

Santa Clara University

School of Engineering

For use by Transfer Applicants

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 30 or more semester units (or 44 or more quarter units) of transfer credit will be exempt from completing one RTC Core 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

- ELSJ 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 School of Engineering website for individual major requirements at: https://www.scu.edu/engineering/undergraduate/degree-programs/)

Engineering School Requirement Course completed or IP (In Progress)

MATHEMATICS\*

- Calculus and Analytic Geometry I\*
Calculus and Analytic Geometry II\*
Calculus and Analytic Geom III/IV
Differential Equations

NATURAL SCIENCE\*

- General Chemistry\*
Physics w/ Calculus \*
Physics w/ Calculus \*
Physics w/ Calculus \*

ADDITIONAL ENGINEERING MAJOR Requirements

- Bioengineering
Civil Engineering
Computer Science and Engineering
Electrical & Computer Engineering
Electrical Engineering
General Engineering
Mechanical Engineering
Web Design and Engineering

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 located on the SCU Undergraduate Admission webpage at: http://www.scu.edu/ugrad/transfer/

# *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 and Computer 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 course with a lab: 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

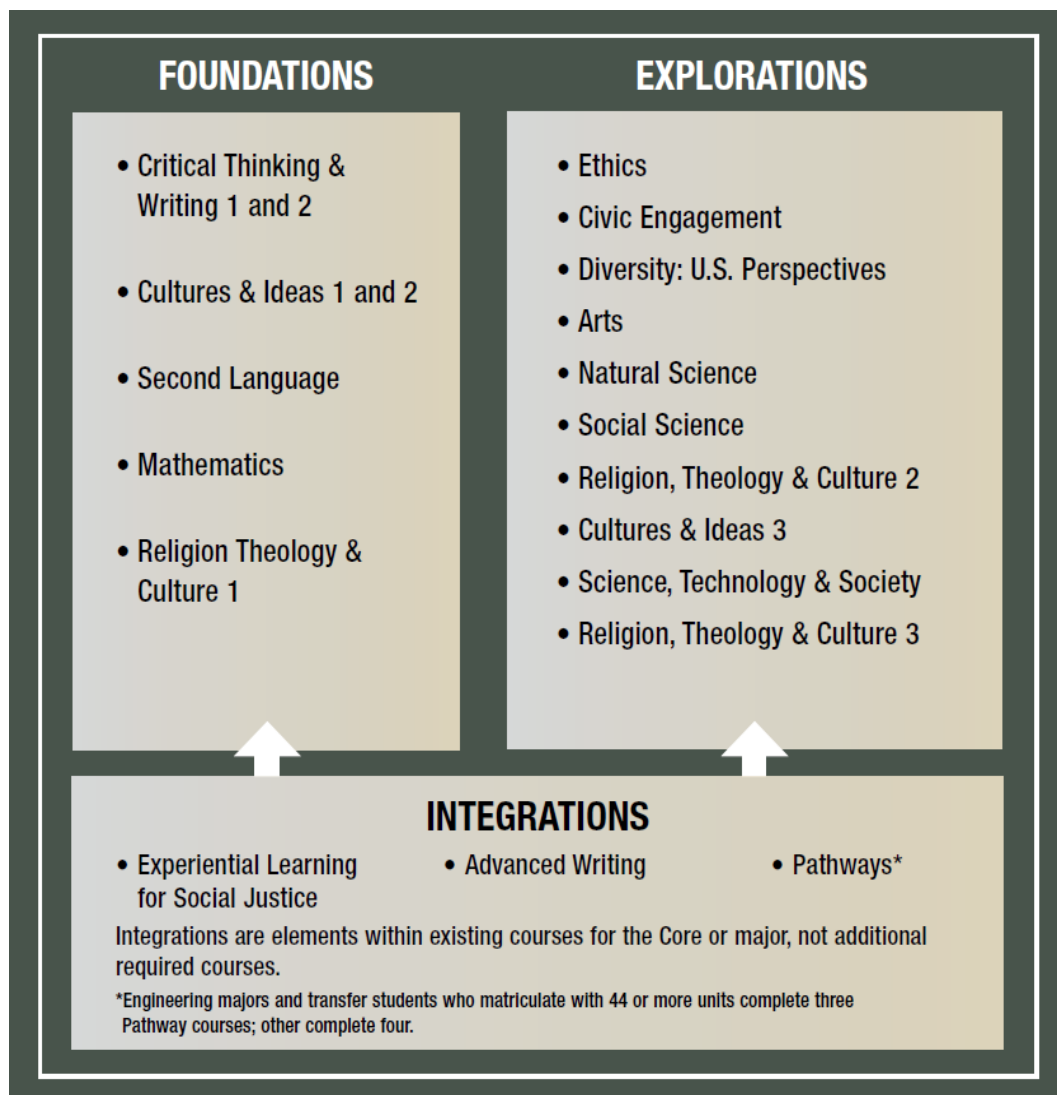
For additional SCU Transfer Admissions information:

