COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

COLLEGE WELCOME & RESOURCE INTRODUCTION

Carlos Santana,
Assistant Dean
Summer 2020 Advising & Registration
AGENDA

- Brief College Overview
- ECS Student Success Center
- Co-Curricular Opportunities
- Student Support Programs
- Success Tips
ECS – Degrees Offered

- 14 degrees total

- BS & MS Civil, Computer, Electrical & Mechanical Engineering and Computer Science

- Integrated BS-MS Computer Engineering (4 years)

- MS (Online only) Environmental Engineering & Software Engineering

- BS General Engineering with Concentration in Biomedical Device Engineering in the immediate plan
FALL 2019
Enrollment Data by Department

- Civil & Environmental Engineering:
  - Includes M.S. in Environmental Engineering (on-line)
- Computer Engineering
- Computer Science:
  - Includes M.S. in Computer Science
  - & M.S. in Software Engineering (state support)
- Electrical Engineering
- General Engineering
- Mechanical Engineering

TOTAL: 4547

- Civil & Environmental Engineering: 863
- Computer Engineering: 957
- Computer Science: 1821
- Electrical Engineering: 414
- General Engineering: 447
- Mechanical Engineering: 45
Undergrad Profile

~3800 undergrads
~750 Master’s students

Undergrad Enrollment

- Civil Eng. 39%
- Comp. Eng. 23%
- Comp. Sci. 18%
- Elec. Eng. 10%
- Mech. Eng. 9%
- Eng. Gen. 1%

Gender

First Generation

Diversity

- Asian 37%
- Black/ African American 17%
- Caucasian/ White 26%
- Hispanic/ Latino 1%
- Multi-Racial 3%
- Unknown/ Other 16%

100% 84.8% 15.2%
ECS Distinctions

2019 US News and World Report Ranking

- Undergraduate programs ranked 38th in the US among non-PhD granting universities
- Online Graduate Programs ranked 1st among non-PhD granting universities

- Nationally accredited programs (ABET)
- Interdisciplinary design projects/research
- National winners of several student design project competitions every year
Learning Environment – Typical Classrooms
Some of the Lab Spaces in the College of Engineering & Computer Science

- Structures Lab
- Environmental Lab
- Wind Tunnel Lab
- Hydraulics Lab
- Geotechnical Lab
- Very Large Scale Integration Lab
- Computer Labs in all departments
- Machine Shop
College of Engineering & Computer Science

Student Success Team Leadership

Dr. Susan Barua
Dean

Dr. Sang June Oh
Associate Dean

Carlos Santana
Assistant Dean, Student Affairs
College of Engineering & Computer Science

Student Success Team

CARLOS SANTANA
Assistant Dean, Student Affairs

Reasons to connect:

- Scholarship Information
- General Questions/ Guidance
- Opportunities for Involvement
- Conflict Resolution
- ECS Themed-Floor in Housing
- Referral to other campus services
- Oversee Operations of the ECS Student Success Center

Contact: csantana@fullerton.edu

ECS ASSISTANT DEAN’S SUITE
CS-206 – (2nd Floor)
ECS STUDENT SUCCESS CENTER

Location: CS-201

Resources:

- Academic & Graduation Advising
  - General Education and Major related
- Workshops:
  - Academic Success, Probation, Grad Check
- Tutoring
- Resume, Cover Letter, & Interview Skills
- Study Space
- PC Computers for Student Use
College of Engineering & Computer Science

Student Success Team

SERGIO GUERRA
Director & Advisor
Center for Academic Support in Engineering & Computer Science (CASECS)

Reasons to connect:
- Major & GE Advising for First-time student & Sophomores
- Supporting students’ timely progress toward their degree
- Assisting with Class Registration process
- Referrals to on campus resources

- Creating academic study plans to reflect student’s anticipated graduation date
- Reviewing (TDA) Titan Degree Audit
- Directs programmatic activities of the CASECS Program
- Tutoring Resources
- Scholarship Resources

Contact: sguerra@fullerton.edu
CHRISTINA HERNANDEZ
Retention Specialist

Reasons to connect:
- GE & Major Advising for Freshmen & Sophomores
- Supporting students’ timely progress toward their degree
- Assisting with the Class Registration process
- Referrals to on-campus resources
- Creating academic study plans to reflect student’s anticipated graduation date
- General questions
- Reviewing student’s Titan Degree Audit

Contact: ecsadvising@fullerton.edu
ROBERTO MONTES
College Advisor

Reasons to connect:

