## Plan of Study for Computer Engineering Concentration in Engineering Physics

### Core Courses:

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|---|---|---|
| • ECE 177 – Intro to Programming for Eng. | F & S | ECE 101, MAT 126 or permission |
| • ECE 210 – Electrical Networks I | F | MAT 127; Coreq. PHY 122 |
| • ECE 271 – Microcomp. Architecture and App. | S | ECE 275 |
| • ECE 275 – Sequential Logic Systems | F | ECE 177 |

Total Engineering Credits: 14

Following the initial 4 courses, students can choose 10 or more credits of advanced classes, focused in a technical area that they find interesting (or substitute up to 6 credits from another engineering discipline area). Examples of these technical areas and courses that can be taken to satisfy the advanced course requirements in each area include:

- Embedded Control – ECE 414 Feedback Control Systems
  ECE 471 Embedded Systems
  ECE 477 Hardware Applications Using C
  ECE 478 Industrial Computer Control

- Robotics – ECE 417 Introduction to Robotics
  ECE 471 Embedded Systems
  ECE 477 Hardware Applications Using C
  ECE 487 Digital Image Processing

- High-Performance Computing Networking – ECE 331 Intro to Unix Systems Admin
  ECE 435 Network Engineering
  ECE 477 Hardware Applications Using C

### Optional Courses:

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|---|---|---|
| • ECE 314 – Signals and Systems | F | MAT 258, at least a C- in ECE 211 |
| • ECE 331 – Intro to Unix Syst Admin | | COS 222/ECE 177/Equivalent |
| • ECE 414 – Feedback Control Systems | S | ECE 211 & 314 |
| • ECE 417 – Introduction to Robotics | F | COS 215(220), MAT 228 |
| • ECE 435 – Network Engineering | | COS 231 |
| • ECE 471 – Embedded Systems | F | ECE 271 |
| • ECE 477 – Hardware App. Using C | S | COS 220, ECE 271, Permission |
| • ECE 478 – Industrial Comp. Control | S | COS 220, Permission |
| • ECE 486 – Digital Signal Processing | S | ECE 177 & 211 |
| • ECE 487 – Digital Image Processing | | COS 220, Permission |