

School of Engineering

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Summer 2025

Dr. Jes Kuczenski < jkuczenski@scu.edu >

Engineering Associate Dean for Undergraduate Studies





- Welcome to SCU!
  - Brief history
  - Current demographics and statistics
- About the curriculum
  - Course advising and enrollment
- Student resources

## SCHOOL OF ENGINEERING

Jesus (the Jesuits)



www.scu.edu/engineering/

Santa Clara University's Vision: To educate citizens and leaders of competence, conscience, and compassion and cultivate knowledge and faith to build a more humane, just, and sustainable world.

1777 1851 1912 1961 Mission Santa Clara de Asis **Santa Clara College School of Engineering First Coeducational Catholic University in** California Established by the Franciscan Oldest institution of higher Began admitting women into Originally established as the Order as part of the chain of 21 learning in the west - only one of undergraduate programs. First College of Engineering, changed Alta California Missions the 21 California Missions to the School of Engineering in female student to graduate with handed over to the Society of a BS from SoE was in 1968 1959

# SCHOOL OF ENGINEERING



www.scu.edu/engineering/

Our mission is to prepare diverse students for professional excellence, responsible citizenship, and service to society



Our values (based on our Vision and Mission, are:

- integrity in the pursuit of knowledge
- Collaboration between each other, across disciplines, and with Silicon Valley and beyond
- Aspiration for excellence in education, research, and service
- Respect –and understanding of our differences among students, faculty, and staff
- Exploration of the frontiers of engineering by research and innovation

ENGINEERING WITH A MISSION

#### STATISTICS

SCU Undergraduate: College of Arts & Sciences, Leavey School of Business, School of Engineering

~**6,235** undergraduate students 10:1 student to faculty ratio 60 Undergrad majors

SCU Graduate: Law, Business, Engineering, Counseling Psychology, Education, Pastoral Ministries, Theology

~3000 graduate students 43 Graduate degrees

618 Full-time faculty, 347 Part-time faculty

#### SoE Undergraduate:

~1,200 undergraduate students 78 full time faculty 8 Majors, 12 minors True 4-yr programs with 5-yr BS/MS programs

#### SoE Graduate:

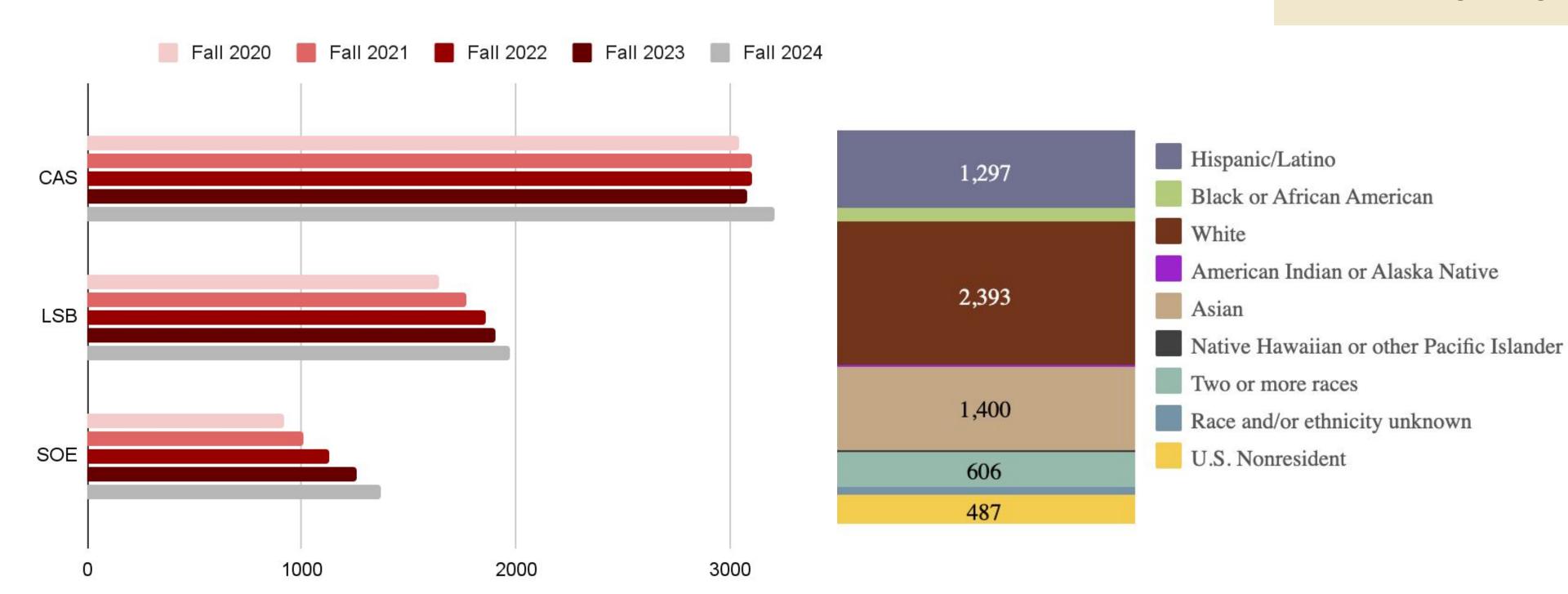
~**750** graduate students
Master's and PhD programs: 10
MS in Engineering, 4 Engineer, 4
PhD
New Master's in Robotics &