- GE & Major Advising for Freshman & Sophomores
- Supporting students’ timely progress toward their degree
- Assisting with the Class Registration process
- Referrals to on campus resources
- Creating academic study plans to reflect student’s anticipated graduation date
- General questions
- Reviewing student’s Titan Degree Audit

Contact: ecsadvising@fullerton.edu
College of Engineering & Computer Science

Student Success Team

ELIZABETH GOMEZ
Graduation Specialist

- General Education Advising for ECS Juniors & Seniors
- Supports students through changes in anticipated graduation date
- Facilitates appeals and petition services with academic departments
- Probation Advising for ECS Juniors and Seniors

Contact: ecsadvising@fullerton.edu
College of Engineering & Computer Science

Student Success Team

PAULA VERDUGO
Interim ECS Career Specialist
CSUF Career Center

- Career Advisement for all ECS students
- Supports resume and cover letter writing skills
- Provides opportunities to improve internship search, job search, interview skills
- Creates opportunities for employers to recruit ECS students for internships or jobs through employer events and career fairs
- Serves as a direct connection to all services provided by the CSUF Career Center

Contact: paverdugo@fullerton.edu
Co-curricular Opportunities

- Scholarships

- Student Organizations
CSUF SCHOLARSHIPS

COLLEGE OF ENGINEERING AND COMPUTER SCIENCE SCHOLARSHIPS

- ECS Scholarship amounts vary from $500 - $3,000 based on availability
- 11 named scholarships
- In 2019-2020 Academic Year, $50,000+ awarded
- Scholarship recipients can engage in various professional and networking opportunities by special invite
- Deadline: Late March/ Early April each year
# Student Organizations

## Civil Engineering
- Associated General Contractors of America (AGC)
- American Society of Civil Engineers (ASCE)
- California Geotechnical Engineering Association (CalGeo)
- Design Build Institute of America (DBIA)
- Earthquake Engineering Research Institute (EERI)
- Geo Institute Graduate Student Organization (GIGSO)
- Institute of Transportation Engineers (ITE)

## Computer Engineering
- Partnership for Applied Computer Engineering (PACE)
- Network Engineering Club (NEC)

## Computer Science
- Association for Computing Machinery (ACM)
- Association for Computing Machinery – Women in Computing (ACM-W)
- Offensive Security Society (OSS)
- Video Game Design Club (VGDC)
- Data Science and Machine Learning (AI)

## Electrical Engineering
- Institute of Electrical and Electronics Engineers (IEEE)
- Institute of Navigation (ION)

## Mechanical Engineering
- American Society of Mechanical Engineers (ASME)
- American Institute for Aeronautics and Astronautics (AIAA)
- Student Aerospace Society (SAS)
- Society of Automotive Engineers (SAE)
- Society of Manufacturing Engineers (SME)
- Society of Unmanned Aerial Vehicle Engineers (SUAVE)
- Titan Rover
- Titan Rocket Engineering Society (T.R.E.S.)

## Identity/Honor Society/Fraternity
- Latinos in Science and Engineering (MAES)
- National Society of Black Engineers (NSBE)
- Society of Hispanic Professional Engineers (SHPE)
- Society of Women Engineers (SWE)
- Tau Beta Pi California Chi Chapter (TBP)
- Chi Epsilon (XE)
- IEEE- Eta Kappa Nu (Iota Omega Chapter) (HKN)
- Theta Tao (Co-Ed Engineering Fraternity)
Student Project Samples

INTERESTED IN LEARNING MORE ABOUT THESE PROJECTS:

FORMULA SAE

➢ http://www.ecs.fullerton.edu/~sae/

TITAN ROVER

➢ https://titanrover.com/

Titan Rover Versions: https://titanrover.com/sar-video
STUDENT SUPPORT PROGRAMS

- Center for Academic Support in Engineering & Computer Science (CASECS) Program (Freshmen)
- Fullerton Finish Scholars Program (Freshmen)
- ASSURE-US Program (Freshmen)
- WiCSE Program (Women Freshmen & Transfers)
- LSAMP Program (Freshmen & Transfers)
- McNair Scholars Program (Transfer Students)
- RAISE Program (Transfer Students)
Center for Academic Support in Engineering & Computer Science (CASECS) Program

How CASECS Supports Students:

• Provides Academic Advising
• Supports students who are ECS majors during their first two years of college.
• Priority registration for the first two years upon successful completion of requirements
• Builds a support community with similar career goals
• Provides opportunities for mentoring relationships between faculty and students
• Increases awareness of research experience and opportunities with faculty
• Collaborates with Career Center for specific opportunities for professional networking
• Tutoring services for all ECS Majors
• Exposure to Clubs and Organizations
• Eligibility to apply for the CASECS Scholarship

Support can lead to success

Eligibility:
If you are an incoming freshman and the first one in your family to go to college or graduate from a four-year university, reach out to the CASECS Director Sergio Guerra to confirm eligibility.

