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

College of the Canyons 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: MATH 211 and MATH 212
- One natural science course with a lab: CHEM 201/201H
- Two Calculus-based Physics courses: PHYS 220 and PHYS 221
    - Web Design Engineering majors are not required to complete CHEM 201, PHYS 220 & 221. Complete one course in the Natural Science list.

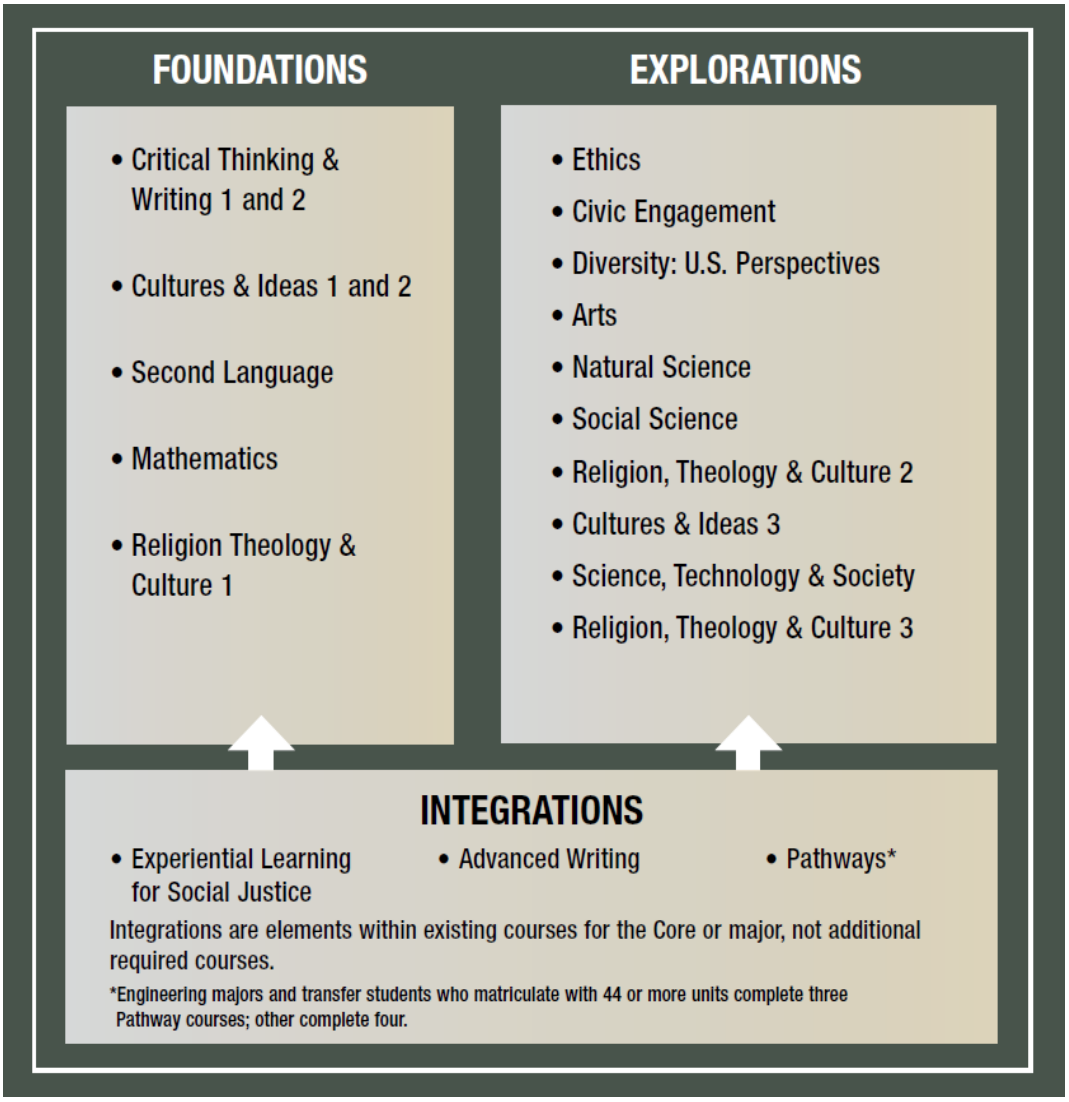
- GPA 3.5

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 **Quarter** units	Maximum transferrable **Semester** unit equivalency
College of Arts and Sciences	175	87.5	58.33
College of Arts and Sciences: *Engineering Physics*	193	96.5	64.33
Leavey School of Business	175	87.5	58.33
School of Engineering:			
Bioengineering	191	95.5	63.66
Civil Engineering	195	97.5	65
Computer Science & Engineering and General Engineering	189	94.5	63
Electrical Engineering and Electrical & Computer Engineering	190	95	63.33
Mechanical Engineering	192	96	64
Web Design and Engineering	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 College of the Canyons UC transferrable courses to transfer for credit: Kinesiology – Physical Education Intercollegiate and Theory courses. To view all College of the Canyons' 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. 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 2nd 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.

College of the Canyons Course
ENGL 101: English Composition
ENGL 101H: Honors - English Composition

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

Admission recommendation: Complete Critical Thinking and Writing 2 Core requirement

College of the Canyons Course
ENGL 103: Critical Reading, Writing and Thinking
ENGL 110: Composition and Literature
ENGL 112: Intermediate Composition, Literature, and Critical Thinking
ENGL 112H: Intermediate Composition, Literature, and Critical Thinking Honors

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.

College of the Canyons Course
ADMJUS 101: Introduction to Administration of Justice
ART 110: Art History- Ancient to Medieval
ART 111: Art History- Renaissance to Modern
ART 115: Art History- US and European Modernism
CINEMA 121: History of American Cinema
CINEMA 122: History of Cinema
CINEMA 123: American Cinema- Crossing Cultures
ECON 170/170H: Economic History of the US
ENGL 250: British Literature I
ENGL 251: British Literature II
ENGL 260: American Literature I
ENGL 261: American Literature II