<https://www.scu.edu/admission/undergraduate/transfer-students/>

The following information is provided to help transfer students understand and complete additional Santa Clara University Core Curriculum (General Education) 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 First-Year students may not transfer courses to fulfill Core Critical Thinking & Writing 1 and 2 or Cultures & Ideas 1 and 2, Religion Theology and Culture 1 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 High-Level International Baccalaureate and University of Cambridge A-Level 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>College of Arts and Sciences: <i>Engineering Physics</i></b>	193	96.5	64.33
<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 and Electrical &amp; Computer Engineering</i>	190	95	63.33
<i>Mechanical Engineering</i>	192	96	64
<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.

The following courses are not transferrable: most first-year seminars, internships, professional development courses, independent study courses, workshops, most physical education 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 (CTW) 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 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 official AP CollegeBoard Report at the time of acceptance to receive such credit.

Chabot College Course
ENGL 1: Critical Reading and Composition

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

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

Chabot College Course
ENGL 4A: Critical Thinking and Writing about Literature
ENGL 7A: 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 50: Introduction to Admin Justice
ARTH 4: Art History- Ancient to Gothic
ARTH 5: Art History- Renaissance to Modern-Day
ARTH 6: Art History- Twentieth- and Twenty-First Century
HIS 1: History of Western Civilization to 1600
HIS 2: History of Western Civilization since 1600
HIS 7: U. S. History Through Reconstruction
HIS 8: U. S. History Since Reconstruction
HIS 12: History of California
HIS 32: Colonial Latin America
HIS 33: Modern Latin America
POSC 1: Introduction to American Government
POSC 12: Introduction 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.

<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 7: Introduction to Global Studies
ANTH 12: Magic, Religion, Witchcraft and Healing
ARTH 8: Art History - A Global Perspective
COMM 11: Intercultural Communication
ENGL 41: World Literature (17th Century to the Present)
GEO 2: Cultural Geography
GEO 3: Economic Geography
GEO 5: World Regional Geography
GEO 10: Global Environmental Problems
GLST 1: Introduction to Global Studies
GLST 2: Issues in Global Studies
HIS 3: World History: Beginnings to 1500
HIS 4: World History: 1500 to the Present
HIS 19: History of Modern China and Japan from Late 19th to Early 20th Century
HUMN 68: World Mythology
MUSL 3: World Music
POSC 11: Introduction to Global Studies
POSC 20: Comparative Government
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

## 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 MTH 1 and MTH 2**

*To fulfill the admission mathematics requirement, complete both 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).*

<b>Chabot College Course</b>	<b>SCU course equivalency</b>
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12

MTH 3: Multivariable Calculus	MATH 13&14
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*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 (44 quarter units) of transfer credit. Students transferring with more than 30 semester units (44 quarter units) of transfer credit will be exempt from this requirement.

Students transferring with less than 30 semester units (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.

<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.

<b>Chabot College Course</b>
PHIL 60: 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.

<b>Chabot College Course</b>
ANTH 5: Cultures of the US in Global Perspective
ANTH 8: Native American Cultures
ARTH 7: Multicultural History of American Art
ENGL 21: The Evolution of the Black Writer
ENGL 22: Mexican American/Latinx Literature of the U. S
ENGL 25: Asian American Literature
ENGL 31: Introduction to Queer Literature
ENGL 32: U.S. Women's Literature
ES 1: Introduction to Ethnic Studies
ES 2: Contemporary Ethnic Minority United States Families
ES 3: Introduction to Muslim-American Studies
ES 4: Introduction to Latinx Studies
ES 5: Critiquing Race and Gender in Popular Culture
ES 6: Introduction to Pacific Islands and Oceania Studies
ES 7: Women of Color in the United States: Introduction to Race, Gender, and Sexuality Studies
ES 10: Introduction to Asian American Studies
ES 22: Mexican American History and Culture
ES 25: American Indian History and Culture
ES 42: Asian American History: 18th Century to 1945
ES 43: Asian American History: Early 20th Century-21st Century
ES 52: Mexican American History from Mesoamerica to the Mexican Revolution
ES 53: Mexican American History from The Mexican Revolution to the Present
ES 62: The African-American Experience in U.S. History Through the Civil War
ES 63: The African-American Experience in U.S. History from
GNST 33A: Student Leadership and the African American Experience
GNST 33B: Student Leadership and the African American Experience
HIS 22: Mexican American History in the Development of U.S. History from Pre-Columbian To the Present
HIS 25: American Indian History and Culture
HIS 42: Asian American History: 18th Century to 1945
HIS 43: Asian American History: Early 20th Century - 21st Century
HIS 48: U.S. Women's History Through Reconstruction
HIS 49: U.S. Women's History Post-Reconstruction
HIS 52: United States History from a Chicano Perspective I
HIS 53: United States History from a Chicano Perspective II
HIS 62: The African-American Experience in U.S. History Through Civil War
HIS 63: The African-American Experience in U.S. History from

