

B.S. in Electrical Engineering

Robotics Track

Freshman Year

		Credits
Fall		
COM 122	English Composition	3
	Humanities or Social Science Lower-Level or Upper-Level Elective	3
EGR 101	Introduction to Engineering	2
EGR 115	Introduction to Computing for Engineers	3
MA 241	Calculus and Analytical Geometry I	4
UNIV 101	College Success	(1)
Credits Subtotal		15.0
Spring		
CEC 220	Digital Circuit Design	3
CEC 222	Digital Circuit Design Laboratory	1
	Humanities Lower-Level Elective	3
MA 242	Calculus and Analytical Geometry II	4
PS 161	Physics I & II for Engineers	4
Credits Subtotal		15.0

Sophomore Year

Fall		
COM 221	Technical Report Writing (Must earn a C or better to pass COM 221)	3
CS 125	Computer Science I	4
ES 207	Fundamentals of Mechanics	3
MA 243	Calculus and Analytical Geometry III	4
PS 250	Physics for Engineers III	3
Credits Subtotal		17.0
Spring		
CEC 320	Microprocessor Systems	3
CEC 322	Microprocessor Systems Laboratory	1
EE 223	Linear Circuits Analysis I	3
EE 224	Electrical Engineering Laboratory I	1
MA 335	Introduction to Linear and Abstract Algebra	3
MA 345	Differential Equations and Matrix Methods	4
PS 253	Physics Laboratory for Engineers	1
Credits Subtotal		16.0

Junior Year

Fall		
EE 302	Electronic Devices and Circuits	3
EE 304	Electronic Circuits Laboratory	1
EE 314	Signal and Linear System Analysis	3
EE 315	Signal and Linear System Analysis Laboratory	1
ES 204	Dynamics	3
MA 441	Mathematical Methods for Engineering and Physics I	3
ME 302	Introduction to Robotics I	3
Credits Subtotal		17.0
Spring		
EE 340	Electric and Magnetic Fields	3
EE 401	Control Systems Analysis and Design	3
EE 402	Control Systems Laboratory	1
ES 312	Energy Transfer Fundamentals	3
MA 412	Probability and Statistics	3

ME 406	Robotics II	3
ME 406L	Robotics II Laboratory	1
Credits Subtotal		17.0

Senior Year

Fall		
COM 420	Advanced Technical Communication I	1
EE 410	Communication Systems	3
EE 412	Communication Systems Laboratory	1
EE 450	Elements of Power Systems	3
EE 452	Power Systems Laboratory	1
ME 407	Preliminary Design for Robotic Systems with Laboratory	4
Credits Subtotal		13.0
Spring		
	Advanced Electives / EE 4XX	3-4
COM 430	Advanced Technical Communication II	2
EC 225	Engineering Economics	3
HU 330	Values and Ethics	3
	or HU 335 Technology and Modern Civilization	
ME 420	Detail Design of Robotic Systems with Laboratory	4
Credits Subtotal		15.0-16.0
Credits Total:		125.0-126.0