Contact: sguerra@fullerton.edu
Fullerton Finish Scholars Program

How Fullerton Finish Supports Students:

• Provides Academic Advising to support 4-Year graduation
• Priority registration for active program participants
• Graduation Celebration

Eligibility:

• You must be able to take MATH 150A or higher during your first semester.

Questions? Contact:
http://www.fullerton.edu/aac/fullerton_finish/

Joshua Loudon
Fullerton Finish Coordinator

Contact: jlouden@fullerton.edu
ASSURE-US Program

PURPOSE:
• ASSURE-US is an NSF funded project aimed to enhance Student Learning Experiences in Engineering and Computer Sciences at lower-division years.

ELIGIBILITY
• Must be a Freshman or Sophomore enrolled in Engineering or Computer Science majors
• Underrepresented students, such as Hispanic and female, are highly encouraged to apply

SERVICES:
• Receive Financial and Academic Support
• Engaging Real World Experiences
• Networking and Internship opportunities
• Participation Incentives: Scholarships, Textbooks, and Gift Cards
• Peer Mentorship opportunities
• Advancing Student Success
• Collaborative Learning
WANT TO JOIN ASSURE-US?

REGISTER: CLICK HERE

QUESTIONS?

VISIT: https://www.fullerton.edu/ecs/assure-us.php

CONTACT: Assure-us@fullerton.edu

Dr. Sudarshan Kurwadkar
Civil Engineering Professor
ASSURE-US Principal Investigator

Dr. Jidong Huang
Electrical Engineering Professor
ASSURE-US Co-Principal Investigator
Women in Computer Science & Engineering Program (WiCSE)
WiCSE Program

Purpose:
• Build a community of students to support women in computer science and engineering
• Network with women in industry, ECS faculty, upperclassmen
• Get connected: meet companies, career preparation- workshops/presentations

Services:
• Tutor available for WiCSE participants
• Program Advisor
• Priority Registration for active participants
• Company Site visits
• Events: mixers, networking events
Want To Get Involved in WiCSE?

Questions? Contact:

Beth Harnick-Shapiro
WiCSE Advisor & Computer Science Instructor
beth.harnick.shapiro@Fullerton.edu
Be part of LSAMP.

A participant can be a part of LSAMP and can also be funded by another undergraduate research program at CSUF. We hope that participants can eventually move to become Research Scholars. Participants can receive scholarships up to $3,500.

During the academic year, the research commitment is a minimum of 6-8 hours per week with additional expectations and requirements that vary each semester. Research Scholars can receive scholarships up to $5,000 per year.
Eligibility & Application

• Must be a US citizen or Permanent Resident.
• Must be working on FIRST baccalaureate degree.
• Must be enrolled at California State University, Fullerton, or be transferring to CSUF from a community college.
• Must have a DECLARED SCIENCE Major –All ECS majors eligible!
• Must be an individual who has faced or faces social, educational, or economic barriers to careers in STEM
WANT TO JOIN L-SAMP?

APPLY: CLICK HERE

QUESTIONS?

VISIT: http://www.fullerton.edu/lsamp/

CONTACT: lsamp@fullerton.edu

Dr. Zair Ibragimov
LSAMP Director
MCNAIR SCHOLARS PROGRAM

FACULTY MENTORSHIP
RESEARCH
ADVISING
GRAD SCHOOL PREP
WORKSHOPS

MCNAIR Scholars Program

Eligibility:
- Desire to obtain a Ph.D
- At least 2 years left until graduation
- 3.0 cumulative GPA / 3.2 major GPA
- Low-income & First-gen college student OR
  Racially underrepresented

For more information: plisterte@fullerton.edu

https://forms.gle/16hKVN1oUUdMUZMG9
Deadline: May 29
Eligibility

• Goal of attending graduate school, particularly a Ph.D. program
• Minimum 3.0 cumulative GPA / 3.2 major GPA
• Junior (for McNair Scholars)
• Low-income background and first generation college student

AND/OR

• From a racial or ethnic group underrepresented in graduate education
WANT TO JOIN McNair Program?

