New Transfer Student Advising
For Computer Engineering & Electrical Engineering Majors

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School of Engineering
San Francisco State University

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For New transfer students:
Before you watch this video, please watch the two videos below first:

**School of Engineering Welcome & Overview Video**
by Dr. Kwok Siong Teh (*School Director & Professor of Mechanical Engineering*)

**Engineering Transfer Student Advising Video (for all majors)**
by Raul Contreras (*Student Services Coordinator, School of Engineering*)

All videos and the presentation slides can be found at [https://engineering.sfsu.edu/engineering-transfer-advising](https://engineering.sfsu.edu/engineering-transfer-advising).
Overview of Computer/Electrical Engineering Programs

Program Educational Objectives:
Graduates of the computer/electrical engineering program are expected to have, within a few years of graduation:
1. Established themselves as practicing professionals or engaged in graduate study in computer/electrical engineering or a related field.
2. Demonstrated an ability to be productive and responsible professionals.

Career Paths after Graduation
- Our graduates work at high-tech companies or continue to pursue an advanced degree at institutions such as CSU and UC campuses, Virginia Tech, and Duke.

Representative companies that hire our graduates

- Intel
- Google
- Texas Instruments
- Qualcomm
- Synopsys
- Cisco
- Western Digital
- STMicroelectronics
Areas of Study

Computer Engineering Areas of Study
- Embedded systems
- Digital systems design
- Computer architecture
- Computer networks
- Emerging fields such as cyber-physical systems, nano-electronic technologies, mobile computing, and machine learning

Electrical Engineering Areas of Study
- Analog and digital electronics
- Power electronics and power systems
- Digital signal processing
- Embedded systems
- Communication
- Emerging fields such as bioelectronics, neuromorphic computing, and hardware security
ENGR 478 Design with Microprocessors
Fall 2020 Virtual Project Showcase
Faculty in Computer/Electrical Engineering

Tenured/Tenure-Track Faculty

Tom Holton
Professor & Program Head
Digital Signal Processing

Hamid Shahnasser
Professor & Graduate Coordinator
Computer Networks

Hao Jiang
Professor
Analog Integrated Circuits Design

Hamid Mahmoodi
Professor
Nano-electronic Technologies; VLSI

Xiaorong Zhang
Associate Professor
Embedded Systems; Human-Machine Interfaces

Zhuwei Qin
Assistant Professor
Mobile Computing

Stephanie Claussen
Assistant Professor
Engineering education; photonics

See more information about tenured/tenure-track faculty members:
https://engineering.sfsu.edu/faculty.
Join a Research Lab! [https://engineering.sfsu.edu/research-labs-and-centers](https://engineering.sfsu.edu/research-labs-and-centers)

- **CompE/EE research areas:** embedded systems, digital design and verification, hardware security, human machine interfaces, neuromorphic computing, mobile computing, and machine learning
- Research supported by funding agencies such as National Science Foundation, Air Force Research Laboratory, Department of Defense, and Department of Education
- Active collaborations among disciplines and with other institutions (e.g. UCSF, Duke) and industry (e.g. Intel, Synopsys)
Faculty in Computer and Electrical Engineering

Lecturer Faculty

Mohammad HajjAboli
Office: SCI 112
Email: mhab@sfedu.edu

Vidyacharan Bhaskar
Office: SCI 381
Email: charobh@sfedu.edu

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Rashid Kohan
Office: SCI 112
Email: rskohan@sfedu.edu

John Kim
Office: SCI 381
Email: jkim@sfedu.edu

See more information about lecturer faculty members:
https://engineering.sfsu.edu/lecturer-faculty.
Computer/Electrical Engineering Major Curriculum

- **BS in Computer Engineering:** 128-unit degree; ABET accredited
- **Major requirements** including math, chemistry, and physics prerequisites: 92 units
  - Mathematics: 15 units
  - Physics: 8 units
  - Chemistry: 3 units
  - Required lower division courses for CompE: 11 units in Engineering, 9 units in Computer Science
  - Required upper division courses for CompE: 34 units in Engineering, 6 units in Computer Science
  - Elective upper division courses for CompE: 6 units
  - **General education:** 36 units

- **BS in Electrical Engineering:** 129-unit degree; ABET accredited
- **Major requirements** including math, chemistry, and physics prerequisites: 93 units
  - Mathematics: 15 units
  - Physics: 12 units
  - Chemistry: 3 units
  - Required lower division courses for EE: 12 units in Engineering
  - Required upper division courses for EE: 42 units in Engineering
  - Elective upper division courses for EE: 9 units
  - **General education:** 36 units
## Engineering Programs Major and Minor Requirements

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More forms can be found at the SoE Website eForms Download page: [https://engineering.sfsu.edu/eforms-download](https://engineering.sfsu.edu/eforms-download).
SF State Scholars Programs (blended BS/MS) in Engineering

The SF State Scholars program provides undergraduate students with an accelerated pathway to a graduate degree. Students in this program pursue a bachelor’s and master’s degree simultaneously.

Program webpage: https://engineering.sfsu.edu/sf-state-scholars-41-blended-bsms-program

Program Value

- Getting the most out of your education: Paying undergraduate tuition for graduate-level courses. Graduate School application fee waived.
- Getting the most of your time: Students in this program pursue bachelor’s and master’s degrees simultaneously, enabling students to use their senior project capstone experience to be integrated with a graduate thesis/project.
- Challenging yourself: Students will become more competitive and dynamic by engaging with advanced &/or graduate-level cohort.
SF State Scholars Programs (blended BS/MS) in Engineering

The School of Engineering offers the SF State Scholars programs in four areas including Civil, Computer, Electrical, and Mechanical Engineering:

- **B.S. in Computer Engineering + M.S. in Computer and Electrical Engineering** (SF Scholars Coordinator - Dr. Xiaorong Zhang)

- **B.S. in Electrical Engineering + M.S. in Computer and Electrical Engineering** (SF Scholars Coordinator - Dr. Hamid Mahmoodi)
Important for New Transfer Students

If you have questions or issues regarding transferring courses from your transfer institutions to SF State, please contact the Computer/Electrical Engineering Program Head Dr. Tom Holton (tholton@sfsu.edu).
One-on-one Advising for Summer 2021

You can schedule a one-on-one major advising appointment with Dr. Xiaorong Zhang (xrzhang@sfsu.edu) on July 13, 15, 20, 22, 27, 29, and August 3 during 1-3 pm PDT.

Please use this Google sheet to book a one-on-one advising appointment
https://docs.google.com/spreadsheets/d/1f4Tq_bu9fLJjd2kN8Gqsfk8PrHf5tbbI5iRqxLBChql/edit?usp=sharing