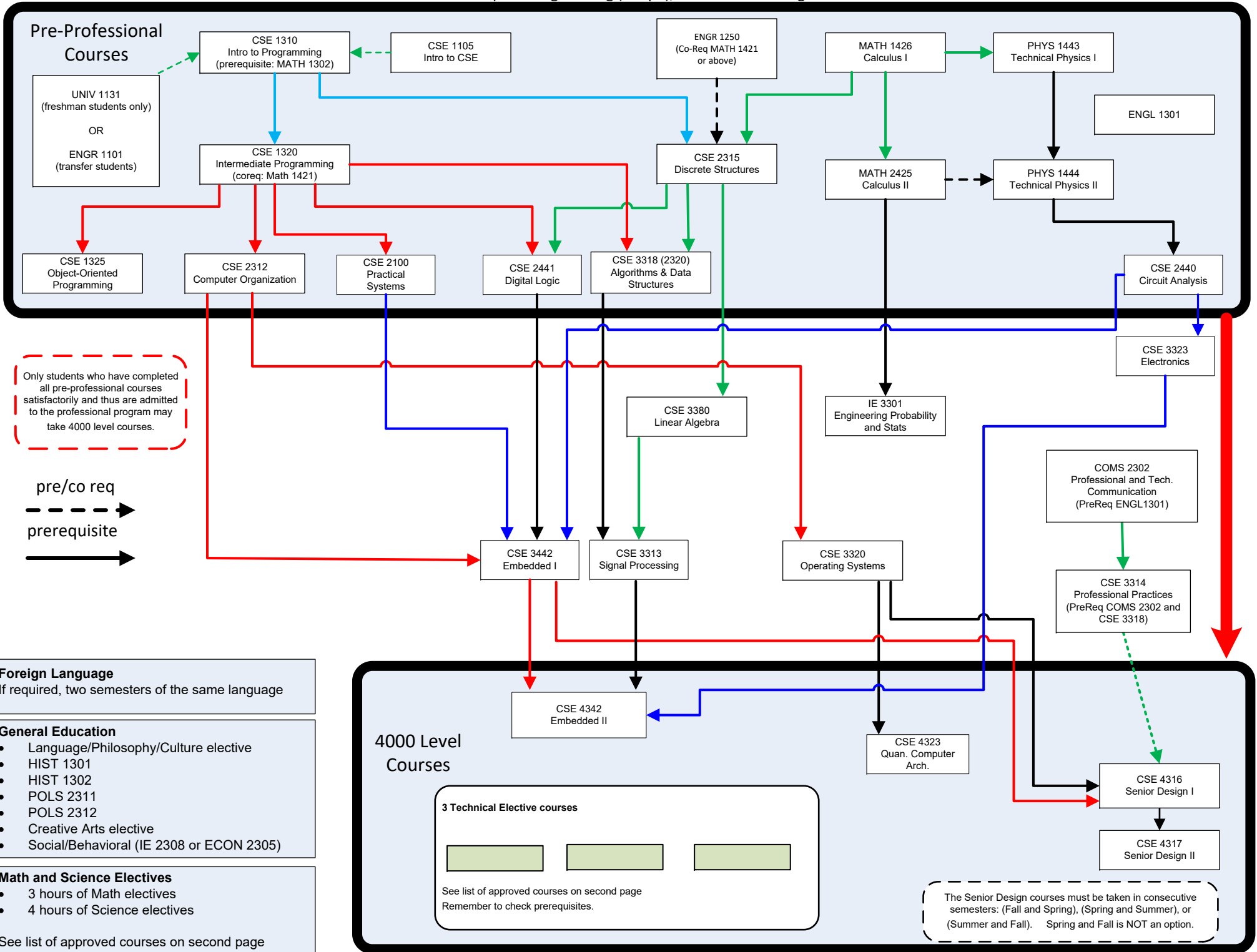


BS in Computer Engineering (BSCpE), 2019-2020 Catalog



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 hours of Math electives
 - 4 hours of Science electives
- See list of approved courses on second page

CPE 2019-2020 Classes

Mathematics Electives

- MATH 2326 - Calculus III
- CSE 3315 - Theoretical Concepts in CSE
- CSE 4345 - Computational Methods

Science Electives

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

Technical Electives

- 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)

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 (PHIL) 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