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

□ Natural Science w/Lab*

Satisfied within major requirements at SCU * 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: <u>https://www.scu.edu/engineering/undergraduate/degree-programs/</u>

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

- <u>Bioengineering</u>
- <u>Civil Engineering</u>
- Computer Science and Engineering
- Electrical & Computer Engineering
- Electrical Engineering
- <u>General Engineering</u>
- 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: <u>http://www.scu.edu/ugrad/transfer/</u>

Santa Clara University

Undergraduate

School of Engineering

Canada 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

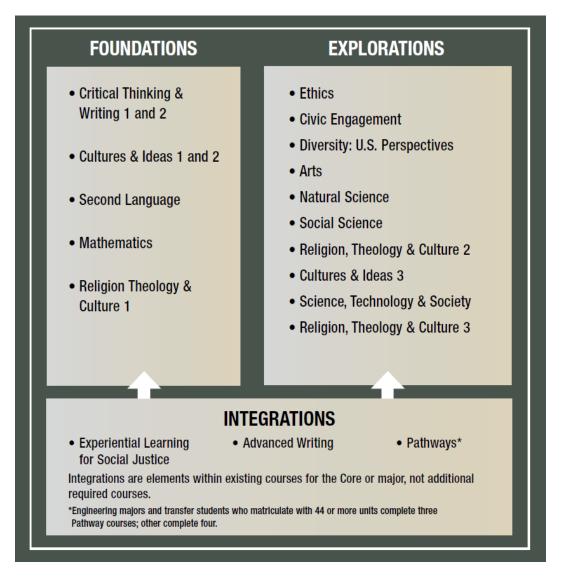
Courses strongly recommended for admission:

- Two English composition courses (*aka: Critical Thinking & Writing 1 & 2*)
- Mathematics: MATH 251 and MATH 252
- One natural science course with a lab: CHEM 210
- Two Calculus-based Physics courses: PHYS 250 and PHYS 260
 - Web Design Engineering majors are not required to complete CHEM 210, PHYS 250 & 260. 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, <u>click here</u>.

Note: Current high school students applying as <u>First-Year students may not</u> 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
 - o 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: <i>Engineering Physics</i>	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 Canada College UC transferrable courses to transfer for credit: Career and Personal Development, English as a Second Language, Fashion Design, most Health Science, Interior Design, most Kinesiology and Physical Education, Physical Education Individual, Intercollegiate Sports, Team Sports and Physical Education Theory courses. To view all Canada College's UC transferable courses, visit <u>www.assist.org</u>. **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 <u>one course</u> 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.

Canada College Course	
ENGL 100: Reading and Composition	

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

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

Canada College Course
ENGL 110: Composition, Literature and Critical Thinking
ENGL 105: Intensive Composition and Reading
ENGL 165: Advanced Composition
PHIL 103: Critical Thinking

CULTURES & IDEAS 1 and 2 Core Requirements:

To fulfill the Santa Clara University Cultures & Ideas 1 and 2 Core Curriculum requirements, a student must complete one course from the Cultures and Ideas 1 list, and one course from the Cultures and Ideas 2 course list. If both requirements are not satisfied prior to enrollment at SCU, students who have completed fewer than 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. <u>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.</u>

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.

Canada College Course
ART 101: Ancient, Classical and Medieval Art History
ART 102: Late Medieval, Renaissance and Baroque Art History
ART 103: Eighteenth and Nineteenth Century Art History
ART 104: History of Modern Art
ART 113: Great Museums of America
ART 114: The Art History of Paris
ART 116: The Art of Great Britain
ART 118: The Art and Architecture of Spain
ART 119: The Golden Age of Painting in Northern Europe
ART 250: The Art History of Rome
BUS 100: Contemporary American Business
BUS 201: Business Law
DRAM 101: History of Theatre
ECON 230: Economic History of the United States
HIST 100: History of Western Civilization I
HIST 101: History of Western Civilization II
HIST 104: World History I
HIST 106: World History II
HIST 201: U.S. History through 1877
HIST 202: U.S. History from 1877 to Present
MUS 215: Music, Culture, and History
MUS 240: Music of the Americas
PHIL 160: History of Philosophy- Ancient and Medieval
PHIL 175: History of Philosophy – 16 th to 18 th C
PHIL 190: Contemporary Philosophy
SOCI 100: Introduction to Sociology

CULTURES & IDEAS 2: Complete <u>one course</u> 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.

