Math Elective
- 3 hour Math elective
See list of approved courses on second page

Foreign Language
If required, two semesters of the same language

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

4000 Level Courses

5 Technical Elective courses out of which at least one must be
CSE 4305 Compilers, CSE 4303 Computer Graphics or CSE 4360 Robotics.

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

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.
Each course taken can be used to satisfy only one degree plan requirement. For example, you can CSE 4380 as your security elective, but it will not also count as a technical elective. If you take CSE 4380 and CSE 4381, CSE 4380 can satisfy your security elective and CSE 4381 can count as a technical elective.

### Mathematics Electives
- MATH 2326 - Calculus III (Fall, Spring, & Summer)
- CSE 4345 - Computational Methods (Fall & Spring)

### Technical Electives
- **CSE 4303** – Computer Graphics  
  prereqs: CSE 3318 and CSE 3380 or MATH 3330 (Fall & Spring)
- **CSE 4305** – Compliers  
  prereqs: CSE 3302 and CSE 3315 (Fall & Spring)
- **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 4321** – Software Testing and Maintenance  
  prereqs: CSE 3310 (Fall, Spring, & Summer)
- **CSE 4322** – Software Project Management  
  prereqs: CSE 3310 (Fall & Spring)
- **CSE 4323** – Quantitative Computer Architecture  
  prereqs: CSE 3320 (Fall & Spring)
- **CSE 4331** – Database Implementation and Theory  
  prereqs: CSE 3330 (Fall, Spring, & Summer)
- **CSE 4344** – Data Mining  
  prereqs: IE 3301 or MATH 3313 and coreq CSE 3330 (Fall & Spring)
- **CSE 4345** – Fundamentals of Wireless Networks  
  prereqs: CSE 4344 or CSE 4352 (Fluctuates)
- **CSE 4346** – Computational Methods  
  prereqs: CSE 3318, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330 (Fall & Spring)
- **CSE 4351** – Parallel Processing  
  prereqs: CSE 3320 (Fall & Spring)
- **CSE 4355** – Autonomous Robot Design and Programming  
  prereqs: CSE 3318, CSE 3320, and CSE 3380 or MATH 3330 (Fall only)
- **CSE 4356** – Software Design Patterns  
  prereqs: CSE 3311 (Fall & Spring)
- **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 Vehicles  
  prereqs: Department consent (Fall only)
- **CSE 4379** – Unmanned Vehicles Development  
  prereqs: B or better in CSE 4378 (Spring only)
- **CSE 4380** – Information Security  
  prereqs: CSE 3320 (Fall & Spring)
- **CSE 4381** – Information Security 2  
  prereqs: CSE 3320 and coreq CSE 4344 (Fall & Spring)
- **CSE 4382** – Secure Programming  
  prereqs: CSE 3320 (Fall & Spring)
- **CSE 4383** – Object-orientated Software Engineering  
  prereqs: CSE 1325, CSE 3318, and CSE 3310 (Fall, Spring, & Summer)
- **CSE 4384** – Quantitative Computer Architecture  
  prereqs: CSE 3320 and CSE 3380 or MATH 3330 (Fall & Spring)
- **IE 3315** – Operations Research I  
  prereqs: coreq MATH 2326 (Fall & 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 (SOC/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

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CS 2020-2021 Classes