

SE Robotics Tracks Sample Schedules, meeting 2011-2012 SE Degree Requirements

Note: these are suggested schedules only; students may need to shift some terms to find specific electives.

See Catalog for notes relevant to SE majors

SE with Controls

Freshman Year			Sophomore Year		
<i>Fall Term</i>			<i>Fall Term</i>		
		<i>Credit</i>			<i>Credit</i>
CSSE 120R	Intro to Software Dev (Robotics)	4	CHEM 111	General Chemistry I	4
MA 111	Calculus I	5	CSSE 232	Computer Architecture I	4
PH 111	Physics I	4	MA 211	Differential Equations (MA elec)	4
RH 131	Rhetoric & Composition	4	MA 275	Discrete & Combinatorial Algebra I	4
CLSK 100	College and Life Skills	1			16
		18			
<i>Winter Term</i>			<i>Winter Term</i>		
		<i>Credit</i>			<i>Credit</i>
CSSE 220	Object-Oriented Software Dev	4	CSSE 230	Data Structures & Algorithm Anal	4
MA 112	Calculus II	5	CSSE 333	Database Systems	4
PH 112	Physics II	4	MA 375	Discrete & Combinatorial Algebra II	4
HSS	Elective	4	MA 212	Matrix Algebra and Sys of Diff Eqs	4
		17			16
<i>Spring Term</i>			<i>Spring Term</i>		
		<i>Credit</i>			<i>Credit</i>
CSSE 132	Computer Systems	4	CSSE 304	Programming Lang. Concepts	4
MA 113	Calculus III	5	CSSE 376	Software Quality Assurance	4
HSS	Elective	4	RH 330	Technical Communications	4
PH 113	Physics III (Science Elective)	4	ECE 203	DC Circuits (Domain)	4
		17			16
Junior Year			Senior Year		
<i>Fall Term</i>			<i>Fall Term</i>		
		<i>Credit</i>			<i>Credit</i>
CSSE 371	Software Requirements & Spec	4	ROBO 410	Senior Robotics Project I	4
CSSE 372	Software Project Management	4	CSSE 377	Software Architecture & Design II	4
MA 381	Intro to Probability with Stat Apps	4	Free	Elective (Robotics)	4
ECE 204	AC Circuits (Domain)	4	HSS	Elective	4
		16			16
<i>Winter Term</i>			<i>Winter Term</i>		
		<i>Credit</i>			<i>Credit</i>
CSSE 374	Software Architecture and Design I	4	ROBO 420	Senior Robotics Project II	4
CSSE 332	Operating Systems	4	ECE 425	Mobile Robotics (Domain)	4
HSS	Elective	4	HSS	Elective	4
ME 430	Mechatronic Systems (Domain)	4	Free	Elective	4
		16			16
<i>Spring Term</i>			<i>Spring Term</i>		
		<i>Credit</i>			<i>Credit</i>
CSSE 373	Formal Methods in Spec & Design	4	ROBO 430	Senior Robotics Project III	4
CSSE 375	Software Construction & Evolution	4	CSSE	Elective	4
ECE 205	Linear Controls (Domain)	4	HSS	Elective	4
HSS	Elective	4			12
		16			