Automation and Responsible Al



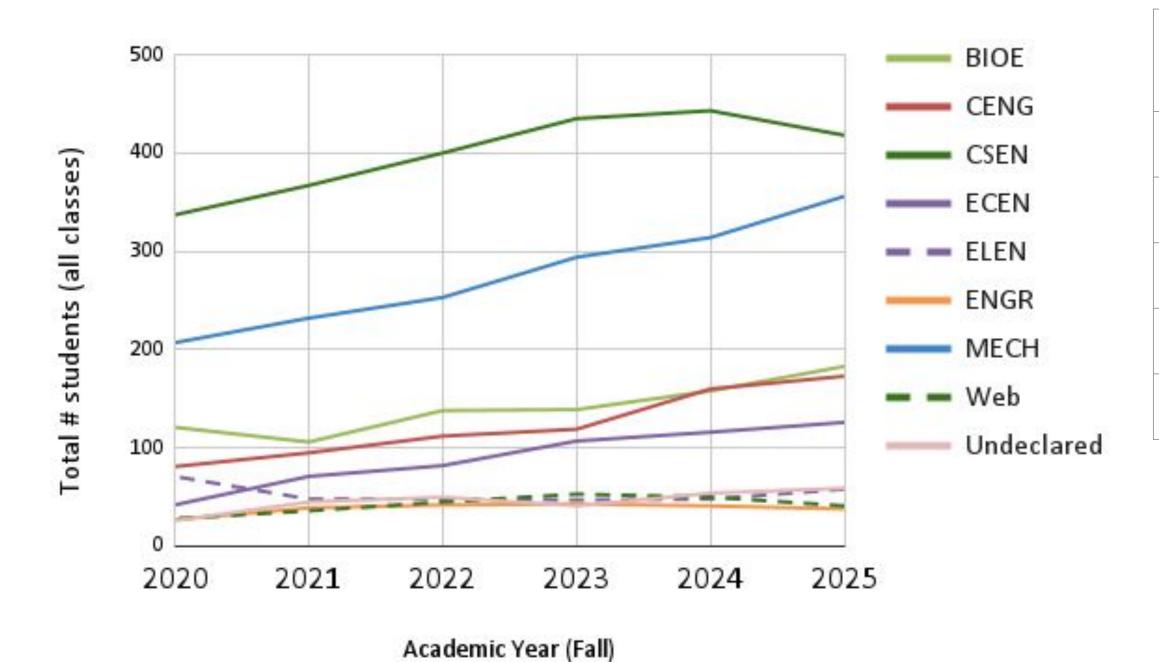
# STATISTICS







#### SOE UNDERGRADUATE TRENDS



Other Student Characteristics	# Incoming students
LEAD	47 (2024:56, 2023: 28)
Honors	27 (2024:26, 2023:19)
Athletes	9 (2024:11, 2023: 12)
Male	287
Female	128

