Pre-Professional Courses

- UNIV 1131 (freshman students only)
- ENGR 1101 (transfer students)
- CSE 1325 Object-Oriented Programming
- CSE 2012 Computer Organization
- CSE 1310 Intro to Programming (prerequisite: MATH 1302)
- CSE 1106 Intro to CSE
- CSE 1320 Intermediate Programming (coreq: Math 1421)
- CSE 2441 Digital Logic
- CSE 2315 Discrete Structures
- CSE 3118 Algorithms & Data Structures

Foreign Language
If required, two semesters of the same language

Only students who have completed all pre-professional courses satisfactorily and thus are admitted to the professional program may take 4000 level courses.

General Education
- Language/Philosophy/Culture elective
- POLS 2311
- POLS 2312
- Creative Arts elective
- Social/Behavioral (IE 2308 or ECON 2305)
- 6 hours of HIST electives

Math and Science Electives
- 3 hour Math elective
- 4 hour Science elective

Math and Science Electives
- 3 hour Math elective
- 4 hour Science elective

See list of approved courses on second page
Remember to check prerequisites.

4000 Level Courses

The Senior Design courses must be taken in consecutive semesters: (Fall and Spring), (Spring and Summer), or (Summer and Fall). Spring and Fall is NOT an option.
CPE 2022-2023 Classes

Mathematics Electives
- MATH 2326 - Calculus III (Fall, Spring, & Summer)
- CSE 4345 - Computational Methods (Fall & Spring)
- CSE 3315 - Theoretical Concepts in CSE (Fall & Spring)

Science Electives
- BIOL 1441 – Cell and Molecular Biology (Fall, Spring, & Summer)
- CHEM 1441 – General Chemistry (Fall, Spring, & Summer)
- CHEM 1465 – Chemistry for Engineers (Fall, Spring, & Summer)
- PHYS 3313 & PHYS 3183 – Intro to Modern Physics (Fall & Spring)

Technical Electives

You need to complete three tech electives for your degree plan, but you are only allowed to take ONE of the following: CSE 4308, CSE 4309, CSE 4310, CSE 4340, CSE 4360, CSE 4378, and CSE 4380.

- CSE 4308 – Artificial Intelligence
  prereqs: CSE 3318, and CSE 3380 or MATH 3330 (Fall, Spring, and Summer)

- CSE 4309 – Fundamentals of Machine Learning
  prereqs: CSE 3318, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330 (Fall only)

- CSE 4310 - Fundamentals of Computer Vision
  prereqs: CSE 3318, IE 3301 or MATH 3313, CSE 3380 or MATH 3330 (Fall only)

- CSE 4340 – Fundamentals of Wireless Networks
  prereqs: CSE 4344 or CSE 4352 (Fluctuates)

- CSE 4352 – IoT and Networking
  prereqs: CSE 3442 (Spring only)

- CSE 4354 – Real-time Operating Systems
  prereqs: CSE 3320 and CSE 3442 (Fall only)

- CSE 4355 – Electomechanical Systems and Sensors
  prereqs: CSE 3323 and CSE 3442 (Fall only)

- CSE 4356 – System on Chip (SoC) Design
  prereqs: CSE 3442 (Fall only)

- CSE 4357 – Advanced Digital Logic Design
  prereqs: CSE 3442 (Spring only)

- CSE 4358 – Microprocessor Systems
  prereqs: CSE 3442 (Spring only)

- CSE 4360 - Autonomous Robot Design and Programming
  prereqs: CSE 3318, CSE 3320, and CSE 3380 or MATH 3330 (Fall only)

- CSE 4372 – RISC Processor Design
  prereqs: CSE 3442 (Spring only)

- CSE 4373 – General Purpose GPU Programming
  prereqs: CSE 3320 (Fall only)

- CSE 4376 – Digital Communication Systems
  prereqs: CSE 3313 (Fall only)

- CSE 4377 – Wireless Communication Systems
  prereqs: CSE 3313 (Spring only)

- CSE 4378 – Intro to Unmanned Vehicle Systems
  prereqs: Admission to the professional program and permission from an advisor (Fall only)

- CSE 4380 – Information Security
  prereqs: CSE 3320 (Fall and Spring)

Language, Philosophy & Culture Electives

- ANTHROPOLOGY (ANTH) 2322
- ARABIC (ARAB) 2310, 2314
- ARCHITECTURE (ARCH) 2300
- ART & ART HISTORY (ART) 1317
- American Sign Lang. (ASL) 2314
- CHINESE (CHIN) 2310, 2314
- CLASSICS (CLAS) 1300
- INTRO TO LGBTQ+ STUDIES (DIVR/WOMS) 2315
- ENGLISH (ENGL) 2303, 2309, 2319, 2329
- FRENCH (FREN) 2310, 2314
- GERMAN (GERM) 2310, 2314
- GLOBAL (GLOBAL) 2301
- GREEK (GREK) 2314
- HISTORY (HIST) 2377
- KOREAN (KORE) 2310, 2314
- LATIN (LATN) 2314
- LINGUISTICS (LING) 2371
- MEXICAN AMERICAN STUDIES (MAS) 2300
- PHILOSOPHY (PHIL) 1304, 2300
- PORTUGUESE (PORT) 2314
- RUSSIAN (RUSS) 2310, 2314
- INTRO TO POPULAR CULTURE (SOCI/INTS) 1310
- SPANISH (SPAN) 2310, 2314, 2315

Creative Arts Electives

- ARCHITECTURE (ARCH) 1301
- ART & ART HISTORY (ART) 1301, 1309, 1310
- DANCE (DNCE) 1300
- ENGLISH (ENGL) 1375
- MUSIC (MUSI) 1300, 1302, 1304, 2300, 2301
- THEATER ARTS (THEA) 1342, 1343

History Electives

- HIST 1301
- HIST 1302
- HIST 1331
- HIST 1332