Pre-Professional Courses

CSE 1310 Intro to Programming (prerequisite: MATH 1302)

CSE 1320 Intermediate Programming (coreq: Math 1421)

CSE 1325 Object-Oriented Programming

CSE 1205 Intro to CSE

CSE 2312 Computer Organization

CSE 2315 Discrete Structures

CSE 2310 Intro to Programming (pre/co req)

CSE 2325 Intro to CSE

CSE 2315 Discrete Structures

CSE 2411 Digital Logic

CSE 3318 Algorithms & Data Structures

CSE 3314 Professional Practices (PreReq COMS 2302 and CSE 3318)

3 Technical Elective courses

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

4000 Level Courses

CSE 3313 Signal Processing

CSE 3310 Operating Systems

CSE 3380 Linear Algebra

MATH 1426 Calculus I

MATH 2425 Calculus II

ENGR 1250 or ENGR 1251 and ENGR 0251

PHYS 1443 Technical Physics I

ENGL 1301

IE 3301 Engineering Probability and Stats

UNIV 1131 (freshman students only)

OR

ENGR 1101 (transfer students)

CSE 2441 Digital Logic

CSE 2440 Circuit Analysis

CSE 3323 Electronics

COMS 2302 Professional and Tech. Communication (PreReq ENGL1301)

CSE 3314 Professional Practices (PreReq COMS 2302 and CSE 3318)

CSE 4317 Senior Design II

CSE 4316 Senior Design I

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.

Foreign Language
If required, two semesters of the same language

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 hours of Math electives
- 4 hours of Science electives

See list of approved courses on second page
CPE 2021-2022 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 (Spring 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 3323 (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
- ENGLISH (ENGL) 2303, 2309, 2319, 2329
- FRENCH (FREN) 2310, 2314
- GERMAN (GERM) 2310, 2314
- GLOBAL (GLOBAL) 2301
- GREEK (GREK) 2314
- HISTORY (HIST) 2377
- INTERDISCIPLINARY STUDIES (INTS) 1310
- KOREAN (KORE) 2310, 2314
- LATIN (LATN) 2314
- LINGUISTICS (LING) 2371
- MEXICAN AMERICAN STUDIES (MAS) 2300
- PHILOSOPHY (PHI) 1304, 2300, 2314
- RUSSIAN (RUSS) 2310, 2314
- SOCIOLOGY (SOCI) 1310
- SPANISH (SPAN) 2310, 2314, 2315
- WOMEN’S & GENDER STUDIES (WOMS) 2310

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