HIST 101/101H: History of Western Civilization- The Pre-Industrial West
HIST 102: History of Western Civilization- The Modern Era
HIST 111/111H: United States History I
HIST 112/112H: United States History II
HIST 115: US History Since 1945
HIST 210: History of California
HIST 243: History of Mexico and the Mexican and Chicano Peoples
HIST 245: History of the Americas
HUMAN 150: Great Books, Great Ideas
MUSIC 106: Development of Jazz
MUSIC 112: Music History
PHILOS 110: History of Ancient Philosophy
PHILOS 111: History of Modern Philosophy
PHILOS 112: History of Philosophy- 20Th C. Philosophy
POLISC 150/150H: Intro to American Government and Politics
POLISC 200: Intro to Political Science

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.

College of the Canyons Course
ANTHRO 103/103H: Cultural Anthropology
ANTHRO 220: Magic, Witchcraft and Religion
ART 112: Art of Africa, Oceania, and the Indigenous Americas
ART 116: Asian Art History
CINEMA 131: History of International Cinema
COMS 256: Intercultural Communication
ENGL 271: Mythology
ENGL 273: World Literature I
ENGL 274: World Literature II
GEOG 102: Human Geography
GEOG 104: World Regional Geography
GLST 101: Introduction to Global Studies
GLST 102: Global Issues
HIST 161: World History I
HIST 191: History of Eastern Civilization I
HIST 192: History of Eastern Civilization II
HIST 193: History of India
HIST 212: History of the Middle East
HIST 240: Latin American Civilization
HIST 241: History of Early Latin America
HIST 242: History of Modern Latin America
HUMAN 100: Intro to Studies in the Humanities
HUMAN 101: Forms and Ideas in Humanities
HUMAN 115: Cultural Eras in Humanities I: Antiquity to the Late 15th Century
HUMAN 116: Cultural Eras in Humanities II: Late 15th Century to the Present
MUSIC 108: World Music
PHILOS 102: Intro to Eastern Religion and Philosophy
PHILOS 220: Intro to Comparative Religion
POLISC 250: Comparative Government and Politics
POLISC 270: International Relations
WINEST 102: World Viticulture and Wine Styles

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 211 and MATH 212

To fulfill the admission mathematics requirement, complete both MATH 211 and 212 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).***

College of the Canyons Course	SCU Course equivalency
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 214: Linear Algebra	MATH 53
MATH 215: Differential Equations	MATH 22 or MATH 106

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.

