

New Transfer Student Advising

For Computer Engineering & Electrical Engineering Majors

Dr. Xiaorong Zhang Associate Professor of Computer and Electrical Engineering School of Engineering San Francisco State University

July 2021

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 <u>https://engineering.sfsu.edu/engineering-</u> 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



Areas of Study

Computer Engineering Areas of Study

- Embedded systems
- Digital systems design
- Computer architecture
- Computer networks
- Emerging fields such as cyberphysical 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



Learn more about the engineering undergraduate programs: <u>https://engineering.sfsu.edu/undergraduate-programs-0</u>.

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

See more information about tenrued/tenure-track faculty members:

https://engineering.sfsu.edu/faculty.



Xiaorong Zhang Associate Professor Embedded Systems; Human-Machine Interfaces



Zhuwei Qin Assistant Professor Mobile Computing



Stephanie Claussen Assistant Professor Engineering education; photonics

Join a Research Lab! 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 HajiAboli Office: SCI 112 Email: mhaji@sfsu.edu



Mojan Norouzi Office: SCI 112 Email: mojan@sfsu.edu



Rashid Kohan

Office: SCI 112 Email: <u>kohan@sfsu.edu</u>



Vidyacharan Bhaskar Office: SCI 381 Email: <u>charanvb@sfsu.edu</u>



Nick Scandy Office: SCI 112 Email: nscandy@sfsu.edu



John Kim Office: SCI 381 Email: jhk@sfsu.edu



Jonathan Song Office: SCI 144 Email: jjs5151@sfsu.edu



Ian Donovan Office: SCI 112 Email: janmdonovan@gmail.com



Ahmad Shahsiah Office: Email: shahsiah@sfsu.edu



Barry Shiller Office: SCI 112 Email: <u>bshiller@sfsu.edu</u>



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

Computer Engineering	CompE Major Planning Worksheet
	Academic Bulletin: BS in Computer Engineering
	Academic Bulletin: Minor in Computer Engineering
Electrical Engineering	EE Major Planning Worksheet
	Academic Bulletin: BS in Electrical Engineering
	Academic Bulletin: Minor in Electrical Engineering

More forms can be found at the SoE Website eForms Download page: <u>https://engineering.sfsu.edu/eforms-download</u>.

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: <u>https://engineering.sfsu.edu/sf-state-scholars-41-blended-bsms-program</u>

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



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 - <u>Dr. Xiaorong Zhang</u>)

• **B.S. in Electrical Engineering + M.S. in Computer and Electrical Engineering (**SF Scholars Coordinator - <u>Dr. Hamid Mahmoodi</u>)





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** (<u>tholton@sfsu.edu</u>).

One-on-one Advising for Summer 2021

You can schedule a one-on-one major advising appointment with **Dr. Xiaorong Zhang** (<u>xrzhang@sfsu.edu</u>) 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 <u>https://docs.google.com/spreadsheets/d/1f4Tq_bu9fLJjd2kN8Gqsfk8PrHf5tbbI5iRqxLBChqI/edit?</u> <u>usp=sharing</u>