CSE 1310 Intro to Programming (prerequisite: MATH 1302)

CSE 1105 Intro to CSE

CSE 1320 Intermediate Programming (coreq: Math 1421)

MATH 1425 Calculus II

CSE 2100 Practical Systems

CSE 2300 Algorithms & Data Structures

CSE 2315 Discrete Structures

CSE 3310 Intro to Software Eng.

CSE 3320 Operating Systems

CSE 3330 Databases

CSE 3302 Programming Languages

CSE 3311 Object-Oriented Software Engineering

CSE 3315 Theoretical CS

CSE 3380 Linear Algebra

IE 3301 Engineering Probability and Stats

COMS 2302 Professional and Tech. Communication (PreReq ENGL1301 and either ENGR 1250 or ENGL 1302)

PHYS 1443 Technical Physics I

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

CSE 3314 Professional Practices (PreReq COMS 2302 and CSE 2320/3318)

ENGL 1301

Pre/co req

prerequisite

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

4000 Level Courses

CSE 4361 Software Design Patterns

CSE 4321 Software Testing

CSE 4322 Software Project Management

CSE 4316 Senior Design I

CSE 4317 Senior Design II

3 Technical Elective Courses

See list of approved courses on second page
Remember to check prerequisites.
Mathematics Electives
- MATH 2326 - Calculus III (Fall, Spring, & Summer)
- CSE 4345 - Computational Methods (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
- CSE 4303 – Computer Graphics
  prerequisites: CSE 2320 and CSE 3380 or MATH 3330 (Fall & Spring)
- CSE 4305 – Compilers
  prerequisites: CSE 3302 and CSE 3315 (Fall & Spring)
- CSE 4308 – Artificial Intelligence
  prerequisites: CSE 2320 and IE 3301 (Fall, Spring, & Summer)
- CSE 4309 – Fundamentals of Machine Learning
  prerequisites: CSE 2320, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330 (Fall only)
- CSE 4310 - Fundamentals of Computer Vision
  prerequisites: CSE 2320, IE 3301 or MATH 3313, CSE 3380 or MATH 3330 (Spring only)
- CSE 4323 – Quantitative Computer Architecture
  prerequisites: CSE 3320 (Fall & Spring)
- CSE 4331 – Database Implementation and Theory
  prerequisites: CSE 3330 (Fall, Spring, & Summer)
- CSE 4334 – Datamining
  prerequisites: IE 3301 or MATH 3313 and coreq: CSE 3330 (Fall & Spring)
- CSE 4340 – Fundamentals of Wireless Networks
  prerequisites: CSE 4344 or CSE 4352 (Fluctuates)
- CSE 4344 – Computer Network Organization
  prerequisites: CSE 3320 (Fall, Spring, & Summer)
- CSE 4345 – Computational Methods
  prerequisites: CSE 2320, IE 3301 or MATH 3313, and CSE 3380 or MATH 3330 (Fall & Spring)
- CSE 4351 – Parallel Processing
  prerequisites: CSE 3320 (Fall & Spring)
- CSE 4360 - Autonomous Robot Design and Programming
  prerequisites: CSE 2320, CSE 3320, and CSE 3380 or MATH 3330 (Fall only)
- CSE 4378 – Intro to Unmanned Vehicles
  prerequisites: Department consent (Fall only)
- CSE 4380 – Information Security
  prerequisites: CSE 3320 (Fall & Spring)
- CSE 4381 – Information Security 2
  prerequisites: CSE 3320 and coreq CSE 4344 (Fall & Spring)
- CSE 4382 – Secure Programming
  prerequisites: CSE 3320 (Fall & Spring)
- CSE 3313 – Signal Processing
  prerequisites: CSE 2320 and CSE 3380 or MATH 3330 (Fall & Spring)
- IE 3315 – Operations Research I
  prerequisites: 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
- 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