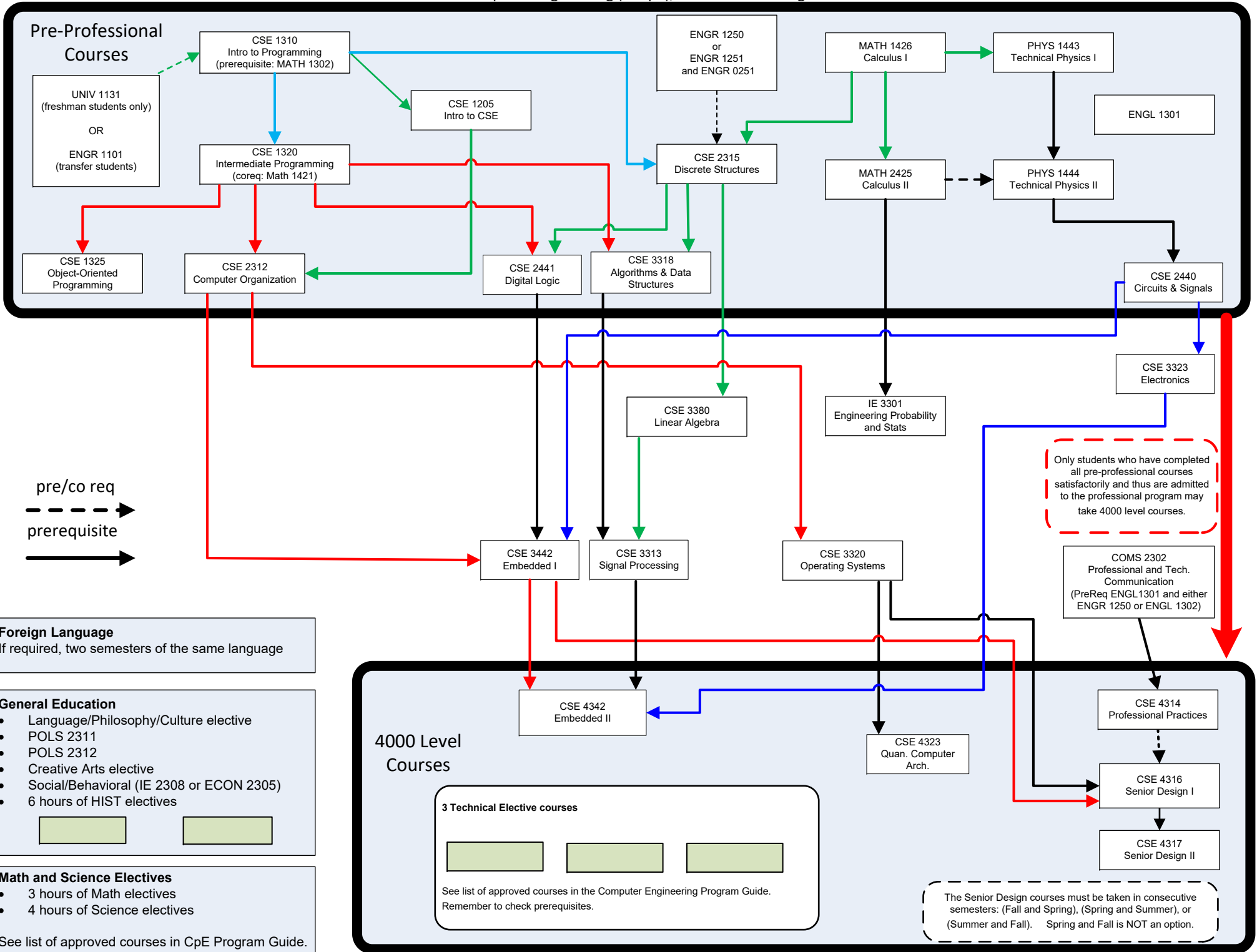


BS in Computer Engineering (BSCpE), 2020-2021 Catalog



## CPE 2020-2021 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 3188 – Intro to Modern Physics with lab

### 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
- CSE 4309 – Fundamentals of Machine Learning  
prereqs: CSE 3318, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330
- 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
- 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 – Electromechanical 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 4378 – Intro to Unmanned Vehicle Systems  
prereqs: Admission to the professional program and permission from an advisor

- CSE 4380 – Information Security  
prereqs: CSE 3320

### Language, Philosophy & Culture

- ANTHROPOLOGY (ANTH) 2322
- ARABIC (ARAB) 2310, 2314
- ARCHITECTURE (ARCH) 2300
- ART & ART HISTORY (ART) 1317
- 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
- PORTUGUESE (PORT) 2314
- RUSSIAN (RUSS) 2310, 2314
- SOCIOLOGY (SOCI) 1310
- SPANISH (SPAN) 2310, 2314

### Creative Arts Electives

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

### History Electives

- HIST 1301
- HIST 1302
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