SE with Hardware

Freshman Year			Sophomore Year		
<i>Fall Term</i>			<i>Fall Term</i>		
	<i>Credit</i>			<i>Credit</i>	
CSSE 120R Intro to Software Dev (Robotics)	4		CHEM 111 General Chemistry I	4	
MA 111 Calculus I	5		CSSE 232 Computer Architecture I	4	
PH 111 Physics I	4		MA 212 Matrix Algebra and Sys of Diff Eqs	4	
RH 131 Rhetoric & Composition	4		MA 275 Discrete & Combinatorial Algebra I	4	
CLSK 100 College and Life Skills	1			16	
	18				
<i>Winter Term</i>			<i>Winter Term</i>		
	<i>Credit</i>			<i>Credit</i>	
CSSE 220 Object-Oriented Software Dev	4		CSSE 230 Data Structures & Algorithm Anal	4	
MA 112 Calculus II	5		CSSE 333 Database Systems	4	
PH 112 Physics II	4		MA 375 Discrete & Combinatorial Algebra II	4	
HSS Elective	4		ECE 203 DC Circuits (Domain)	4	
	17			16	
<i>Spring Term</i>			<i>Spring Term</i>		
	<i>Credit</i>			<i>Credit</i>	
CSSE 132 Computer Systems	4		CSSE 304 Programming Lang. Concepts	4	
MA 113 Calculus III	5		CSSE 376 Software Quality Assurance	4	
HSS Elective	4		MA Elective	4	
PH 113 Physics III (Science Elective)	4		RH 330 Technical Communications	4	
	17			16	
Junior Year			Senior Year		
<i>Fall Term</i>			<i>Fall Term</i>		
	<i>Credit</i>			<i>Credit</i>	
CSSE 371 Software Requirements & Spec	4		ROBO 410 Senior Robotics Project I	4	
CSSE 372 Software Project Management	4		CSSE 377 Software Architecture & Design II	4	
MA 381 Intro to Probability with Stat Apps	4		HSS Elective	4	
ECE 204 AC Circuits (Domain)	4		CSSE 413 Artificial Intelligence (CSSE Elec/Domain)	4	
	16			16	
<i>Winter Term</i>			<i>Winter Term</i>		
	<i>Credit</i>			<i>Credit</i>	
CSSE 374 Software Architecture and Design I	4		ROBO 420 Senior Robotics Project II	4	
CSSE 332 Operating Systems	4		Free Elective	4	
HSS Elective	4		HSS Elective	4	
ME 430 Mechatronic Systems (Domain)	4		Free Elective (Robotics)	4	
	16			16	
<i>Spring Term</i>			<i>Spring Term</i>		
	<i>Credit</i>			<i>Credit</i>	
CSSE 373 Formal Methods in Spec & Design	4		ROBO 430 Senior Robotics Project III	4	
CSSE 375 Software Construction & Evolution	4		Free Elective	4	
ME 435 Robotics Engineering (Domain)	4		HSS Elective	4	
HSS Elective	4				
	16			12	

SE with Mechanics

Freshman Year			Sophomore Year		
<i>Fall Term</i>		<i>Credit</i>	<i>Fall Term</i>		<i>Credit</i>
CSSE 120R	Intro to Software Dev (Robotics)	4	CHEM 111	General Chemistry I	4
MA 111	Calculus I	5	CSSE 232	Computer Architecture I	4
PH 111	Physics I	4	MA 221	Diff Eqs and Matrix Algebra I	4
RH 131	Rhetoric & Composition	4	MA 275	Discrete & Combinatorial Algebra I	4
CLSK 100	College and Life Skills	1			16
		18			
<i>Winter Term</i>		<i>Credit</i>	<i>Winter Term</i>		<i>Credit</i>
CSSE 220	Object-Oriented Software Dev	4	CSSE 230	Data Structures & Algorithm Anal	4
MA 112	Calculus II	5	CSSE 333	Database Systems	4
PH 112	Physics II	4	MA 375	Discrete & Combinatorial Algebra II	4
HSS	Elective	4	ES 201	Conservation & Acct. Princ. (Domain)	4
		17			16
<i>Spring Term</i>		<i>Credit</i>	<i>Spring Term</i>		<i>Credit</i>
CSSE 132	Computer Systems	4	CSSE 304	Programming Lang. Concepts	4
MA 113	Calculus III	5	CSSE 376	Software Quality Assurance	4
HSS	Elective	4	MA	Elective	4
PH 113	Physics III (Science Elective)	4	RH 330	Technical Communications	4
		17			16
Junior Year			Senior Year		
<i>Fall Term</i>		<i>Credit</i>	<i>Fall Term</i>		<i>Credit</i>
CSSE 371	Software Requirements & Spec	4	ROBO 410	Senior Robotics Project I	4
CSSE 372	Software Project Management	4	CSSE 377	Software Architecture & Design II	4
MA 381	Intro to Probability with Stat Apps	4	ME 403	Kinematics of Machinery (Domain)	4
ME 430	Mechatronic Systems (Domain)	4	HSS	Elective	4
		16			16
<i>Winter Term</i>		<i>Credit</i>	<i>Winter Term</i>		<i>Credit</i>
CSSE 374	Software Architecture and Design I	4	ROBO 420	Senior Robotics Project II	4
CSSE 332	Operating Systems	4	CSSE	Elective	4
HSS	Elective	4	HSS	Elective	4
ES 204	Mechanical Systems (Domain)	3	Free	Elective (Robotics)	4
		15			16
<i>Spring Term</i>		<i>Credit</i>	<i>Spring Term</i>		<i>Credit</i>
CSSE 373	Formal Methods in Spec & Design	4	ROBO 430	Senior Robotics Project III	4
CSSE 375	Software Construction & Evolution	4	HSS	Elective	4
HSS	Elective	4	Free	Elective	4
ME 435	Robotics Engineering (Domain)	4	Free	Elective	1
		16			13

Last confirmed 6/2011

Total credits required: 192