

Civil, Environmental, and Sustainable Engineering Technical Electives

Courses sharing a box are typically offered in alternating years

Fall	Winter	Spring	
118 (A) Constr Engr	119 (D) Des Sustain Constr	124 (A) Water Law Policy	Structures
134 (D) Str Steel Des I	123 (A) Pollut Fate Transp	133 (D) Wood Des	Water & Environ.
139 (A) Groundwater Hydr 161 (A) Sustain Water Res	135 (D) Reinf Concr Des	136 (D) Adv Concrete Str	Transp.
144 (D) Water Waste Trtmt	137 (D) Earthquake Engr	138 (D) Geotech Engr Des	Construct.
149 (A) Civil Systems Engr	146 (D) Des. Steel Frame	142 (D) Water Res Des 162 (A) Comput Water Res	Geotech.
186 (A) Constr Plan Control 187 (A) Constr Oper Equip	160 (A) GIS Water Res	150 (D) Traffic Engr Des	DIMA
	184 (A) Construct Mgmt	151 (A) Spec Topics Transp	
		182 (A) Build Info Model	

Five required technical electives must include: One digital information management and analysis (DIMA); Two design (D); One analysis (A); One either design (D) or analysis (A). **Not all electives are offered every year.** CENG 146 and 133 also may be offered in alternate years.

CORE Curriculum Requirements for CENG Majors

There are normally ten required humanities courses in the CORE Curriculum that all SCU students must complete. Engineering students can complete one course that satisfies two of these requirements (“double-dip”) as long as the course has been approved (visit <https://www.scu.edu/apps/courseavail> and click “advanced”) for both CORE categories.

Ten Required CORE Humanities Courses				
Critical Thinking and Writing I and II	Cultures and Ideas I, II, and III	Religion, Theology, and Culture	Ethics	Diversity
CTW-1 and CTW-2	C&I-I, II, and III	RTC-I, II, and III	Various	Various

Students also must complete coursework that satisfies five additional learning outcomes listed below.

Pre-approved Course Options for Specific, Supplemental Required CORE Curriculum Learning Outcomes				
Science, Technology And Society	Civic Engagement	Social Science	Arts	Experiential Learning
ENGL 181 & CENG 193	ENGR 1 & CENG 193	Various	ENGL 181 & CENG 193	Various

Engineering students complete an approved three-course (12-unit) Pathway or cluster of thematically linked courses as part of the SCU Core. Students must declare their Pathway by the end of their sophomore year. At least one Pathway course (minimum of four units) must be from outside their major department and any non-major Pathway course(s) should, where possible, satisfy other (base) CORE Curriculum requirements.

Pre-approved Pathway Course Options/Recommendations for Civil Engineering Students				
	Digital Age	Sustainability	Values in Science & Technology	Design Thinking
Course #1	CENG 7	Two from CENG 20, 115, 119, 140, 143, 144, or 161	Two from CENG 115, 119, 140, 143, 144, or 161	8 units from CENG 119, 128, 148, 192A, or 193
Course #2	CENG 15			
Course #3 ^a	PHIL 22 or ENGR 19	PHIL 29 or RSOC 64	PHIL 29 or CHEM 11	PHIL 22 or ENGR 19

^a **Departments occasionally change course numbers. Students should verify course numbers.**

As part of the documentation (portfolio) requirements for the CORE Curriculum, students must submit a composite reflection paper based on the pathway coursework during their senior year