COMPUTER SCIENCE

Plan of Study

Below is a <u>sample</u> plan of study that illustrates one way to achieve the program requirements. Any given student's plan of study may differ based on a variety of factors (e.g., advanced credit, placement exams, adding a minor). Enrolled students will work with their academic advisor; utilize the degree audit/planner to create a specific plan of study.

Course	Title	Hours
Freshman		
Fall		
CSSE 120	Introduction to Software Development	4
MA 111	Calculus I	5
PH 111	Physics I	4
PH 111L	Physics I Lab	0
RHIT 100	Foundations for Rose-Hulman Success	1
HUM H190	First-Year Writing Seminar	4
	Hours	**18**
Winter		
CSSE 220	Object-Oriented Software Development	4
MA 112	Calculus II	5
PH 112	Physics II	4
PH 112L	Physics II Lab	0
HSSA Elective		4
	Hours	**17**
Spring		
CSSE 132	Introduction to Systems Programming	4
MA 113	Calculus III	5
ECE 233	Introduction to Digital Systems	4
Science Elective		4
	Hours	**17**
Sophomore		
Fall		
CSSE 232	Computer Architecture I	4
CSSE 280	Introduction to Web Programming	4
MA 221	Matrix Algebra & Differential Equations I	4
MA 276	Introduction to Proofs	4
	Hours	**16**
Winter		
CSSE 230	Data Structures and Algorithm Analysis	4
CSSE 332	Operating Systems	4
MA 374	Combinatorics	4
ENGL H290	Technical & Professional Communication	4
	Hours	**16**
Spring		
CSSE 333	Intro to Database Systems	4
ECE 332	Computer Architecture II	4
MA 381	Introduction to Probability with Applications to Statistics	4
HSSA Elective		4
	Hours	**16**
Junior		
Fall		
CSSE 371	Software Requirements Engineering	4
CSSE 304	Programming Language Concepts	4
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Lab	1
HSSA Elective		4
	Hours	**16**
Winter		
CSSE 473	Design and Analysis of Algorithms	4
CSSE 374	Software Design	4
CS Elective		4
HSSA Elective		4
	Hours	**16**
Spring		
CSSE/MA 474	Theory of Computation	4
HSSA Elective		4
Free Elective		4
Free Elective		4
	Hours	**16**
Senior		
Fall		
Select one of the following:		4
CSSE 487	Senior Research Project I	
CSSE 497	Senior Capstone Project I	
CSSE 494	Senior Thesis I	
CS Elective		4
HSSA Elective		4
Free Elective		4
	Hours	**16**
Winter		
Select one of the following:		4
CSSE 488	Senior Research Project II	
CSSE 498	Senior Capstone Project II	
CSSE 495	Senior Thesis II	
CS Elective		4
HSSA Elective		4
Technical Elective		4
	Hours	**16**
Spring		
Select one of the following:		4
CSSE 489	Senior Research Project III	
CSSE 499	Senior Capstone Project III	
CSSE 496	Senior Thesis III	
Free Elective		4
Free Elective		4
	Hours	**12**
	Total Hours	**192**