**Pre-Professional Courses**

- **CSE 1310** Intro to Programming (pre-requisite: MATH 1302)
- **CSE 1105** Intro to CSE
- **ENGR 1250** (co-requisite: MATH 1421 or above)
- **MATH 1426** Calculus I
- **MATH 2425** Calculus II
- **PHYS 1442** Technical Physics I
- **ENGL 1301**

**Technical Elective courses**

- **See list of approved courses on second page.**
- **Remember to check pre-requisites.**

- **CSE 1325** Object Oriented Programming
- **CSE 1320** Intermediate Programming (co-requisite: Math 1401)
- **CSE 2100** Practical Systems
- **CSE 2310** Digital Logic
- **CSE 2315** Discrete Structures
- **CSE 2441** Algorithms & Data Structures
- **CSE 3318** (2320) Algorithms & Data Structures
- **CSE 3315** Linear Algebra
- **CSE 3380** Linear Algebra
- **IE 3301** Engineering Probability and Stats

- **CSE 2315** Discrete Structures
- **CSE 2440** Circuit Analysis
- **CSE 3320** Operating Systems
- **CSE 3325** Operating Systems
- **CSE 3323** Electronics
- **CSE 3314** Professional Practices (pre-requisites: COMS 2302 and CSE 3316)
- **CSE 3318** (2320) Algorithms & Data Structures
- **CSE 3442** Embedded I
- **CSE 3313** Signal Processing
- **CSE 3320** Operating Systems
- **CSE 3313** Signal Processing
- **CSE 3442** Embedded II
- **CSE 4323** Quan. Computer Arch.
- **CSE 4316** Senior Design I
- **CSE 4317** Senior Design II

**Foreign Language**

- If required, two semesters of the same language.

**General Education**

- Language/Philosophy/Culture elective
- HIST 1301
- HIST 1302
- POLS 2311
- POLS 2312
- Creative Arts elective
- Social/Behavioral (IE 2308 or ECON 2305)

**Math and Science Electives**

- 3 hour Math elective
- 4 hour Science elective

See list of approved courses on second page.

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 2019-2020 Classes

Mathematics Electives
- MATH 2326 - Calculus III (Fall, Spring, & Summer) pre-req: MATH 2425
- CSE 4345 - Computational Methods (Fall & Spring) pre-req: CSE 3318, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330
- CSE 3315 - Theoretical Concepts in CSE (Fall & Spring) pre-req: CSE 2315

Science Electives
- BIOL 1441 – Biology I for Science Majors (Fall, Spring, & Summer) pre-req: None
- CHEM 1441 – General Chemistry (Fall, Spring, & Summer) pre-req: MATH 1302
- CHEM 1465 – Chemistry for Engineers (Fall, Spring, & Summer) co-req: MATH 1421
- PHYS 3313 & PHYS 3183 – Intro to Modern Physics (Fall & Spring) pre-req: MATH 2425 and PHYS 1444

Technical Electives
- CSE 4310 - Fundamentals of Computer Vision pre-reqs: CSE 3318, IE 3301 or MATH 3313, CSE 3380 or MATH 3330 (Spring only)
- CSE 4340 – Fundamentals of Wireless Networks pre-reqs: CSE 4344 or CSE 4352 (Fluctuates)
- CSE 4352 – IoT and Networking pre-reqs: CSE 3442 (Spring only)
- CSE 4354 – Real-time Operating Systems pre-reqs: CSE 3320 and CSE 3442 (Fall only)
- CSE 4355 – Electomechanical Systems and Sensors pre-reqs: CSE 3323 and CSE 3442 (Fall only)
- CSE 4356 – System on Chip (SoC) Design pre-reqs: CSE 3442 (Fall only)
- CSE 4357 – Advanced Digital Logic Design pre-reqs: CSE 3442 (Spring only)
- CSE 4358 – Microprocessor Systems pre-reqs: CSE 3442 (Spring only)
- CSE 4360 - Autonomous Robot Design and Programming pre-reqs: CSE 3318, CSE 3320, and CSE 3380 or MATH 3330 (Fall only)
- CSE 4372 – RISC Processor Design pre-reqs: CSE 3442 (Spring only)
- CSE 4373 – General Purpose GPU Programming pre-reqs: CSE 3320 (Fall only)
- CSE 4376 – Digital Communication Systems pre-reqs: CSE 3313 (Fall only)
- CSE 4377 – Wireless Communication Systems pre-reqs: CSE 3313 (Spring only)

Language, Philosophy & Culture Electives
- ANTHROPOLOGY (ANTH) 2322
- ARABIC (ARAB) 2310, 2314
- ARCHITECTURE (ARCH) 2300
- ART & ART HISTORY (ART) 1317
- AMERICAN SIGN LANGUAGE (ASL) 2314
- CHINESE (CHIN) 2310, 2314
- CLASSICS (CLAS) 1300
- INTRO TO LGBTIQ+ STUDIES (DIVR) 2315
- ENGLISH (ENGL) 1350, 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 (SOCl/INTS) 1310
- SPANISH (SPAN) 2310, 2314, 2315
- WOMEN’S STUDIES (WOMS) 2310, 2315

Creative Arts Electives
- ARCHITECTURE (ARCH) 1301
- ART & ART HISTORY (ART) 1301, 1309, 1310
- DANCE (DNCE) 1300
- ENGLISH (ENGL) 1375
- PHOTOJOURNALISM I (JOUR) 2340
- MUSIC (MUSI) 1300, 1302, 1304, 2300, 2301
- THEATER ARTS (THEA) 1342, 1343

History Electives
- HIST 1301
- HIST 1302
- HIST 1331
- HIST 1332