Canada College Course
ANTH 110: Cultural Anthropology
ANTH 200: Ethnographic Film
ANTH 351: Intro to Archaeology and World Prehistory
ART 105: Art of Asia and the Near East
BUS 125: International Business
DRAM 160: Latin America Theatre
GEOG 110: Cultural Geography
GEOG 150: World Regional Geography
HIST 104: World History I
HIST 106: World History II
HIST 422: Modern Latin America
LIT 205: New Voices in World Literature
LIT 373: Latin American Literature in Translation
MUS 250: World Music
PHIL 300: Intro to World Religions
PLSC 103: Critical Thinking About World Politics
PLSC 130: Intro to International Relations
PLSC 170: Intro to Comparative Politics
PLSC 320: Latin American Politics

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 251 and MATH 252

To fulfill the admission mathematics requirement, complete both MATH 251 & 252 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).

Canada College Course	SCU Course
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13 & 14
MATH 268: Discrete Mathematics	MATH 51 OR COEN 19
MATH 270: Linear Algebra	MATH 53
MATH 275: Differential Equations	MATH 22

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: <u>Only needed if transferring with</u> <u>less than 30 semester units (44 quarter units) of transfer credit. Students transferring with</u> <u>more than 30 semester units (44 quarter units) of transfer credit will be exempt from this</u> <u>requirement.</u>

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.

Canada College Course	
PHIL 300: Introduction to World Religions	

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 <u>one course</u> from the list below.

Canada College Course	
PHIL 240: Introduction to Ethics	

CIVIC ENGAGEMENT: Must be completed at Santa Clara University.

DIVERSITY: US Perspectives: Complete <u>one course</u> 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.

Canada College Course
COMM 150: Intercultural Communication
HIST 242: African-American History
HIST 245: Race, Ethnicity and Immigration in the US
HIST 246: History of Latinos in the US
HIST 247: Women in US History
LIT 252: Women Writers- Multicultural Perspectives
LIT 266: Black Literature
LIT 371: Mexican-American Literature
LIT 372: Myth and Folklore of La Raza
LIT 373: Mexican-American Lit
LIT 375: Native-American Lit
SOCI 105: Social Problems
SOCI 141: Ethnicity and Race in

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 210 and PHYS 250 & 260

(Note: Web Design & Engineering major completes one course to satisfy Natural Science core requirement. It is recommended to complete CHEM210)

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 Canada 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.

Canada College Course	SCU Course Equivalency
ANTH 125/126: Phys Anthr w/ Lab	TRCR 18: Core Natural Science
ASTR 100/101: Intro to Astron w/ Lab	TRCR 18: Core Natural Science
BIO 110: Principles of Biology	TRCR 18: Core Natural Science
BIO 130/132: Human Biology w/ Lab	TRCR 18: Core Natural Science
BIO 225: Biology of Organisms	TRCR 18: Core Natural Science
BIO 230: Molecular Biology	TRCR 18: Core Natural Science
BIO 240: General Microbiology	TRCR 18: Core Natural Science
BIO 250: Human Anatomy	TRCR 18: Core Natural Science
BIO 260: Human Physiology	TRCR 18: Core Natural Science
CHEM 114: Survey of Chemistry and Physics	TRCR 18: Core Natural Science
CHEM 192: Elementary Chemistry	TRCR 18: Core Natural Science
CHEM 210: General Chemistry I	CHEM 11
CHEM 220: General Chemistry II	CHEM 12&50
CHEM 231: Organic Chemistry	CHEM 31
CHEM 232: Organic Chemistry II	CHEM 32 (If CHEM 231 & 232 completed,
	equates to SCU's CHEM 31, 32 & 33)
ENVS 115/101: Environmental Science w/Lab	TRCR 18: Core Natural Science
GEOG 100/101: Physical Geography w/Lab	TRCR 18: Core Natural Science
GEOL 100/101: Intro to Geol w/ Lab	CENG 20/20L
GEOL 121: Earth Science	TRCR 18: Core Natural Science
OCEN 100/101: Oceanog w/ Lab	TRCR 18: Core Natural Science
PHYS 114: Survey of Chemistry and Physics	TRCR 18: Core Natural Science
PHYS 210: General Physics I	PHYS 11
PHYS 220: General Physics II	PHYS 13 (If PHYS 210 & 220 completed,
	equates to SCU's PHYS 11,12 & 13)
PHYS 250: Physics with Calculus I	PHYS 31
PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed,
	equates to SCU's PHYS 31, 32 & 33)
PHYS 270: Physics with Calculus III	PHYS 34 (If PHYS 250, 260 & 270, will
	equate to SCU's PHYS 31, 32, 33 & 34)

SOCIAL SCIENCE: Complete <u>one course</u> 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.