College of the Canyons Course
No approved College of the Canyons course equivalencies at time of publication.

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.*

College of the Canyons Course
PHILOS 120: Intro to Ethics
PHILOS 240: Contemporary Moral Problems
PHILOS 250: Environmental 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.

College of the Canyons Course
ANTHRO 210: Indians of California
ART 205: Landmarks of Art and Visual Culture
CINEMA 123: American Cinema- Crossing Cultures
COMS 260: Communication and Gender
EDUC 203: Intro to Teaching in a Diverse Society
ENGL 262: American Multicultural Literature
ENGL 270: Intro to African American Literature
ENGL 280: Women Writers
HIST 120/120H: The Role of Women in the History of the United States
HIST 130: Social and Cultural History of the U.S.
HIST 210: History of California
POLISC 290: Ethnic and Gender Politics
SOCI 105: Multiculturalism in the United States
SOCI 106: Introduction to Race and Ethnicity
SOCI 107: Introduction to Chicana/o Studies
SOCI 130: Introduction to LGBTQ+ Studies
SOCI 200: Introduction to Women's Studies
SOCI 200H: Introduction to Women's Studies-Honors
SOCI 207: Social Problems
SPAN 240: Introduction to Latin American Literature

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 201/201H; PHYS 220 & 221

(Note: Web Design & Engineering major completes one course to satisfy Natural Science core requirement. It is recommended to complete CHEM 201/201H)

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 College of the Canyons 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.

College of the Canyons Course	SCU course equivalency
ANTHRO 101/101L or 101H/101L: Physical Anthropology w/ Lab	TRCR 18
ASTRON 101/101L: Stellar & Galactic Evolution w/ Lab	TRCR 18
BIOSCI 100/100H: General Biology w/Lab	TRCR 18
BIOSCI 106/106H: Organismal and Enviro Biology w/Lab	TRCR 18
BIOSCI 107/107H: Molecular and Cellular Biology w/Lab	TRCR18
BIOSCI 115: General Zoology w/Lab	TRCR 18
BIOSCI 116: General Botany w/Lab	TRCR 18
BIOSCI 119: Marine Biology w/Lab	TRCR 18
BIOSCI 201: Intro to Human Anatomy w/Lab	TRCR 18
BIOSCI 202: Intro to Human Physiology w/Lab	TRCR 18
BIOSCI 204: Human Anatomy and Physiology I w/Lab	TRCR 18
BIOSCI 205: Human Anatomy and Physiology II w/Lab	TRCR 18
BIOSCI 221: Intro to Microbiology w/Lab	TRCR 18
BIOSCI 240: Molecular Genetics w/Lab	TRCR 18
CHEM 151/151H: Preparatory General Chemistry w/Lab	TRCR 18
CHEM 201/201H: General Chemistry I w/Lab	CHEM 11
CHEM 202: General Chemistry II w/Lab	CHEM 12&50
CHEM 255: Organic Chemistry I w/Lab	CHEM 31
CHEM 256: Organic Chemistry II w/Lab	CHEM 33 (If CHEM 255 & 256 completed, equates to SCU's CHEM 31, 32, & 33)
ENVRMT 103: Introduction to Environmental Science	TRCR 18
GEOGRPH 100/101L or 100H/101L: Physical Geography w/Lab	TRCR 18
GEOGRPH 101: Physical Geography with Lab	TRCR 18
GEOLOGY 100/101L: Physical Geology w/Lab	TRCR 18
GEOLOGY 101: Physical Geology with Lab	TRCR 18

GEOLOGY 102: Historical Geology	TRCR 18
GEOLOGY 109/109L: Earth Science w/Lab	TRCR 18
OCEAN 101: Introduction to Oceanography w/Lab	TRCR 18
PHYSCI 101: Physical Science w/Lab	TRCR 18
PHYSIC 110: General Physics I w/Lab	PHYS 11
PHYSIC 111: General Physics II w/Lab	PHYS 13 (If PHYS 110 & 111 completed, equates to SCU's PHYS 11, 12 & 13)
PHYSIC 220: Physics for Scientists and Engineers-Mechanics of Solids and Fluids w/Lab	PHYS 31
PHYSIC 221: Physics for Scientists and Engineers-Electricity and Magnetism w/Lab	PHYS 33
PHYSIC 222: Physics for Scientists and Engineers-Waves, Heat, Optics and Modern Physics w/Lab	PHYS 32

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.

