

# LAFAYETTE

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## ENGINEERING

### Robotics Focus Area Electives

The following are approved courses for the Robotics focus area – discuss the courses that meet your specific interests with your advisor. A few of these upper-level courses may require other prerequisites\* (for example you need BIOL 111 or 112 for BIOL 275 & 314). We do our best to keep these lists current, but students may petition for new courses to be added. If a course is on this list and doesn't show up in DegreeAudit, please let both the Registrar and Program Chair know about it.

#### Engineering Electives

ES 254	Thermodynamics
ME 210	Manufacturing and Design
ME 372	Engineering Design Optimization
ME 470	Heat Transfer
ME 477	The Need for Speed: Motorsport Engineering
ME 492	Biomechanics
ECE 332	Communications Systems
ECE 414	Embedded Systems
ECE 427	Sensors and Electronic Systems
ECE 428	Power Electronics
ECE 434	Digital Signal Processing
ECE 435	Speech and Image Processing
ES 495, 496	Honors Thesis Research

#### Math, Science, or Eng Electives (can be any from the above list, plus the courses listed below)

BIOL 275*	Behavioral Ecology
BIOL 314*	Anatomy of Vision
CS 150	Data Structures and Algorithms
CS 200	Computers and Society
CS 202	Analysis of Algorithms
CS 205	Software Engineering
MATH 246	Evolutionary Game Theory
MATH 286	Introduction to Probability and Mathematical Statistics
MATH 335	Probability
MATH 336	Statistics
MATH 272	Linear Algebra with Applications
PHYS 218	Oscillatory and Wave Phenomena
PHYS 327*	Advanced Classical Mechanics

#### Related Electives (can be any from the above two lists, plus the courses list below):

EGRS 220	Race and Technology
PHIL 200	Logic
PHIL 225*	Philosophy of Mind
PHIL 230	Theories of Knowledge
PSYC 321*	Learning
PSYC 322	Perception
PSYC 331	Human Factors and Engineering Psychology