Canada College Course
ANTH 110: Cultural Anthropology
ANTH 351: Archaeology
ECON 100: Principles of Macro Economics
ECON 102: Principles of Micro Economics
GEOG 110: Cultural Geography
PLSC 103: Critical Thinking about World Politics
PLSC 130: Intro to International Relations
PLSC 150: Intro to Political Theory
PLSC 170: Intro to Comparative Politics
PLSC 210: American Politics
PSYC 100: General Psychology
PSYC 300: Social Psychology
SOCI 100: Intro to Sociology
SOCI 105: Social Problems
SOCI 141: Ethnicity and Race in Society

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

CULTURES & IDEAS 3: Complete <u>one course</u> 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.

Canada College Course
ANTH 110: Cultural Anthropology
ANTH 351: Archaeology
ECON 100: Principles of Macro Economics
ECON 102: Principles of Micro Economics
GEOG 110: Cultural Geography
PLSC 103: Critical Thinking about World Politics
PLSC 130: Intro to International Relations
PLSC 150: Intro to Political Theory
PLSC 170: Intro to Comparative Politics
PLSC 210: American Politics
PSYC 100: General Psychology
PSYC 300: Social Psychology
SOCI 100: Intro to Sociology
SOCI 105: Social Problems
SOCI 141: Ethnicity and Race in Society

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	MATH 251	Х	Х	Х	Х	Х	Х	Х	Х
MATH 12	MATH 252	Х	Х	Х	Х	Х	Х	х	Х
MATH 13	MATH 253	Х	Х	Х	Х	Х	Х	Х	Х
MATH 14	MATH 253	Х	Х	Х	Х	Х	Х	Х	Х
MATH 22 or AMTH 106	MATH 275	х	х	х	х	х	х	х	
MATH 51 or COEN 19	CIS 262			х	х				
MATH 53	MATH 270			Х	Х				
PHYS 31	PHYS 250	Х	Х	Х	Х	Х	Х	Х	
PHYS 32	PHYS 250/260	Х	Х	Х	Х	Х	Х	Х	
PHYS 33	PHYS 260	Х	Х	Х	Х	Х	Х	Х	
PHYS 34	PHYS 270					Х			
CHEM 11	CHEM 1A	Х	Х	Х	Х	Х	Х	Х	
ELEN/COEN 21/21L	-			х	х	х	х		
ELEN 50/50L	ENGR 260/261	х		х	Х	х	х	х	
CENG 41	ENGR 230		Х				Х	Х	
COEN 10/10L	CIS 118			Х	Х	Х	Х		Х
COEN 11/11L	CIS 250			Х	Х	Х			Х
COEN 12/12L	CIS 252			Х	Х	Х			Х
Abbreviations a	and Links:								
BIOE = Bioengineering									
CENG = Civil, Environmental, and Sustainable Engineering									
COEN = Computer Science and Engineering									
ECEN = Electrica	al and Computer	Enginee	ering						
ELEN = Electrical Engineering									
ENGR = General Engineering									
MECH = Mechanical Engineering									
	sign and Enginee								
A "-" indicates that an equivalent course has not been approved at time of publication									

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

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I	CHEM 11
CHEM 220: General Chemistry II	CHEM 12&50
CHEM 231: Organic Chemistry	CHEM 31
CHEM 235: Organic Chemistry II w/Lab	CHEM 33 (If CHEM 231 & 235 completed,
	equates to SCU's CHEM 31, 32 & 33)
PHYS 250: Physics with Calculus I	PHYS 31
PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed,
	equates to SCU PHYS 31, 32 & 33)
Engineering:	
ENGR 260/261: Circuits & Devices w/Lab	ELEN 50/50L
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14
MATH 275: Differential Equations	MATH 22 or AMTH 106

BIOENGINEERING MAJOR REQUIREMENTS

CIVIL ENGINEERING MAJOR REQUIREMENTS

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I	CHEM 11
PHYS 250: Physics with Calculus I	PHYS 31
PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed,
	equates to SCU PHYS 31, 32 & 33)
GEOL 100/101: Introduction to Geology w/Lab	CENG 20/20L
Engineering:	
ENGR 210: Engineering Graphics	CENG 7/7L
ENGR 111: Surveying	CENG 10/10L
ENGR 230: Statics	CENG 41
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14
MATH 275: Differential Equations	MATH 22 or AMTH 106

COMPUTER SCIENCE & ENGINEERING MAJOR REQUIREMENTS

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I	CHEM 11
PHYS 250: Physics with Calculus I	PHYS 31
PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed,
	equates to SCU PHYS 31, 32 & 33)
Engineering:	