#### ACADEMIC CALENDAR



www.scu.edu/engineering/

#### 2025-2026 UNDERGRADUATE ACADEMIC CALENDAR – approved

## SCU Quarter System:

- 10 week quarter + finals week
- Fall + Winter + Spring = Academic Year

#### Class Schedule

- MWF = Monday, Wednesday, and Friday (1 hr 5 min classes)
- TR = Tuesday and Thursday (1 hr 40 min classes)
- 10 min break between classes

#### **FALL QUARTER 2025**

Apr 28-May 9	M-F	Mandatory academic advising period
May 12-16	M-F	Fall registration appointment period
Aug 21	Th	Financial clearance deadline
Sep 20-21	Sa-Su	New student Welcome Weekend
Sep 19	F	Residence halls open at 8:30 am to new
- Transcorp		students
Sep 20	Sa	Residence halls open at 9 am to returning
100 A B 100 A		students
Sep 22	M	Classes begin
Sep 15-26	M-F	Late registration/add & drop period
Sep 26	F	Last day to withdraw with 100% refund (less registration fees) for the dropped units
Sept 26	F	Last day to add a class
Oct 1	W	Mass of the Holy Spirit 12 noon at Mission
0011		Church. Classes will not meet from 11:45am
		-1:15pm. Classes scheduled to begin at 1pm
		will begin instead at 1:15pm.
Oct 3	F	Last day to withdraw with 50% refund (less
		registration fees) for the dropped units
Oct 10	F	Last day to submit incomplete Spring 2025
8 8		and Summer Session 2025 work to faculty
Oct 10	F	Last day to petition for degrees to be
		conferred in December 2025
Oct 10	F	Last day to withdraw with 25% refund (less
		registration fees) for the dropped units
Oct 13	M	Indigenous Peoples' Day; academic and administrative holiday
Oct 17	F	Last day to remove Spring 2025 and
		Summer Session 2025 incompletes (faculty)
Oct 20	M	Last day to drop classes without a W (no
2 122		tuition refund)
Oct 20	M	Last day to declare P/NP grading option
Nov 10	$\mathbf{M}$	Last day to drop classes with a W (no tuition
17.01	NE	refund)
Nov 17-21	M-F	Winter registration appointment period
Nov 24-28 Nov 27-28	M-F	Academic holiday
Dec 5	Th-F	Thanksgiving; administrative holidays Classes end
Dec 8-12	M-F	Fall final examinations
Dec 12	F	Residence halls close 9 p.m.
Dec 17	w	Fall quarter grades due (faculty)
Dec 21	Su	Financial clearance deadline for Winter
	, ou	2026
Dec 24-25	W-Th	Christmas recess; administrative holidays
Dec 31, Jan 1	W-Th	New Year's recess; administrative holidays

#### WINTER QUARTER 2026

Nov 17-21	M-F	Winter registration appointment period
Dec 21	Su	Financial clearance deadline for Winter 2026
Jan 3	Sa	Residence halls open at 9am
Jan 5	M	Classes begin
Jan 5-9	M-F	Late registration/add & drop period
Jan 9	F	Last day to add a class
Jan 9	F	Last day to withdraw with 100% refund (less registration fees) for the dropped units
Jan 16	F	Last day to withdraw with 50% refund (less registration fees) for the dropped units
Jan 19	M	Martin Luther King Day; academic and administrative holiday
Jan 23	F	Last day to submit incomplete Fall 2025 work to professors
Jan 23	F	Last day to petition for degrees to be conferred in March 2026
Jan 23	F	Last day to withdraw with 25% refund (less registration fees) for the dropped units
Jan 30	F	Last day to remove Fall 2025 incompletes (faculty)