College of the Canyons Course
ANTHRO 105: Intro to Archaeology
ECON 170/170H: Economic History of the U.S.
ECON 201/201H: Macroeconomics
ECON 202/202H: Microeconomics
PSYCH 101/101H: Intro to Psychology
PSYCH 102: Physiological Psychology
SOCI 101/101H: Intro to Sociology
SOCI 102: Intro to Sociological Research Methods
SOCI 108: Thinking Critically About Social Issues
SOCI 137: Statistics for the Social Sciences

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.

College of the Canyons Course
ANTHRO 103/103H: Cultural Anthropology
ANTHRO 220: Magic, Witchcraft and Religion
ART 112: Art of Africa, Oceania, and the Indigenous Americas
ART 116: Asian Art History
CINEMA 131: History of International Cinema
COMS 256: Intercultural Communication
ENGL 271: Mythology
ENGL 273: World Literature I
ENGL 274: World Literature II
GEOG 102: Human Geography
GEOG 104: World Regional Geography
GLST 101: Introduction to Global Studies
GLST 102: Global Issues
HIST 161: World History I
HIST 191: History of Eastern Civilization I
HIST 192: History of Eastern Civilization II
HIST 193: History of India
HIST 212: History of the Middle East
HIST 240: Latin American Civilization
HIST 241: History of Early Latin America
HIST 242: History of Modern Latin America
HUMAN 100: Intro to Studies in the Humanities
HUMAN 101: Forms and Ideas in Humanities
HUMAN 115: Cultural Eras in Humanities I: Antiquity to the Late 15th Century
HUMAN 116: Cultural Eras in Humanities II: Late 15th Century to the Present
MUSIC 108: World Music
PHILOS 102: Intro to Eastern Religion and Philosophy
PHILOS 220: Intro to Comparative Religion
POLISC 250: Comparative Government and Politics
POLISC 270: International Relations
WINEST 102: World Viticulture and Wine Styles

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	CotC COURSE	BIOE	CENG	COEN	ECEN	ELEN	ENGR	MECH	WDE
MATH 11	MATH 211	X	X	X	X	X	X	X	X
MATH 12	MATH 212	X	X	X	X	X	X	X	X
MATH 13	MATH 213	X	X	X	X	X	X	X	X
MATH 14	MATH 213	X	X	X	X	X	X	X	X
MATH 22 or AMTH 106	MATH 215	X	X	X	X	X	X	X	
MATH 51 or COEN 19	CMPSCI 256			X	X				
MATH 53	MATH 214			X	X				
PHYS 31	PHYSIC 220	X	X	X	X	X	X	X	
PHYS 32	PHYSIC 222	X	X	X	X	X	X	X	
PHYS 33	PHYSIC 221	X	X	X	X	X	X	X	
PHYS 34	-					X			
CHEM 11	CHEM 201/201H	X	X	X	X	X	X	X	
ELEN/COEN 21/21L	-			X	X	X	X		
ELEN 50/50L	ENGR 260/260L	X		X	X	X	X	X	
CENG 41	ENGR 152		X				X	X	
COEN 10/10L	CMPSCI 111/111L OR CMPSCI 132			X	X	X	X		X
COEN 11/11L	-			X	X	X			X
COEN 12/12L	CMPSCI 182/182L			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