Reconstruction
HUMN 65: The American Style
MUSL 5: American Cultures in Music
POSC 35: Politics of Race and Gender: History, Governance, and Public Policy
PSCN 13: Multicultural Issues in Contemporary America
SOCI 2: Social Problems
SOCI 3: Introduction to Race and Ethnicity
SOCI 7: Women of Color in the United States: Introduction to Race, Gender, and Sexuality Studies
SOCI 10: Introduction 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)*

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 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
ANTH 1/1L: Biological/ Physical Anthropology w/ Lab	ANTH 1
ANTH 13/13L: Forensic Anthropology w/Lab	TRCR 18
ASTR 10/30: Introduction to Astronomy- the Solar System w/ Lab	TRCR 18

ASTR 20/30: Introduction to Astronomy- Stars and Universe w/ Lab	TRCR 18
BIOS 1: Introduction to the Science of Biology w/Lab	TRCR 18
BIOS 15: Anatomy and Physiology w/Lab	TRCR 18
BIOS 21A: Principles of Plant Biology and Ecology w/Lab	TRCR 18
BIOS 21B: Principles of Animal Biology and Evolution w/Lab	TRCR 18
BIOS 21C: Principles of Cell and Molecular Biology w/Lab	TRCR 18
BIOS 41: Introduction to College Biology for Health Sciences w/Lab	TRCR 18
BIOS 42: General Human Anatomy w/Lab	TRCR 18
BIOS 43: Human Physiology w/Lab	TRCR 18
BIOS 44: Microbiology w/Lab	TRCR 18
CHEM 1A: General College Chemistry I w/Lab	CHEM 11
CHEM 1B: General College Chemistry II w/Lab	CHEM 12&50
CHEM 10: Introduction to Chemistry w/Lab	TRCR 18
CHEM 12A: Organic Chemistry w/Lab	CHEM 31
CHEM 12B: Organic Chemistry w/Lab	CHEM 33 (If CHEM 12A & 12B completed, equates to SCU's CHEM 31, 32 & 33)
CHEM 30A: Introductory and Applied Chemistry I w/Lab	CHEM 11
CHEM 30B: Introductory and Applied Chemistry II w/Lab	CHEM 12&50
CHEM 31: Introduction to College Chemistry w/Lab	TRCR 18
ENSC 10/11: Humans and the Environment w/Lab	TRCR 18
ENSC 15/15L: Agroecology w/Lab	TRCR 18
GEO 1/1L: Introduction to Physical Geography w/ Lab	TRCR 18
GEOS 1: Physical Geology w/Lab	TRCR 18
GEOS 11/11L: Physical Geology w/Lab	TRCR 18
PSCI 15: Descriptive Physical Science: Introduction to Principles of Physical Science w/Lab	TRCR 18
PHYS 3A: College Physics A w/Lab	TRCR 18
PHYS 3B: College Physics B w/Lab	TRCR 18
PHYS 4A: General Physics I w/Lab	PHYS 31
PHYS 4B: General Physics II w/Lab	PHYS 33
PHYS 4C: General Physics III w/Lab	PHYS 32
PHYS 11: Descriptive Physics w/Lab	TRCR 18

**SOCIAL SCIENCE:** 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 2: Introduction to Archaeology
ANTH 3: Social and Cultural Anthropology
ANTH 5: Cultures of the US in Global Perspective
ECN 1: Principles of Microeconomics
ECN 2: Principles of Macroeconomics
ECN 10: General Economics
GEO 2: Cultural Geography
GEO 3: Economic Geography
POSC 20: Comparative Government
POSC 30: International Relations
PSY 1: General Psychology
PSY 3: Social Psychology
SOCI 1: Principles of Sociology
SOCI 5: Introduction to Social Research

