU's MATH 11, 12, 13)
MTH 3: Multivariable Calculus	MATH 14
MTH 4: Elem Differential Equations	MATH 22

## GENERAL ENGINEERING

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
CHEM 1A : General College Chemistry I	CHEM 11
PHYS 4A: General Physics I	PHYS 31
PHYS 4B: General Physics II	PHYS 33
PHYS 4C: General Physics III	PHYS 32

<b>Engineering:</b>	
ENGR 10: Intro to Engineering	ENGR 1
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
<i>No approved course equivalency at time of publication</i>	MECH 10/10L
<i>No approved course equivalency at time of publication</i>	MECH 11
<i>No approved course equivalency at time of publication</i>	MECH 15
ENGR 36: Engineering Mech - Statics	CENG 41
<i>No approved course equivalency at time of publication</i>	CENG 43
CSCI 10: Intro to Progr OR CSCI 14: Intro to Struct	COEN 10/10L
<i>No approved course equivalency at time of publication</i>	COEN 21/21L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & 2 completed, equates to SCU's MATH 11, 12, 13)
MTH 3: Multivariable Calculus	MATH 14
MTH 4: Elem Differential Equations	MATH 22

## MECHANICAL ENGINEERING

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
CHEM 1A : General College Chemistry I	CHEM 11
PHYS 4A: General Physics I	PHYS 31
PHYS 4B: General Physics II	PHYS 33
PHYS 4C: General Physics III	PHYS 32
<b>Engineering:</b>	
ENGR 10: Intro to Engineering	ENGR 1 (optional)
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
<i>No approved course equivalency at time of publication</i>	MECH 10/10L
<i>No approved course equivalency at time of publication</i>	MECH 11
<i>No approved course equivalency at time of publication</i>	MECH 15
ENGR 36: Engineering Mech - Statics	CENG 41
<i>No approved course equivalency at time of publication</i>	CENG 43
<i>No approved course equivalency at time of publication</i>	COEN 44/44L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & 2 completed, equates to SCU's MATH 11, 12, 13)
MTH 3: Multivariable Calculus	MATH 14
MTH 4: Elem Differential Equations	MATH 22

## 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.*

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
CHEM 1A : General College Chemistry I	CHEM 11
<b>Engineering:</b>	

ENGR 10: Intro to Engineering	ENGR 1 (optional)
CSCI 10: Intro to Progr OR CSCI 14: Intro to Struct	COEN 10/10L
CSCI 14: Intro to Structured Programming in C++	COEN 11/11L
CSCI 20: Intro to Data Structures	COEN 12/12L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 13 (If MTH 1 & 2 completed, equates to SCU's MATH 11, 12, 13)
MTH 3: Multivariable 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 SCU policy, transfer credit earned after enrollment 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](mailto: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\* Satisfied within major requirements at SCU
Religion Theology & Culture 1
(Students transferring with more than 30 semester units of transfer credit will be exempt from this requirement.)

EXPLORATIONS

- Ethics
Civic Engagement Must be completed at Santa Clara
Diversity: U.S. Perspectives
Arts Satisfied within major requirements at SCU
Natural Science w/Lab\* Satisfied within major requirements at SCU
Social Science
Religion, Theology & Culture 2 Must be completed at Santa Clara
Cultures & Ideas 3
Science, Technology & Society Must be completed at Santa Clara
Religion, Theology & Culture 3 Must be completed at Santa Clara

INTEGRATIONS

- E LSJ Must be completed at Santa Clara University
Advanced Writing Must be completed at Santa Clara University
Pathways Must be completed at Santa Clara University

SCHOOL OF ENGINEERING REQUIREMENTS

(Refer to the individual major charts within this transfer guide)

Engineering School Requirement Course completed or IP (In Progress)

MATHEMATICS\*

- Calculus and Analytic Geometry I\*
Calculus and Analytic Geometry II\*
Intermediate Calculus
Differential Equations

NATURAL SCIENCE\*

- General Chemistry\*
General Chemistry (2nd sem)
Engineering Phys \*
Engineering Phys\*
Engineering Phys\*

ADDITIONAL ENGINEERING MAJOR Requirements

- Intro to Engineering (OPTIONAL)
Intro to Circuit Analysis
Engineering Graphics
Computer Programming
Computer Programming

Total Semester UNITS

TOTAL SEMESTER UNITS x 1.5 = TOTAL QUARTER UNITS

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