[ARCHIVED CATALOG]

Computer Science, Minor

Students pursuing a minor in Computer Science are required to:

- Complete 24 credits.
- Complete a minimum of 12 credits in the minor that are not duplicated by the major or any other minor.
- Complete 6 credits upper division credits in the minor in residence at Chapman.
- Complete a minimum of 9 upper division credits in the minor.
- Achieve a 2.000 cumulative GPA in the minor and a 2.000 GPA for all upper-division coursework in the minor.

lower-division requirements (15 credits)

- CPSC 230 Computer Science I 3 credits
- CPSC 231 Computer Science II 3 credits
- CPSC 236 Visual Programming 3 credits
- MATH 250 Discrete Mathematics I 3 credits
- CPSC 350 Data Structures and Algorithms 3 credits

electives (9 credits)

three of the following

- SE 310 Software Design 3 credits
- SE 320 The Software Development Lifecycle 3 credits
- CPSC 330 Digital Logic Design I 3 credits

AND

• CPSC 330L - Lab - Digital Logic Design I 1 credit

- CPSC 351 Computer Architecture I 3 credits
- CPSC 353 Data Communications and Computer Networks 3 credits
- CPSC 354 Programming Languages 3 credits
- CPSC 355 Human Computer Interaction 3 credits
- CPSC 356 Android Application Development 3 credits
- CPSC 357 iOS Application Development 3 credits
- <u>CPSC 360 Computer Graphics</u> **3 credits**
- CPSC 370 Topics in Computer Science 3 credits
- <u>CPSC 380 Operating Systems 3 credits</u>
- CPSC 390 Artificial Intelligence 3 credits
- CPSC 392 Introduction to Data Science 3 credits
- CPSC 393 Machine Learning 3 credits
- <u>CPSC 402 Compiler Construction 3 credits</u>
- <u>CPSC 406 Algorithm Analysis 3 credits</u>
- CPSC 408 Database Management 3 credits
- CPSC 430 Computational Economics 4 credits
- CPSC 445 High Performance Computing 3 credits
- CPSC 453 Network Implementation and Security 3 credits

total credits 24