

Course Offerings by Term

Title	Course	Fall	Spring	Summer
Bioengineering				
Radiofrequency Medical Devices	BIOENG 1005	✓		
Introduction to Cell Biology I	BIOENG 1070	✓		
Introduction to Cell Biology II	BIOENG 1071		✓	
Introductory Cell and Molecular Biology Lab	BIOENG 1075	✓	✓	
Special Projects	BIOENG 1095	✓	✓	✓
Bioengineering Methods and Applications	BIOENG 1150		✓	
Bioengineering Thermodynamics	BIOENG 1210	✓	✓	
Biotransport Phenomena	BIOENG 1220	✓	✓	
Linear Systems and Electronics I	BIOENG 1310		✓	
Biological Signals and Systems	BIOENG 1320	✓		
Biomedical Imaging	BIOENG 1330	✓		
Biomedical Optical Microscopy	BIOENG 1383		✓	
Introduction to Tissue Engineering	BIOENG 1620		✓	
Biomechanics 1	BIOENG 1630		✓	
Biomechanics 2	BIOENG 1631	✓		
Biomechanics 3	BIOENG 1632		✓	
Biomechanics 4	BIOENG 1633	✓		
Biomaterials and Biocompatibility	BIOENG 1810	✓		
Biological Sciences				
Foundations of Biology Research Lab 1	BIOSC 0057	✓	✓	✓
Foundations of Biology Research Lab 2	BIOSC 0067	✓	✓	✓
Foundations of Biology I	BIOSC 0150	✓	✓	✓
Foundations of Biology II	BIOSC 0160	✓	✓	✓
Biochemistry	BIOSC 1000	✓		✓
Human Physiology - UHC	BIOSC 1070	✓		
Introduction to Human Physiology	BIOSC 1250	✓	✓	✓
Macromolecular Structure & Function	BIOSC 1810	✓		
Chemistry				
Organic Chemistry 1	CHEM 0310	✓	✓	✓
Organic Chemistry 2	CHEM 0320	✓	✓	✓
General Chemistry for Engineering 1	CHEM 0960	✓		
General Chemistry for Engineering 2	CHEM 0970	✓	✓	✓
Inorganic Chemistry	CHEM 1130	✓	✓	

Physical Chemistry 1	CHEM 1410	✓	✓	
Physical Chemistry 2	CHEM 1420	✓	✓	
Intermediate Physical Chemistry	CHEM 1480	✓	✓	
Atoms, Molecules, and Materials	CHEM 1620	✓		
Civil Engineering				
Introduction to Structural Analysis	CEE 1330	✓	✓	
Design of Steel Structures	CEE 1341		✓	✓
Open Channel Hydraulics	CEE 1401		✓	✓
Introduction to Water Resources Engineering	CEE 1412	✓	✓	
Principles of Soil Mechanics	CEE 1811	✓	✓	
Foundation Engineering	CEE 1821		✓	✓
Electrical & Computer Engineering				
Linear Circuits & Systems	ECE 0101	✓	✓	
Microelectronic Circuits & Lab	ECE 0102		✓	✓
Digital Circuits & Systems	ECE 0201	✓	✓	
Problem Solving in C++	ECE 0301	✓	✓	
Signals Systems & Probabilities	ECE 0402		✓	✓
Electrical Circuits Design Lab	ECE 1212		✓	✓
Introduction to Lasers & Optical Electronics	ECE 1232		✓	
Digital Electronics	ECE 1238	✓		
Semiconductor Device Theory	ECE 1247	✓	✓	
Introduction to Nanotechnology & Nanoengineering	ECE 1250	✓		
Fabrication & Design in Nanotechnology	ECE 1251		✓	
Applied Fields & Waves	ECE 1266	✓		
Junior Design Fundamentals	ECE 1895	✓	✓	✓
General Engineering				
Introduction to Engineering Analysis	ENGR 0011	✓		
Engineering Computing	ENGR 0012		✓	
Probability & Statistics	ENGR 0021	✓	✓	✓
Materials Structures & Properties	ENGR 0022	✓	✓	
Statics & Mechanics of Materials 1	ENGR 0135	✓	✓	✓
Statics & Mechanics of Materials 2	ENGR 0145	✓	✓	✓
Introduction to Nanotechnology & Nanoengineering	ENGR 0240	✓		
Health & Rehabilitation Sciences				
Human Physiology	HRS 1023	✓		