**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.

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 7: Introduction to Global Studies
ANTH 12: Magic, Religion, Witchcraft and Healing
ARTH 8: Art History - A Global Perspective
COMM 11: Intercultural Communication
ENGL 41: World Literature (17th Century to the Present)
GEO 2: Cultural Geography
GEO 3: Economic Geography
GEO 5: World Regional Geography
GEO 10: Global Environmental Problems
GLST 1: Introduction to Global Studies
GLST 2: Issues in Global Studies
HIS 3: World History: Beginnings to 1500
HIS 4: World History: 1500 to the Present
HIS 19: History of Modern China and Japan from Late 19th to Early 20th Century

HUMN 68: World Mythology
MUSL 3: World Music
POSC 11: Introduction to Global Studies
POSC 20: Comparative Government
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

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

SCU COURSE	CC COURSE	BIOE	CENG	COEN	ECEN	ELEN	ENGR	MECH	WDE
MATH 11	MTH 1	X	X	X	X	X	X	X	X
MATH 12	MTH 2	X	X	X	X	X	X	X	X
MATH 13	MTH 3	X	X	X	X	X	X	X	X
MATH 14	MTH 3	X	X	X	X	X	X	X	X
MATH 22 or AMTH 106	MTH 4	X	X	X	X	X	X	X	
MATH 51 or COEN 19	MTH 8			X	X				
MATH 53	MTH 6			X	X				
PHYS 31	PHYS 4A	X	X	X	X	X	X	X	
PHYS 32	PHYS 4C	X	X	X	X	X	X	X	
PHYS 33	PHYS 4B	X	X	X	X	X	X	X	
PHYS 34	PHYS 5					X			
CHEM 11	CHEM 1A	X	X	X	X	X	X	X	
ELEN/COEN 21/21L	-			X	X	X	X		
ELEN 50/50L	ENGR 43	X		X	X	X	X	X	
CENG 41	ENGR 36		X				X	X	
COEN 10/10L	CSCI 10			X	X	X	X		X
COEN 11/11L	CSCI 14			X	X	X			X
COEN 12/12L	CSCI 20			X	X	X			X

**Abbreviations and Links:**

[BIOE = Bioengineering](#)

[CENG = Civil, Environmental, and Sustainable Engineering](#)

[COEN = Computer Science and Engineering](#)

[ECEN = Electrical and Computer Engineering](#)

[ELEN = Electrical Engineering](#)

[ENGR = General Engineering](#)

[MECH = Mechanical Engineering](#)

[WDE = Web Design and Engineering](#)

A "-" indicates that an equivalent course has not been approved at time of publication.

**BIOENGINEERING MAJOR REQUIREMENTS**

Chabot College Course	SCU course equivalency
<b>Natural Science:</b>	
CHEM 1A: General College Chemistry I	CHEM 11
CHEM 1B: General College Chemistry II	CHEM 12&50
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	PHYS 32
<b>Engineering:</b>	
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
ENGR 22: Engineering Design Graphics	MECH 10/10L (*Medical Device track)
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12
MTH 3: Multivariable Calculus	MATH 13&14
MTH 4: Elementary Differential Equations	MATH 22 or AMTH 106

**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
GEOS 1: Physical Geology with Laboratory	CENG 20/20L
<b>Engineering:</b>	
<i>No approved course equivalency at time of publication</i>	CENG 7/7L
<i>No approved course equivalency at time of publication</i>	CENG 10/10L
<i>No approved course equivalency at time of publication</i>	CENG 15
ENGR 36: Engineering Mech - Statics	CENG 41
ENGR 85: Introduction to Solid Mechanics	CENG 44A
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12
MTH 3: Multivariable Calculus	MATH 13&14
MTH 4: Elementary Differential Equations	MATH 22 or AMTH 106

**COMPUTER SCIENCE & 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 43: Electrical Circuits and Devices	ELEN 50/50L
CSCI 10: Introduction to Programming Using Visual BASIC.Net OR CSCI 14: Introduction to Structured Programming in C++	COEN 10/10L
CSCI 14: Introduction to Structured Programming in C++	COEN 11/11L
CSCI 20: Introduction to Data Structures	COEN 12/12L
CSCI 21: Computer Organization and Assembly Language Programming	COEN 20/20L
<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 12
MTH 3: Multivariable Calculus	MATH 13&14
MTH 4: Elementary Differential Equations	MATH 22 or AMTH 106
MTH 6: Elementary Linear Algebra	MATH 53
MTH 8: Discrete Mathematics	COEN 19 or MATH 51

