3 hour Math elective

out of which at least one must be

Oriented
(IE 2308 or ECON 2305)
POLS 2311
courses
requisite: MATH 1302)

6 hours of HIST electives
out of which at least one must be

POLS 2312
Social/Behavioral:
requisites.

Creative Arts elective
Language/Philosophy/Culture elective
Social/Behavioral:
requisites.

Professional

Only students who have completed all pre-professional courses satisfactorily and thus are admitted to the professional program may take 4000 level courses.

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 Elective
• 3 hour Math elective

See list of approved courses on second page.

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 pre-requisites.

Security Elective

Complete ONE of the following three security courses.
CSE 3320 is a pre-requisite for all three courses.
Each course taken can be used to satisfy only one degree plan requirement. For example, you can take 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) pre-req: MATH 2425
- CSE 4345 - Computational Methods (Fall & Spring) pre-reqs: CSE 3318, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330

Technical Electives
- CSE 4303 – Computer Graphics pre-reqs: CSE 3318 and CSE 3380 or MATH 3330 (Fall & Spring)
- CSE 4305 – Compilers pre-reqs: CSE 3302 and CSE 3315 (Fall & Spring)
- CSE 4309 – Fundamentals of Machine Learning pre-reqs: CSE 3318, MATH 2326 or the consent of the instructor, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330 (Fall only)
- CSE 4310 – Fundamentals of Computer Vision pre-reqs: CSE 3318, IE 3301 or MATH 3313, CSE 3380 or MATH 3330 (Spring only)
- CSE 4321 – Software Testing and Maintenance pre-reqs: CSE 3310 (Fall, Spring, & Summer)
- CSE 4322 – Software Project Management pre-reqs: CSE 3310 (Fall & Spring)
- CSE 4323 – Quantitative Computer Architecture pre-reqs: CSE 3320 (Fall & Spring)
- CSE 4331 – Database Implementation and Theory pre-reqs: CSE 3330 (Fall, Spring, & Summer)
- CSE 4334 – Databases pre-reqs: IE 3301 or MATH 3313 and co-req: CSE 3330 (Fall & Spring)
- CSE 4340 – Fundamentals of Wireless Networks pre-reqs: CSE 4344 or CSE 4352 (Fluctuates)
- CSE 4345 – Computational Methods pre-reqs: CSE 3318, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330 (Fall & Spring)
- CSE 4351 – Parallel Processing pre-reqs: CSE 3320 (Fall & Spring)
- CSE 4360 – Autonomous Robot Design and Programming pre-reqs: CSE 3318, CSE 3320, and CSE 3380 or MATH 3330 (Fall only)
- CSE 4361 – Software Design Patterns pre-reqs: CSE 3311 (Fall & Spring)
- CSE 4373 – General Purpose GPU Programming pre-reqs: CSE 3320 (Fall only)
- CSE 4376 – Digital Communication Systems pre-reqs: CSE 3313 (Fall only)
- CSE 4378 – Intro to Unmanned Vehicles pre-reqs: Department consent (Fall only)
- CSE 4379 – Unmanned Vehicles Development pre-reqs: B or better in CSE 4379 (Spring only)
- CSE 4380 – Information Security pre-reqs: CSE 3320 (Fall & Spring)
- CSE 4381 – Information Security 2 pre-reqs: CSE 3320 and co-req CSE 4344 (Fall & Spring)
- CSE 4382 – Secure Programming pre-reqs: CSE 3320 (Fall & Spring)
- CSE 3311 – Object-orientated Software Engineering pre-reqs: CSE 1325, CSE 3318, and CSE 3310 (Fall, Spring, & Summer)
- CSE 3313 – Signal Processing pre-reqs: CSE 3318 and CSE 3380 or MATH 3330 (Fall & Spring)
- ENGR 4302 – Engineering Entrepreneurship pre-reqs: Admitted to an engineering professional program (Fall only)
- IE 3315 – Operations Research I pre-reqs: co-req 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 LANGUAGE (ASL) 2314
- CHINESE (CHIN) 2310, 2314
- CLASSICS (CLAS) 1300
- INTRO TO LGBTQ+ 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 (SOCI/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 (DNE) 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