Introduction to Prosthetics and Orthotics	HRS 1787	-	-	-
Industrial Engineering				
Manufacture of Structural Nanomaterials	IE 1012		✓	
Materials Science				
Computational Material Science	MSE 2012	✓		
Math				
Analytical Geometry & Calculus 1	MATH 0220	✓	✓	✓
Analytical Geometry & Calculus 2	MATH 0230	✓	✓	✓
Analytical Geometry & Calculus 3	MATH 0240	✓	✓	✓
Matrices & Linear Algebra	MATH 0280	✓	✓	✓
Differential Equations	MATH 0290	✓	✓	✓
Vector Analysis & Applications	MATH 1550	✓		✓
Mechanical Engineering				
Introduction to Design	MEMS 0024	✓		
Linear Circuits & Systems 1	MEMS 0031		✓	✓
Thermodynamics of Materials	MEMS 0048		✓	
Introduction Thermodynamics	MEMS 0051		✓	
Introduction to Fluid Mechanics	MEMS 0071	✓	✓	
Experimental Methods in MSE	MEMS 1010	✓		
Structure & Properties Lab	MEMS 1011		✓	
Dynamic Systems	MEMS 1014	✓	✓	
Rigid Body Dynamics	MEMS 1015		✓	✓
Vibrations	MEMS 1020		✓	
Mechanical Design 1	MEMS 1028	✓	✓	
Mechanical Measurements 1	MEMS 1041	✓	✓	
Automatic Controls	MEMS 1045	✓		
Finite Element Analysis	MEMS 1047	✓		
Analysis & Characteristics at the Nanoscale	MEMS 1048		✓	
Mechatronics	MEMS 1049		✓	✓
Applied Thermodynamics	MEMS 1051	✓	✓	
Heat & Mass Transfer	MEMS 1052	✓	✓	
Structures of Crystals	MEMS 1053	✓		
Micro/Nano Manufacturing	MEMS 1057	✓		
Phase Equilibria	MEMS 1059	✓		
Phase Transformation	MEMS 1063		✓	

Applied Fluid Mechanics	MEMS 1071		✓	✓
Electromechanical Sensors & Actuators	MEMS 1082	✓		
Materials for Energy Generation & Storage	MEMS 1111			✓
Neuroscience				
Introduction to Neuroscience	NROSCI 1000	✓	✓	✓
UHC Introduction to Neuroscience	NROSCI 1003	✓		✓
Physics				
Physics for Science & Engineering 1	PHYS 0174	✓		✓
Physics for Science & Engineering 2	PHYS 0175		✓	✓
Lab Physics for Science & Engineering	PHYS 0219	✓	✓	✓
Principles of Modern Physics 1	PHYS 0477	✓		
Principles of Modern Physics 2	PHYS 0481		✓	
Modern Physical Measurements	PHYS 0520	✓		
Mechanics	PHYS 1331		✓	
Thermodynamics & Statistical Methods	PHYS 1341		✓	
Intermediate Electricity & Magnetism	PHYS 1351	✓		
Wave Motion & Optics	PHYS 1361	✓		
Introduction to Quantum Mechanics 1	PHYS 1370	✓		
Introduction to Quantum Mechanics 2	PHYS 1371		✓	
Electromagnetic Theory	PHYS 1372		✓	
Solid State Physics	PHYS 1374	✓		
Foundations of Nanoscience	PHYS 1375		✓	
Introduction to Biological Physics	PHYS 1376	✓		
Introduction to Nuclear & Particle Physics 1	PHYS 1378			✓
Statistics				
Applied Statistical Methods	STAT 1000	✓	✓	✓