## ELECTRICAL & COMPUTER 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
PHYS 5: Modern Physics	PHYS 34
<b>Engineering:</b>	
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
CSCI 10: Introduction to Programming Using Visual BASIC.Net OR CSCI 14: Introduction to Structured Programming in C++	COEN 10/10L
CSCI 14: Introduction to Structured Programming in C++	COEN 11/11L
CSCI 20: Introduction to Data Structures	COEN 12/12L
<i>No approved course equivalency at time of publication</i>	ELEN 21/21L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12
MTH 3: Multivariable Calculus	MATH 13&14
MTH 4: Elementary Differential Equations	MATH 22 or AMTH 106
MTH 6: Elementary Linear Algebra	MATH 53
MTH 8: Discrete Mathematics	MATH 51 or COEN 19



**ELECTRICAL ENGINEERING MAJOR REQUIREMENTS**

<b>Chabot College Course</b>	<b>SCU course equivalency</b>
<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
PHYS 5: Modern Physics	PHYS 34
<b>Engineering:</b>	
ENGR 43: Electrical Circuits and Devices	ELEN 50/50L
ENGR 36: Engineering Mech - Statics	CENG 41
CSCI 10: Introduction to Programming Using Visual BASIC.Net OR CSCI 14: Introduction to Structured Programming in C++	COEN 10/10L
CSCI 14: Introduction to Structured Programming in C++	COEN 11/11L
CSCI 20: Introduction to Data Structures	COEN 12/12L
<i>No approved course equivalency at time of publication</i>	ELEN 21/21L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12
MTH 3: Multivariable Calculus	MATH 13&14
MTH 4: Elementary Differential Equations	MATH 22 or AMTH 106

**GENERAL ENGINEERING MAJOR REQUIREMENTS**

<b>Chabot College Course</b>	<b>SCU course equivalency</b>
<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 43: Electrical Circuits and Devices	ELEN 50/50L
ENGR 36: Engineering Mech - Statics	CENG 41
<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
ENGR 45: Materials of Engineering	MECH 15/15L
CSCI 10: Introduction to Programming Using Visual BASIC.Net OR CSCI 14: Introduction to Structured Programming in C++	COEN 10/10L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12

MTH 3: Multivariable Calculus	MATH 13&14
MTH 4: Elementary Differential Equations	MATH 22 or AMTH 106

## MECHANICAL 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 43: Electrical Circuits and Devices	ELEN 50/50L
ENGR 36: Engineering Mech - Statics	CENG 41
<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
ENGR 45: Materials of Engineering	MECH 15/15L
ENGR 25: Computational Methods for Engineers and Scientists	MECH 45/45L
ENGR 40: Thermodynamics	MECH 121
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12
MTH 3: Multivariable Calculus	MATH 13&14
MTH 4: Elementary Differential Equations	MATH 22 or AMTH 106

## WEB DESIGN AND ENGINEERING MAJOR REQUIREMENTS

*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 <i>(recommended)</i>	CHEM 11
<b>Engineering:</b>	
CSCI 10: Introduction to Programming Using Visual BASIC.Net OR CSCI 14: Introduction to Structured Programming in C++	COEN 10/10L
CSCI 14: Introduction to Structured Programming in C++	COEN 11/11L
CSCI 20: Introduction to Data Structures	COEN 12/12L
<b>Mathematics:</b>	
MTH 1: Calculus I	MATH 11
MTH 2: Calculus II	MATH 12
MTH 3: Multivariable Calculus	MATH 13&14

**Additional notes:**

- Consult the current Undergraduate Bulletin for Advanced Placement and High-Level International Baccalaureate test credit equivalencies at:  
<https://www.scu.edu/bulletin/undergraduate/chapter-8/AcademicCreditEvaluation.html>
- Consult the Santa Clara University Undergraduate Bulletin for additional requirements in a major. The Bulletin can be found at:  
<https://www.scu.edu/academics/course-catalogs/undergraduate-bulletin/>
- 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.
- This guide is to be used by transfer applicants, not First-Year (aka: freshmen) applicants. Admitted First-Year students must complete the following Core requirements at SCU: Critical Thinking & Writing 1 and 2; Cultures & Ideas 1 and 2; Religion Theology & Culture 1, 2 and 3 (taken in sequence order at SCU); Civic Engagement; Science, Technology & Society; Experiential Learning for Social Justice; Advanced Writing; and four Pathway courses.

For questions regarding transfer credit or test credit, contact the Transfer Record Analyst at: [Transfercredit@scu.edu](mailto:Transfercredit@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.