



Engineering,
Computer Science,
& Physics

Undergraduate Course Carousel

Course Number	Course Name	Fall	Winter	Spring	Summer	As Needed
Computer Science Courses						
CSC 105	C Programming for Scientists and Engineers	x				
CSC 114	Introduction to Computer Science	x	x	x	x	
CSC 115	Foundations of Computer Science	x		x		
CSC 116	Intro. to Programming and Problem Solving	x		x		
CSC 204	Practical Fortran Programming					x
CSC 205	Data Structures and Algorithms for Engineers					Spring
CSC 216	Data Structures	x		x		
CSC 220	C/C++ Language Programming	x		x		
CSC 231	Selected Language Programming (1 hr.)					x
CSC 232	Selected Language Programming (2 hrs.)					x
CSC 233	Selected Language Programming	x				
CSC 300	Fundamentals of Computer Science for Educators					x
CSC 302	Internet and WWW Basics	x				
CSC 309	Discrete Structures			x		
CSC 310	File and Systems Software					x
CSC 314	Computer Organization			x		
CSC 319	Computer-Human Interaction			ODD		
CSC 320	Systems Analysis and Design	x				
CSC 330	Social & Ethical Issues in Computing	x				

Course Number	Course Name	Fall	Winter	Spring	Summer	As Needed
CSC 380	Internship					x
CSC 381	Introduction to Numerical Methods					x
CSC 387	Internship					x
CSC 388	Internship					x
CSC 389	Internship					x
CSC 402	Advanced Data Structures and Algorithm Analysis	x				
CSC 404	Programming Language Structures			x		
CSC 405	Introduction to Operations Research					x
CSC 415	Database Management Systems	x				
CSC 416	Software Engineering			x		
CSC 422	Operating Systems	x				
CSC 423	Computer Networking			x		
CSC 425	Advanced Database Systems			EVEN		
CSC 431	Selected Topics					x
CSC 432	Selected Topics					x
CSC 433	Selected Topics					Fall Spring
CSC 435	Computer Security	x				
CSC 436	Cryptography & Network Security			x		
CSC 438	Computer & Network Forensics				x	Fall Spring
CSC 440	Introduction to Artificial Intelligence	x				
CSC 445	Web-Centric Programming Methodologies	EVEN				
CSC 450	Computer Graphics	x				
CSC 455	Graph Theory (cross-listed w/ MAT 455)					x
CSC 460	Automata Theory and Formal Languages					x
CSC 481	Numerical Analysis (cross-listed w/ MAT 381)					x
CSC 485	Senior Seminar	x		x	x	

Course Number	Course Name	Fall	Winter	Spring	Summer	As Needed
Electrical Engineering Courses						
ECE 099	Professional Development			x		
ECE 101	Introduction to Electrical Engineering	x				
ECE 201	Logic Design	x				
ECE 202	Logic Design Laboratory	x				
ECE 301	Electric Circuit Theory			x		
ECE 302	Electric Circuit Theory Laboratory			x		
ECE 305	Electronics I	x				
ECE 306	Electronics I Laboratory	x				
ECE 315	Electronics II			x		
ECE 316	Electronics II Laboratory			x		
ECE 320	Microprocessors and Microcontrollers	x				
ECE 321	Microprocessors and Microcontrollers Laboratory	x				
ECE 325	Electromagnetic Theory I	x				
ECE 326	Electromagnetic Theory II			x		
ECE 330	Signals and Systems			x		
ECE 401	Electric Machines			x		
ECE 405	Feedback Control Systems	x				
ECE 421	Communications Systems			x		
ECE 423	Electrical Properties of Materials	x				
ECE 425	Digital Signal Processing	x				
ECE 431	Advanced Logic Design			x		
ECE 433	VLSI Design			x		
ECE 435	Introduction to Robotics			x		
ECE 447	Selected Topics in Electrical Engineering	x				
ECE 451	Senior Design I	x				
ECE 452	Senior Design II			x		
ECE 490	Service Learning			x		

Course Number	Course Name	Fall	Winter	Spring	Summer	As Needed
ECE 5453	Senior Design With Business Proposal I					x
ECE 5454	Senior Design With Business Proposal II					x
Engineering Science Courses						
ESC 105	Spreadsheet Applications for Scientists & Engineers					x
ESC 205	Computational Tools for Scientists & Engineers			x		
ESC 305	Electrical Circuits					x
ESC 306	Digital Circuits					x
ESC 310	Electronics					x
ESC 311	Statics					Spring
ESC 312	Dynamics					x
ESC 315	Thermodynamics			x		
ESC 321	Strength of Materials					x
ESC 340	Heat Transfer					x
ESC 350	Fluid Mechanics					x
ESC 450	Senior Design Project					x
Physics Courses						
PHY 104	Physics for Today	EVEN				
PHY 151	General Physics I	x			x	
PHY 152	General Physics II			x	x	
PHY 216	Astronomy					x
PHY 250	Selected Topics in Physics Laboratory					x
PHY 251	Fundamentals of Physics I			x		
PHY 252	Fundamentals of Physics II	x				
PHY 301	Modern Physics	EVEN				
PHY 308	Classical Mechanics	ODD				
PHY 313	Optics			EVEN		
PHY 401	Quantum Mechanics			ODD		
PHY 402	Special Projects	x				

Course Number	Course Name	Fall	Winter	Spring	Summer	As Needed
PHY 406	Electricity and Magnetism I (cross-listed w/ ECE 325)	x				
PHY 407	Electricity and Magnetism II (cross- listed w/ ECE 326)			x		
PHY 413	Nuclear Physics					x
PHY 417	Selected Topics in Physics					x
PHY 433	Physics Capstone			x		