Computer Engineering, Minor

The minor in Computer Engineering introduces students to the fundamental concepts of low-level and high-level hardware design, as well as the real-time, embedded programming techniques needed to interface with that hardware. Students will learn electricity and electronics, logic and circuit design, systems programming, hardware architectures, and how all of these things come together to support specific applications.

Students pursuing a minor in Computer Engineering are required to:

- Complete 28 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 must be completed in residence at Chapman.
- Complete a minimum of 12 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.

required core (22 credits)

- EENG 200 - Electronics and Circuits I **3 credits**
- EENG 200L - Lab - Electronics and Circuits I **1 credit**
- CPSC 230 - Computer Science I **3 credits**
- CENG 231 - Systems Programming **3 credits**
- CENG 231L - Lab - Systems Programming **1 credit**
- CENG 330 - Digital Logic Design I **3 credits**
- CENG 330L - Lab - Digital Logic Design I **1 credit**
- CENG 351 - Computer Architecture I **3 credits**
- CENG 366 - Digital Logic Design II **3 credits**
- CENG 366L - Lab - Digital Logic Design II **1 credit**

electives (6 credits)

- CENG 350 - Embedded Systems **3 credits**

- CENG 352 - Computer Architecture II **3 credits**
- CENG 353 - Wireless Communication **3 credits**
- CPSC 353 - Data Communications and Computer Networks **3 credits**
- CENG 370 - Topics in Computer Engineering **3 credits**
- CENG 380 - Real-Time Operating Systems **3 credits**
- CPSC 380 - Operating Systems **3 credits**
- CENG 381 - Modeling and Simulation **3 credits**
- CENG 382 - Digital Signal Processing **3 credits**
- CENG 390 - Robotics **3 credits**
- CENG 465 - Integrated Circuit Design I **3 credits**
- CENG 466 - Integrated Circuit Design II **3 credits**

total credits 28