Feb 2	M	Last day to drop classes without a W (no tuition refund)
Feb 2	M	Last day to declare P/NP grading option
Feb 16	M	Presidents' Day; academic and administrative holiday
Feb 20	F	Last day to petition for degrees to be conferred in June 2026
Feb 23-27	M-F	Spring registration appointment period
Feb 23	M	Last day to drop classes with a W (no tuition refund)
Mar 13	F	Classes end
Mar 16-20	M-F	Winter final examinations
Mar 21	Sa	Financial clearance deadline for Spring 2026
Mar 23-27	M-F	Spring recess
Mar 25	W	Winter 2026 quarter grades due (faculty)

SPRING Q	UARTEI	R 2026
Feb 23-27	M-F	Spring registration appointment period
Mar 21	Sa	Financial clearance deadline for Spring 2026
Mar 30	M	Classes begin
Mar 30-Apr 3	M-F	Late registration/add & drop period
Apr 3	F	Good Friday; administrative and academic holida
Apr 6	M	Last day to add a class
Apr 6	M	Last day to withdraw with 100% refund (less registration fees) for the dropped units
Apr 13	M	Last day to withdraw with 50% refund (less registration fees) for the dropped units
Apr 17	F	Last day to submit incomplete Winter 2026 work to faculty
Apr 20	M	Last day to withdraw with 25% refund (less registration fees) for the dropped units
Apr 24	F	Last day to remove Winter 2026 incompletes (faculty)
Apr 24	F	Last day to petition for degrees to be conferred in September 2026
Apr 27	M	Last day to drop classes without a W (no tuition refund)
Apr 27	M	Last day to declare P/NP grading option
May 4-15	M-F	Annual mandatory academic advising period
May 18	M	Last day to drop classes with a W (no tuition refund)
May 18-22	M-F	Fall registration appointment period
May 21	Th	Financial clearance deadline for Summer 2026
May 25	M	Memorial Day; academic and administrative holiday
Jun 5	F	Classes end
Jun 8-11	M-Th	Spring final examinations
Jun 11	Th	Residence halls close 9 pm (non-graduating students)
Jun 13	Sa	175th Undergraduate Commencement
Jun 14	Su	Residence halls close 12 pm (graduating students)
Jun 16	Tu	Spring quarter grades due (faculty)

#### ACADEMIC CALENDAR

# University Core Requirements

- Foundations
- Explorations
- Integrations



## UNIVERSITY CORE REQUIREMENTS

FOUNDATIONS	
Critical Thinking and Writing (CTW) 1 & 2	
Cultures and Ideas (C&I) 1 & 2	
Second Language	
Mathematics*	
Religion Theology and Culture (RTC) 1	

EXPLORATIONS		
Ethics	Natural Science*	
Civic Engagement*	Social Science	
Diversity	Science, Technology, and Society (STS)*	
Arts*	RTC 2	
C&I 3	RTC 3	

