

Robotics Engineering Electives

- **AM 114 Introduction to Dynamical Systems**
- **AM 147 Computational Methods and Applications**
- **CMPM 146 Game AI**
- **CSE 102 Introduction to Analysis of Algorithms**
- **CSE 103 Computational Models**
- **CSE 106 Applied Graph Theory and Algorithms**
- **CSE 110A Fundamentals of Compiler Design I**
- **CSE 110B Fundamentals of Compiler Design II**
- **CSE 111 Advanced Programming**
- **CSE 112 Comparative Programming Languages**
- **CSE 113 Parallel and Concurrent Programming**
- **CSE 115A Intro to Software Engineering**
- **CSE 118 Mobile Applications**
- **CSE 120 Computer Architecture**
- **CSE 122 Introduction to VLSI Digital System Design**
- **CSE 125 Logic Design with Verilog**
- **CSE 131 Introduction to Operating Systems**
- **CSE 132 Computer Security**
- **CSE 138 Distributed Systems**
- **CSE 140 Artificial Intelligence**
- **CSE 142 Machine Learning**
- **CSE 165 Human-Computer Interaction**
- **CSE 150/L Introduction to Computer Networks and Laboratory**
- **CSE 151/L Advanced Computer Networks and Laboratory**
- **CSE 156/L Network Programming and Laboratory**
- **CSE 160/L Introduction to Computer Graphics and Laboratory**
- **CSE 161/L Introduction to Visualization and Laboratory**
- **CSE 167 Mobile Sensing and Interaction**
- **CSE 180 Database Systems I**
- **CSE 181 Database Systems II**
- **CSE 183 Web Applications**
- **CSE 276 Optimization Theory and Applications**
- **ECE 102/L Properties of Materials and Laboratory**
- **ECE 130/L Introduction to Optoelectronics and Photonics and Laboratory**
- **ECE 135/L Electromagnetic Fields and Waves and Laboratory**
- **ECE 145 Estimation and Introduction to Control of Stochastic Processes**
- **ECE 151 Communications Systems**
- **ECE 152 Introduction to Wireless Communications**
- **ECE 153 Digital Signal Processing**
- **ECE 163 Introduction to Small-Scale UAV Theory and Practice**
- **ECE 171/L Analog Electronics and Laboratory**
- **ECE 172 Advanced Analog Circuits**
- **ECE 173 High Speed Digital Design and Laboratory**
- **ECE 175/L Energy Generation and Control and Laboratory**
- **ECE 193 Field Study (with department approval)**
- **ECE 198 Individual Study Research (with department approval)**

Students may also use a second course from the Advanced Robotics Elective list to fulfill the elective requirement