No approved course equivalency at time of	COEN 21/21L
publication	
ENGR 260/261: Circuits & Devices w/Lab	ELEN 50/50L
CIS 118: Introduction to Computer Science	COEN 10/10L
CIS 250: Introduction to Object Oriented	COEN 11/11L
Programming-C++	
CIS 252: Introduction to Data Structures-C++	COEN 12/12L
CIS 262: Discrete Mathematics for Computer	COEN 19 or MATH 51
Science	
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14
MATH 275: Differential Equations	MATH 22 or AMTH 106
MATH 270: Linear Algebra	MATH 53

ELECTRICAL & COMPUTER ENGINEERING MAJOR REQUIREMENTS

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I	CHEM 11
PHYS 250: Physics with Calculus I	PHYS 31
PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed,
	equates to SCU PHYS 31, 32 & 33)
Engineering:	
No approved course equivalency at time of	ELEN 21/21L
publication	
ENGR 260/261: Circuits & Devices w/Lab	ELEN 50/50L
CIS 118: Introduction to Computer Science	COEN 10/10L
CIS 250: Introduction to Object Oriented	COEN 11/11L
Programming-C++	
CIS 252: Introduction to Data Structures-C++	COEN 12/12L
CIS 262: Discrete Mathematics for Computer	COEN 19 or MATH 51
Science	
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14
MATH 275: Differential Equations	MATH 22 or AMTH 106
MATH 270: Linear Algebra	MATH 53

ELECTRICAL ENGINEERING MAJOR REQUIREMENTS

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I	CHEM 11
PHYS 250: Physics with Calculus I	PHYS 31

PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed, equates to SCU PHYS 31, 32 & 33)
PHYS 270: Physics with Calculus III	PHYS 34
Engineering:	
ENGR 260/261: Circuits & Devices w/Lab	ELEN 50/50L
ENGR 230: Statics	CENG 41
CIS 118: Introduction to Computer Science	COEN 10/10L
CIS 250: Introduction to Object Oriented	COEN 11/11L
Programming-C++	
CIS 252: Introduction to Data Structures-C++	COEN 12/12L
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14
MATH 275: Differential Equations	MATH 22 or AMTH 106

GENERAL ENGINEERING MAJOR REQUIREMENTS

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I	CHEM 11
PHYS 250: Physics with Calculus I	PHYS 31
PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed,
	equates to SCU PHYS 31, 32 & 33)
Engineering:	
ENGR 260/261: Circuits & Devices	ELEN 50/50L
No approved course equivalency at time of	MECH 10/10L
publication	
No approved course equivalency at time of	MECH 11
publication	
ENGR 270: Materials Science	MECH 15/15L
ENGR 230: Statics	CENG 41
CIS 118: Introduction to Computer Science	COEN 10/10L
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14
MATH 275: Differential Equations	MATH 22 or AMTH 106

MECHANICAL ENGINEERING MAJOR REQUIREMENTS

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I	CHEM 11
PHYS 250: Physics with Calculus I	PHYS 31
PHYS 260: Physics with Calculus II	PHYS 33 (If PHYS 250 & 260 completed,
	equates to SCU PHYS 31, 32 & 33)
Engineering:	
ENGR 260/261: Circuits & Devices	ELEN 50/50L

No approved course equivalency at time of	MECH 10/10L
publication	
No approved course equivalency at time of	MECH 11
publication	
ENGR 270: Materials Science	MECH 15/15L
ENGR 215: Computational Methods for	MECH 45/45L
Engineers and Scientists	
ENGR 230: Statics	CENG 41
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14
MATH 275: Differential Equations	MATH 22 or AMTH 106

WEB DESIGN AND ENGINEERING MAJOR REQUIREMENTS

Canada College Course	SCU course equivalency
Natural Science:	
CHEM 210: General Chemistry I (<i>Recommended</i>)	CHEM 11
Engineering:	
CIS 118: Introduction to Computer Science	COEN 10/10L
CIS 250: Introduction to Object Oriented	COEN 11/11L
Programming-C++	
CIS 252: Introduction to Data Structures-C++	COEN 12/12L
Mathematics:	
MATH 251: Analyt Geom & Calc I	MATH 11
MATH 252: Analyt Geom & Calc II	MATH 12
MATH 253: Analyt Geom & Calc III	MATH 13&14

Additional notes:

- Consult the current Undergraduate Bulletin for Advanced Placement and High-Level International Baccalaureate test credit equivalencies at: <u>https://www.scu.edu/bulletin/undergraduate/chapter-</u> <u>8/AcademicCreditEvaluation.html</u>
- Consult the Santa Clara University Undergraduate Bulletin for additional requirements in a major. The Bulletin can be found at: <u>https://www.scu.edu/academics/course-catalogs/undergraduate-bulletin/</u>
- 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.
- <u>Per SCU policy, transfer credit earned after enrollment cannot satisfy University</u> <u>Core, major or minor requirements.</u> 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.