College of the Canyons Course	SCU course equivalency
Natural Science:	
CHEM 201/201H: General Chemistry I	CHEM 11
CHEM 202: General Chemistry II	CHEM 12&50
CHEM 255: Organic Chemistry I	CHEM 31
CHEM 256: Organic Chemistry II	CHEM 33 (If CHEM 255 & CHEM 256 completed, equates to SCU CHEM 31, 32, 33 sequence)
PHYSIC 220: Physics for Scientists and Engineers- Mechanics of Solids and Fluids	PHYS 31
PHYSIC 221: Physics for Scientists and Engineers- Electricity and Magnetism	PHYS 33
PHYSIC 222: Physics for Scientists and Engineers- Waves, Heat, Optics, and Modern Physics	PHYS 32
Engineering:	
ENGR 260/260L: Electrical Circuits w/Lab	ELEN 50/50L
ENGR 110: Introduction to Engineering Graphics with AutoCAD	MECH 10/10L (*Medical Device track)
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 215: Differential Equations	MATH 22 or AMTH 106

CIVIL ENGINEERING MAJOR REQUIREMENTS

College of the Canyons Course	SCU course equivalency
Natural Science:	
CHEM 201/201H: General Chemistry I	CHEM 11
PHYSIC 220: Physics for Scientists and Engineers- Mechanics of Solids and Fluids	PHYS 31
PHYSIC 221: Physics for Scientists and Engineers- Electricity and Magnetism	PHYS 33
PHYSIC 222: Physics for Scientists and Engineers- Waves, Heat, Optics, and Modern Physics	PHYS 32

GEOLOGY 100/101L: Physical Geology w/Lab OR GEOLOGY 101: Physical Geology with Lab	CENG 20/20L
Engineering:	
No approved course equivalency at time of publication	CENG 7/7L
No approved course equivalency at time of publication	CENG 10/10L
ENGR 152: Statics	CENG 41
ENGR 240: Strength of Materials	CENG 44A/44B or CENG 43 (need to take CENG 44AL or 43L)
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 215: Differential Equations	MATH 22 or AMTH 106

COMPUTER SCIENCE & ENGINEERING MAJOR REQUIREMENTS

College of the Canyons Course	SCU course equivalency
Natural Science:	
CHEM 201/201H: General Chemistry I	CHEM 11
PHYSIC 220: Physics for Scientists and Engineers- Mechanics of Solids and Fluids	PHYS 31
PHYSIC 221: Physics for Scientists and Engineers- Electricity and Magnetism	PHYS 33
PHYSIC 222: Physics for Scientists and Engineers- Waves, Heat, Optics, and Modern Physics	PHYS 32
Engineering:	
ENGR 260/260L: Electrical Circuits w/Lab	ELEN 50/50L
CMPSCI 132: Introduction to Programming OR CMPSCI 111/ CMPSCI 111L: Introduction to Computer Algorithms and Programming/JAVA w/Lab	COEN 10/10L
No approved course equivalency at time of publication	COEN 11/11L
CMPSCI 182/182L: Data Structures and Program Design w/Lab	COEN 12/12L
CMPSCI 256: Discrete Structures	COEN 19/MATH 51
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 215: Differential Equations	MATH 22 or AMTH 106
MATH 215: Differential Equations	MATH 53

ELECTRICAL & COMPUTER ENGINEERING MAJOR REQUIREMENTS

College of the Canyons Course	SCU course equivalency
Natural Science:	
CHEM 201/201H: General Chemistry I	CHEM 11
PHYSIC 220: Physics for Scientists and Engineers- Mechanics of Solids and Fluids	PHYS 31
PHYSIC 221: Physics for Scientists and	PHYS 33

Engineers- Electricity and Magnetism	
PHYSIC 222: Physics for Scientists and Engineers- Waves, Heat, Optics, and Modern Physics	PHYS 32
Engineering:	
ENGR 260/260L: Electrical Circuits w/Lab	ELEN 50/50L
CMPSCI 132: Introduction to Programming OR CMPSCI 111/ CMPSCI 111L: Introduction to Computer Algorithms and Programming/JAVA w/Lab	COEN 10/10L
No approved course equivalency at time of publication	COEN 11/11L
CMPSCI 182/182L: Data Structures and Program Design w/Lab	COEN 12/12L
CMPSCI 256: Discrete Structures	COEN 19/MATH 51
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 215: Differential Equations	MATH 22 or AMTH 106
MATH 215: Differential Equations	MATH 53