# INTEGRATIONS Advanced Writing\* Experiential Learning for Social Justice Pathways\*\*



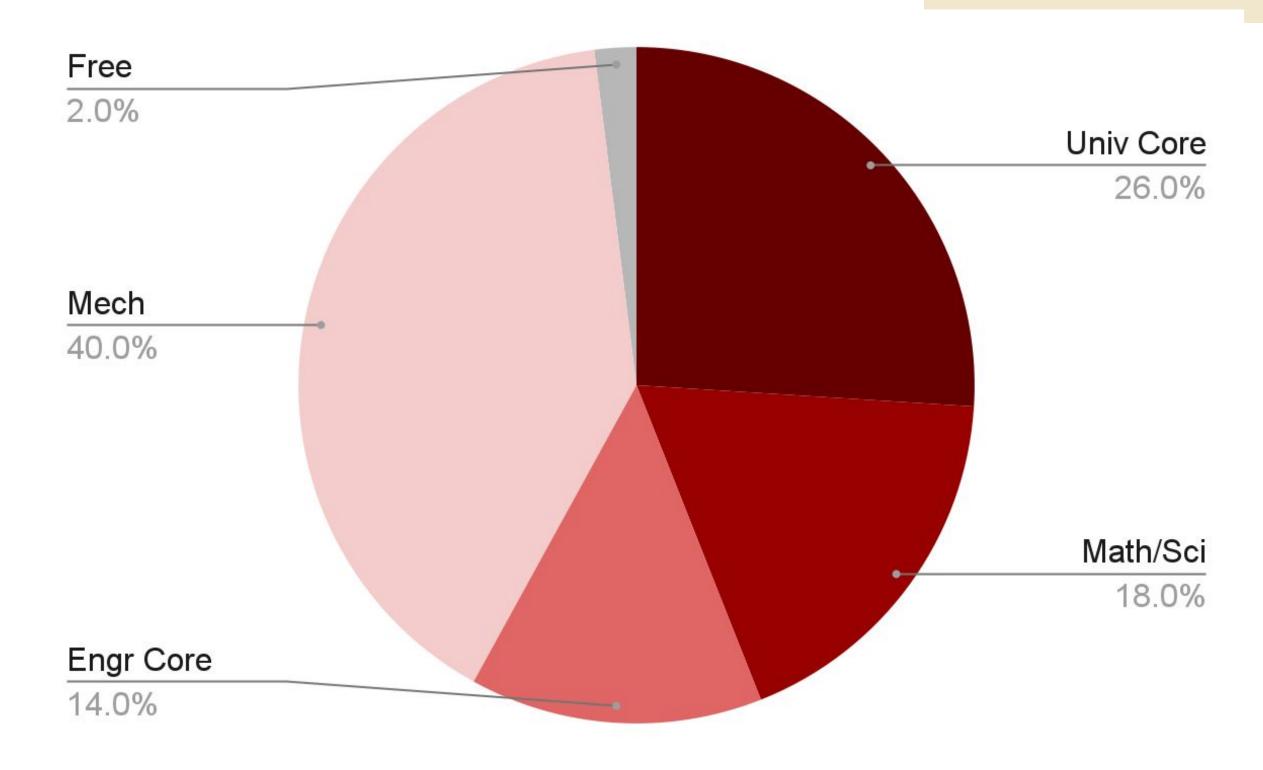


# ENGINEERING CURRICULUM





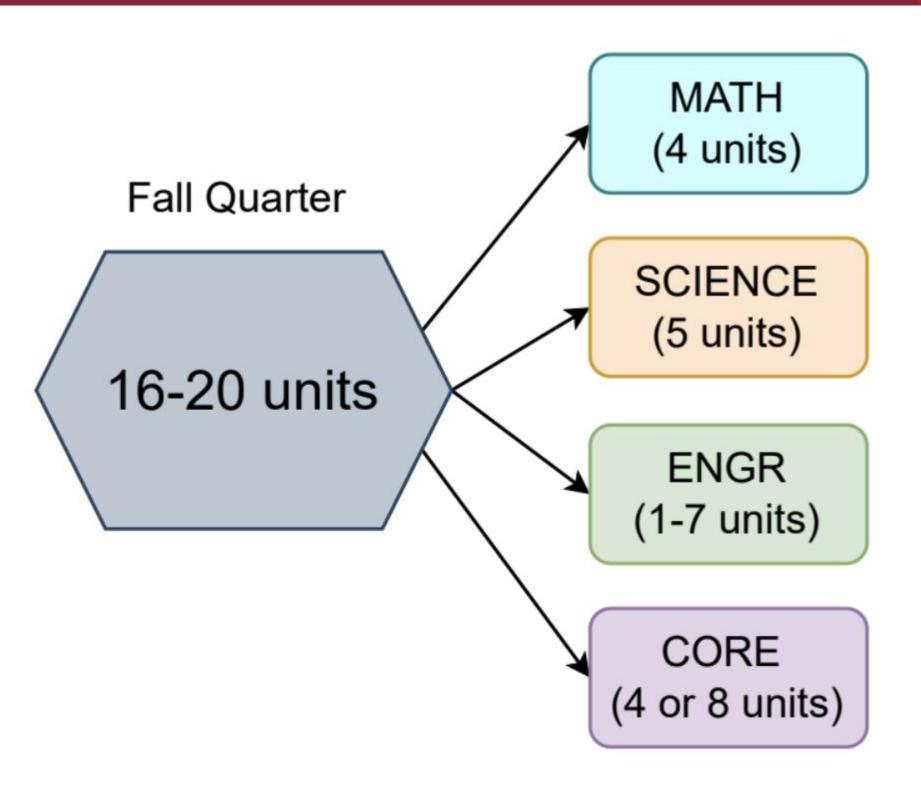




## ENGINEERING FIRST-YEAR



www.scu.edu/engineering/



MATH: Calculus sequence

(MATH 11, 12, 13, 14)

Placement based on incoming credit or CRE score

SCIENCE: Most engr students will take General Chemistry to fulfill their major's science requirement (CHEM 11)

