LAFAYETTE
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, depending on the instructor you may need both BIOL 111 and 112 or just 112 for upper level BIOL electives). 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 your Advisor know about it. Please note that courses on this list may not be offered each year.

Engineering Electives

CS 150	Data Structures and Algorithms (*ABET counts CS as engineering*)
CS 200	Computers and Society (*ABET counts CS as engineering*)
CS 202	Analysis of Algorithms (*ABET counts CS as engineering*)
CS 205	Software Engineering (*ABET counts CS as engineering*)
ES 254	Thermodynamics
ME 210	Manufacturing and Design
ME 372	Engineering Design Optimization
ME 470	Heat Transfer
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
ECE 471	Introduction to AI for Computer Vision
ES 495, 496	Integrative Engineering Senior Thesis

Math/Science Electives

BIOL 275*	Behavioral Ecology
BIOL 314*	Anatomy of Vision
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
INDS 253	Being Human in STEM
PHIL 175	Ethics of AI, Internet, and Algorithms
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