

CS Robotics Tracks Sample Schedules, meeting 2011-2012 CS 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 CS majors

CS with Controls

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	211 Differential Equations (Free 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>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		MA	212 Matrix Algebra and Sys of Diff Eqs	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		ECE	332 Computer Architecture II	4	
HSS	Elective	4		MA	381 Intro to Probability with Stat Apps	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	473 Design and Analysis of Algorithms	4		CSSE	Elective	4	
CSSE	Elective	4		HSS	Elective	4	
ECE	203 DC Circuits (Tech Elec)	4		Free	Elective (Robotics)	4	
		16				16	
<i>Winter Term</i>		<i>Credit</i>		<i>Winter Term</i>		<i>Credit</i>	
CSSE	374 Software Architecture and Design	4		ROBO	420 Senior Robotics Project II	4	
CSSE	474 Theory of Computation	4		ECE	425 Mobile Robotics (Free elec)	4	
ECE	204 AC Circuits (Tech Elec)	4		HSS	Elective	4	
ME	430 Mechatronic Systems (Free Elec)	4		HSS	Elective	4	
		16				16	
<i>Spring Term</i>		<i>Credit</i>		<i>Spring Term</i>		<i>Credit</i>	
CSSE	332 Operating Systems	4		ROBO	430 Senior Robotics Project III	4	
CSSE	Elective	4		CSSE	Elective	4	
ECE	205 Linear Controls (Free Elec)	4		HSS	Elective	4	
HSS	Elective	4				12	
		16					

CS with Hardware

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		CHM	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>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		HSS	Elective	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		ECE	332 Computer Architecture II	4	
HSS	Elective	4		MA	381 Intro to Probability with Stat Apps	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	473 Design and Analysis of Algorithms	4		CSSE	Elective	4	
CSSE	413 Artificial Intelligence (CSSE Elec)	4		HSS	Elective	4	
ECE	203 DC Circuits (Tech Elec)	4		Free	Elective	4	
		16				16	
<i>Winter Term</i>		<i>Credit</i>		<i>Winter Term</i>		<i>Credit</i>	
CSSE	374 Software Architecture and Design	4		ROBO	420 Senior Robotics Project II	4	
CSSE	474 Theory of Computation	4		CSSE	Elective	4	
ME	430 Mechatronic Systems (Free Elec)	4		HSS	Elective	4	
ECE	204 AC Circuits (Tech Elec)	4		Free	Elective	4	
		16				16	
<i>Spring Term</i>		<i>Credit</i>		<i>Spring Term</i>		<i>Credit</i>	
CSSE	332 Operating Systems	4		ROBO	430 Senior Robotics Project III	4	
CSSE	Elective	4		Free	Elective (Robotics)	4	
ME	435 Robotics Engineering (Free elec)	4		HSS	Elective	4	
HSS	Elective	4				12	
		16					

CS with Mechanics

Freshman Year				Sophomore Year			
<i>Fall Term</i>			<i>Credit</i>	<i>Fall Term</i>			
CSSE	120R	Introduction to Software Dev	4	CHM	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	ECE	332	Computer Architecture II	4
HSS		Elective	4	MA	381	Intro to Probability with Stat Apps	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	473	Design and Analysis of Algorithms	4	CSSE		Elective	4
CSSE		Elective (Robotics)	4	HSS		Elective	4
ME	430	Mechatronic Systems (Free EI)	4	ME	403	Kinematics of Machinery (Free el)	4
			16				16
<i>Winter Term</i>			<i>Credit</i>	<i>Winter</i>			<i>Credit</i>
CSSE	374	Software Architecture and Design	4	ROBO	420	Senior Robotics Project II	4
CSSE	474	Theory of Computation	4	CSSE		Elective	4
HSS		Elective	4	HSS		Elective	4
ES	204	Mechanical Systems (Domain)	3	Tech		Elective	4
			15				16
<i>Spring Term</i>			<i>Credit</i>	<i>Spring Term</i>			<i>Credit</i>
CSSE	332	Operating Systems	4	ROBO	430	Senior Robotics Project III	4
ME	435	Robotics Engineering (Free el)	4	Tech		Elective	4
HSS		Elective	4	CSSE		Elective	4
HSS		Elective	4	Free		Elective	1
			16				13