ENGR: ALL engr students should take ENGR 1 and 1L during their first-year. Other engineering courses are based on engineering major interests

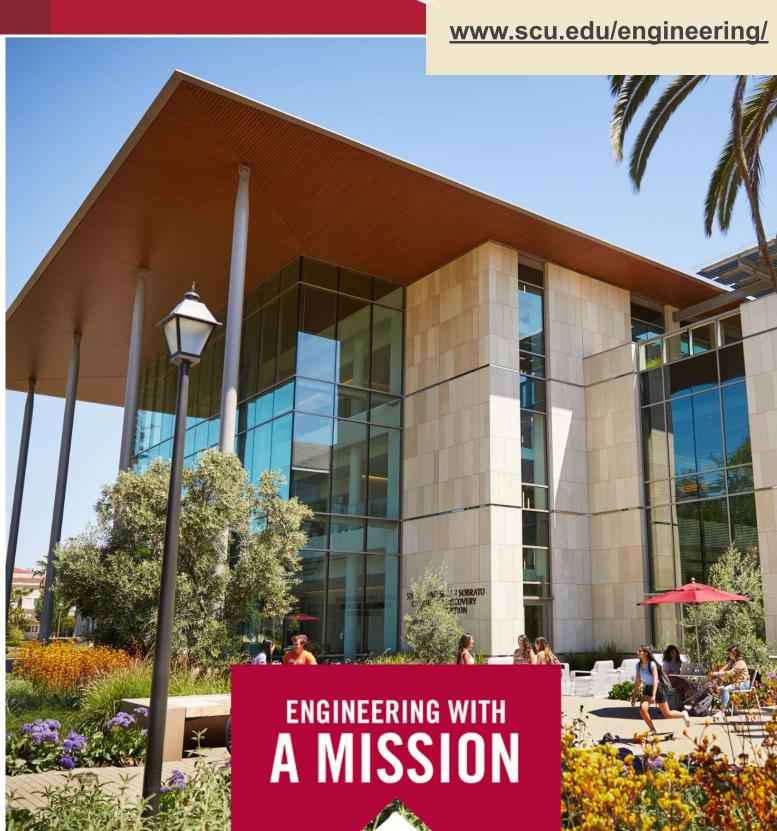
<u>CORE</u>: All engr students will be pre-enrolled into CTW 1 (and CTW 2 for winter quarter). Some students may also take RTC 1 - often with incoming math, science, or coding credit

