Plan of Study for Computer Engineering Concentration in Engineering Physics

Core Courses:

- **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:

- **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**
- **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