APPLY: CLICK HERE

QUESTIONS?

VISIT: http://www.fullerton.edu/mcnair/

CONTACT: plitere@fullerton.edu

Dr. Patricia Literte
McNair Program Director
Project RAISE focuses on providing services and resources to STEM transfer students to increase academic and career success.

Transfer Resource Center (TRC)
McCarthy Hall 525  Monday-Thursday 9 am-7 pm, Friday 9 am-12 pm
- Study Area
- Charging Stations
- White Boards
- Break area w/ Microwave
- Access to Peer Advisors
- Stress Free Station
- Academic Success and Career Workshops

Summer Internship Program (SIP)
- Assistance with developing resume, cover letter, and interview skills
- Connections to employers for internship opportunities
- Build a professional network
- Access to NSM and ECS Career Specialists

CONNECT WITH US!
raise@fullerton.edu
657-278-4876
www.fullerton.edu/projectraise
@csufprojectraise @projectraise_
For questions and to verify eligibility for Project RAISE Programs, please contact:

raise@fullerton.edu
or
657-278-4876
SUCCESS TIPS
SUCCESS TIPS

BEFORE you start in the Fall 2020 semester:

- As soon as you get your AP scores, make sure you log in to your College Board account, and request to send your AP Score Report to CSUF.

- Calculus Placement: Unless you have college credit for Calculus (ex. Score of 4 or better in AP Calc AB), you will need to take ALEKS (an online Math learning & assessment program) during the summer. Take it seriously and complete it early! Math is a very important foundation – if possible start with Calculus (Math 150A).

- Questions about ALEKS: ALEKSECS@Fullerton.edu https://www.fullerton.edu/math/resources/aleks.php

- Review Credit by Exam Options available here: https://www.fullerton.edu/aac/docs/Credit_By_EXAM_AP_CLEP_IB.pdf

- Transfer Students: Ensure final community college transcripts are received as soon as possible to begin articulation process. Articulation can take time.
SUCCESS TIPS

- Connect with campus resources
  - Tutoring
  - Professor Walk-In/ Office Hours
  - Academic Advising Services
  - CSUF/ College of ECS Support Programs

- Engage with your classes!
  - Meet Friends/ Future Colleagues
  - Form Study Groups
  - Get to Know Your Professors/ Future Letters of Recommendation

- Get involved!
  - Join Student Clubs
  - Faculty Research
  - Student Projects
  - Time Management is Key!

- Create an academic plan that meets your goals by meeting with your advisor!
  - ECS requires academic advising at least once per academic year
  - 15 units per semester → 4 year graduation
Time Investments

AVAILABLE HOURS IN WEEK: 7 days x 24 hours = 168 Hours

Take 4-5 Academic Classes:

School: Class = 15 units & hours + Studying = ~30 hours

Commitments: Family = 14 hours + Work (Part-Time) = 20 hours

Your Health: Sleep = 53 hours (~7.5 hrs/night) + Exercise = 5 hours + Eating = 21 hours

Social Life: Hangout = 7 hours

Routine: Morning Preparation = 5 hours + Commute/ Parking = ~8 hrs

~45 Hrs
~34 Hrs
~79 Hrs
~7 Hrs
~13 Hrs
15 units per semester  ➞  4 year graduation

Earn Your Degree in 4 Years!

HERE’S HOW  TAKE 15 UNITS PER SEMESTER . . .

15

All programs in the College of Engineering & Computer Science are 120 units, and can be completed in 8 semesters by taking 15 units per semester or 30 units each academic year (can include Summer term, in addition to Fall & Spring semesters).

HERE’S WHY  THERE ARE ADVANTAGES & OPTIONS . . .

Save money & accrue less student loan debt!
Finishing in 4 years can save you $6,894 compared to 5 years, or $13,788 for a 6-year degree!
The 2018-2019 tuition cost for your degree at CSUF is at $3,447 per semester, which means:
4 years cost = $27,578
5 years cost = $34,470
6 years cost = $41,364

Did you know?
Students enrolled in 15 units or more have been shown to perform as well or better academically than students taking 12 units per semester.
According to a study, there is a significant correlation between students registering in more credit hours and higher earned GPAs during a semester.

Start your professional career sooner to improve life-long salary earnings!
The National Association of Colleges and Employers (NACE) estimated average starting salaries in Winter 2017 were offered at $66,356 and $66,292 for computer science and engineering fields, respectively.
Earning your 4-year degree increases your life-long earnings potential to an additional $132,000, when compared to earning a 6-year degree. Wow!