#### ENGINEERING ADVISING

#### Advising and Enrollment Agenda:

- O1 Today, students meet with their major advisor
  - Get major specific information
    - Share incoming credit for math,
       chemistry, computer science, etc.
  - Ask questions
  - Get recommended fall schedule courses
    - Begin to plan course schedule



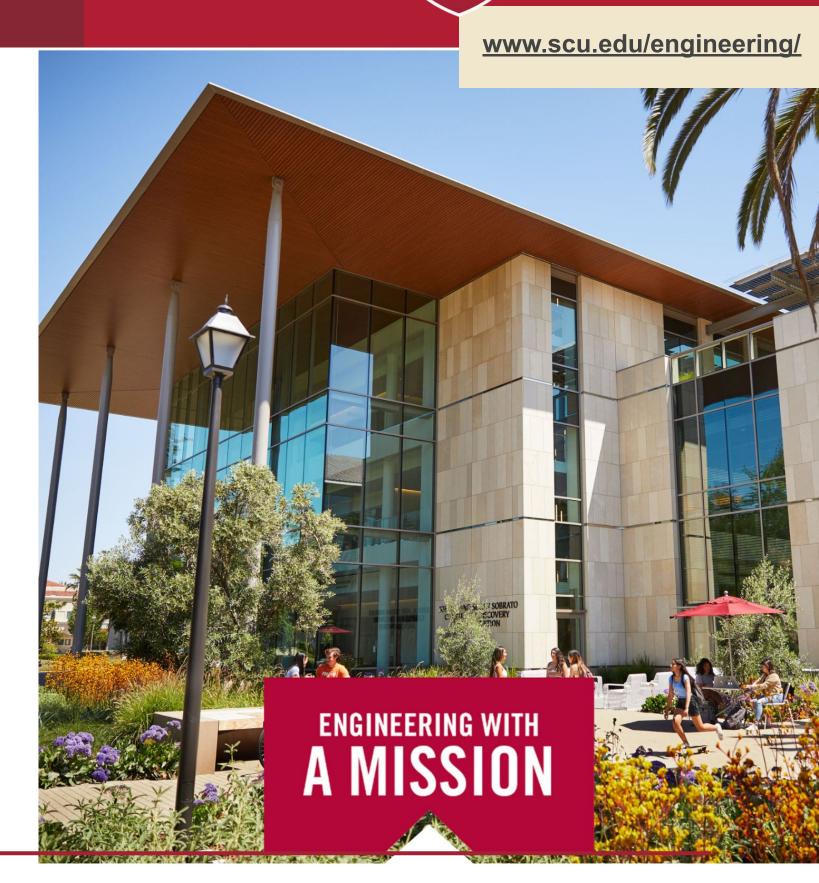


#### ENGINEERING ADVISING

# Santa Clara Engineering

#### Advising and Enrollment Agenda:

- O2 Tomorrow, students again meet with their major advisor
  - Finalize any courses
  - Ask remaining questions
  - Plan schedule for any courses that are not pre-enrolled
  - ENROLL!
    - We'll help with any course conflicts/closed classes, etc. case by case during the enrollment session



#### ENGINEERING RESOURCES

- Advising Resources
  - 4-yr plans for each major
  - Core curriculum checklist and information
  - Advice for undeclared engineering students
- Additional opportunities
- Bronco Exchange
- Upcoming fall events

#### **ENGINEERING ADVISING TEAM**



**Engineering Peer Advisors** 



**Engineering Faculty & Staff** 



**Drahmann Advising Center** 



SoE Undergrad Studies





#### ENGINEERING ADVISING

#### This fall, students are assigned BOTH:

- An academic advisor (faculty member in their major)
- A peer advisor (returning student in their major)





www.scu.edu/engineering/

#### Fall Quarter:

- Their peer advisor will contact them in early fall - watch your SCU gmail!
- Mid-fall quarter peer advisors
   will hold advising group sessions
  - Plan their course schedule for winter and spring
  - Check in on fall quarter progress
  - Sign their peer advising form take to their academic advisor for winter course advising