ELECTRICAL ENGINEERING MAJOR REQUIREMENTS

College of the Canyons Course	SCU course equivalency
Natural Science:	
CHEM 201/201H: General Chemistry I	CHEM 11
PHYSIC 220: Physics for Scientists and Engineers- Mechanics of Solids and Fluids	PHYS 31
PHYSIC 221: Physics for Scientists and Engineers- Electricity and Magnetism	PHYS 33
PHYSIC 222: Physics for Scientists and Engineers- Waves, Heat, Optics, and Modern Physics	PHYS 32
No approved course equivalency at time of publication	PHYS 34
Engineering:	
ENGR 260/260L: Electrical Circuits w/Lab	ELEN 50/50L
ENGR 152: Statics	CENG 41
CMPSCI 132: Introduction to Programming OR CMPSCI 111/ CMPSCI 111L: Introduction to Computer Algorithms and Programming/JAVA w/Lab	COEN 10/10L
No approved course equivalency at time of publication	COEN 11/11L
CMPSCI 182/182L: Data Structures and Program Design w/Lab	COEN 12/12L
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 215: Differential Equations	MATH 22 or AMTH 106

GENERAL ENGINEERING MAJOR REQUIREMENTS

College of the Canyons Course	SCU course equivalency

Natural Science:	
CHEM 201/201H: General Chemistry I	CHEM 11
PHYSIC 220: Physics for Scientists and Engineers- Mechanics of Solids and Fluids	PHYS 31
PHYSIC 221: Physics for Scientists and Engineers- Electricity and Magnetism	PHYS 33
PHYSIC 222: Physics for Scientists and Engineers- Waves, Heat, Optics, and Modern Physics	PHYS 32
Engineering:	
ENGR 260/260L: Electrical Circuits w/Lab	ELEN 50/50L
ENGR 110: Introduction to Engineering Graphics with AutoCAD	MECH 10/10L
No approved course equivalency at time of publication	MECH 11
No approved course equivalency at time of publication	MECH 15/15L
ENGR 152: Statics	CENG 41
CMPSCI 132: Introduction to Programming OR CMPSCI 111/ CMPSCI 111L: Introduction to Computer Algorithms and Programming/JAVA w/Lab	COEN 10/10L
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 215: Differential Equations	MATH 22 or AMTH 106

MECHANICAL ENGINEERING MAJOR REQUIREMENTS

College of the Canyons Course	SCU course equivalency
Natural Science:	
CHEM 201/201H: General Chemistry I	CHEM 11
PHYSIC 220: Physics for Scientists and Engineers- Mechanics of Solids and Fluids	PHYS 31
PHYSIC 221: Physics for Scientists and Engineers- Electricity and Magnetism	PHYS 33
PHYSIC 222: Physics for Scientists and Engineers- Waves, Heat, Optics, and Modern Physics	PHYS 32
Engineering:	
ENGR 260/260L: Electrical Circuits w/Lab	ELEN 50/50L
ENGR 110: Introduction to Engineering Graphics with AutoCAD	MECH 10/10L
No approved course equivalency at time of publication	MECH 11
No approved course equivalency at time of publication	MECH 15/15L
ENGR 220: Programming and Problem-Solving in MATLAB	MECH 45/45L
ENGR 152: Statics	CENG 41
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	MATH 13&14
MATH 215: Differential Equations	MATH 22 or AMTH 106

WEB DESIGN AND ENGINEERING MAJOR REQUIREMENTS

College of the Canyons Course	SCU course equivalency
Natural Science:	
CHEM 201/201H: General Chemistry I *(Recommended)*	CHEM 11
Engineering:	
CMPSCI 132: Introduction to Programming OR CMPSCI 111/ CMPSCI 111L: Introduction to Computer Algorithms and Programming/JAVA w/Lab	COEN 10/10L
No approved course equivalency at time of publication	COEN 11/11L
CMPSCI 182/182L: Data Structures and Program Design w/Lab	COEN 12/12L
Mathematics:	
MATH 211: Calculus I	MATH 11
MATH 212: Calculus II	MATH 12
MATH 213: Calculus III	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: Registrar@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.