## ADDITIONAL OPPORTUNITIES



www.scu.edu/engineering/

Without delaying graduation, Engineering students CAN:

- Be athletes
- Study Abroad
- Do internships, up to a 6-month full-time Co-Op
- Complete a minor (or minors)
- Complete a double major
- Become an NAE <u>Grand Challenge Scholar</u>
- Complete first 1/3rd of a Masters degree
- Work with faculty on a year-long research project
- Actively participate in extracurricular activities
- Join a Registered Student Organization (Engr RSOs)





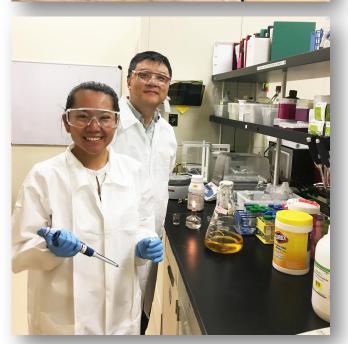


#### UNDERGRADUATE RESEARCH



www.scu.edu/engineering/





#### A Sample of Research Areas:

- Tissue and protein engineering
- Devices for biomedical applications
- Sustainable building materials
- Cyber security
- Artificial intelligence
- Wireless communication & networks
- Nanotechnology
- Robotic design and control
- Sustainable energy systems
- And more...

#### **Engineering Research Grants:**

Paid undergraduate research experiences

One-on-one collaboration with faculty supervisor

Opportunities for work to be published

**Kuehler Grants:** Summer research awards

**DeNovo Grants:** Academic year or summer research grants awarded to underrepresented engineering students

#### STUDENT ORGS & HONOR SOCIETIES



- American Institute of Aeronautics and Astronautics (AIAA)
- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- Associated General Contractors of America (AGC)
- Association of Computing Machinery (ACM)
- Association of Computing Machinery Women's Chapter (ACM-W)
- Biomedical Engineering Society (BMES)
- Energy Club
- Institute of Electrical & Electronic Engineers (IEEE)

- Engineers Without Borders (EWB)
- Engineering World Health
- Maker Club
- National Society of Black Engineers (NSBE)
- Santa Clara Innovation & Design (SCID)
- Society of Hispanic Professional Engineers (SHPE)
- Society of Women Engineers (SWE)
- Pi Tau Sigma (Mechanical Engineering Honor Society)
- Tau Beta Pi (Engineering Honor Society)
- Upsilon Pi Epsilon (Computing and Information Honor Society)



Social Events & Networking Opportunities



Field Trips to Engineering
Sites and Companies



Educational Outreach - Engineering is Fun!

#### CO-OPS & INTERNSHIPS



www.scu.edu/engineering/

#### Within 15 minutes of many amazing companies...





















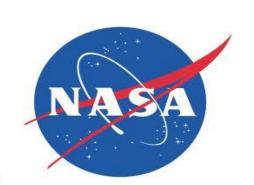




















## BRONCO EXCHANGE

www.scu.edu/engineering/

Online platform for SCU students to connect with peers, classmates, faculty, alumni, etc.

- Sign up: <a href="https://scubroncoexchange.peoplegrove.com/">https://scubroncoexchange.peoplegrove.com/</a>
- Create a free account
- Look through resources, join groups, register for virtual events, and more!





#### UPCOMING FALL EVENTS



www.scu.edu/engineering/

O1

ENGINEERING WELCOME NIGHT

Come meet your peer advisors, get free

dinner, and learn more about the

Engineering RSOs

TALL INVOLVEMENT FAIR

Campus-wide RSO fair - learning about all the communities you could become involved with



O3 CAREER FAIRS

Our <u>SCU Career Center</u> puts on several fall career fairs - visit the Career Center to learn more!

ATHLETIC EVENTS

Attend an SCU Athletic event - tickets are free for students! Fall sports include:

- Men's/Women's Soccer
- Volleyball
- Men's Water polo



