

Subject	New Course #	Old Course #	Long Title
BIOL	1010	101	Principles of Biology
BIOL	1610	161	Biology I: Molecular and Cellular Biology
BIOL	1611	171	Biology Lab I
BIOL	1620	162	Biology II: Evolution and Ecology
BIOL	1621	172	Biology Lab II
BIOL	1630	163	Biology III: Physiology & Development
BIOL	1631	173	Biology III Lab
BIOL	1960	196	Independent Study
BIOL	2200	200	Anatomy and Physiology I
BIOL	2210	210	Anatomy and Physiology II
BIOL	2220	220	Microbiology
BIOL	2350	235	Invertebrate Zoology
BIOL	2360	236	Marine Invertebrate Zoology
BIOL	2520	252	Taxonomy of Flowering Plants
BIOL	2530	253	Marine Botany
BIOL	2600	270	Fundamentals of Ecology
BIOL	2700	240	Genetics
BIOL	2750	285	Biotechnology
BIOL	2751	286	Biotechnology Laboratory
BIOL	2910	291, 292, 293	Special Topics
BIOL	2960	296	Directed Study
BIOL	2960	297	Directed Reading
BIOL	3100	300	Microbiology
BIOL	3150	315	Virology
BIOL	3250	325	Comparative Anatomy of the Vertebrates
BIOL	3300	310	Developmental Biology
BIOL	3310	361	Ultrastructure
BIOL	3400	340	Epidemiology & Public Health
BIOL	3500	320	Evolution
BIOL	3650	275	Marine Biology
BIOL	3660	276	Conservation Biology
BIOL	3750	305	Molecular Biology Projects Lab
BIOL	3760	306	Protein Project Laboratory
BIOL	3770	318	Genomics
BIOL	3800	380	Animal Behavior
BIOL	3820	335	Neurobiology
BIOL	3850	385	Plant Physiology
BIOL	3880	388	Animal Physiology
BIOL	3890	389	Environmental Physiology
BIOL	3910	391, 392, 393	Special Topics
BIOL	3960	396	Directed Study
BIOL	4100	422	Medical Microbiology
BIOL	4150	415	Fundamentals of Immunology
BIOL	4600	470	General Ecology
BIOL	4620	472	Marine Ecology
BIOL	4640	474	Aquatic Ecology
BIOL	4660	476	Tropical Ecology
BIOL	4700	440	Molecular Genetics
BIOL	4750	455	Cell Biology
BIOL	4751	456	Cell Biology Laboratory
BIOL	4910	491, 492, 493	Special Topics
BIOL	4960	496	Independent Study
BIOL	4990	499	Undergraduate Research
BIOL	4992	489	Biology Senior Synthesis
BIOL	4994	487	Biology Senior Synthesis: Independent Experience
BIOL	4996	488	Biology Senior Synthesis: Seminar

Subject	New Course #	Old Course #	Long Title
CEEGR	1000	100	Introduction to Civil and Environmental Engineering
CEEGR	1050	105	Civil Engineering Graphics and Communication
CEEGR	2210	221	Mechanics of Materials I
CEEGR	2220	222	Mechanics of Materials Laboratory I
CEEGR	2500	250	Residential Design
CEEGR	2910	291, 292, 293	Special Topics
CEEGR	2960	296	Independent Study
CEEGR	3020	302	Global Engineering Economics
CEEGR	3110	311	Engineering Measurements
CEEGR	3230	323	Mechanics of Materials II
CEEGR	3260	326	Transportation Engineering
CEEGR	3280	328	Timber Design
CEEGR	3310	331	Fluid Mechanics
CEEGR	3350	335	Applied Hydraulics
CEEGR	3370	337	Fluids Laboratory
CEEGR	3410	341	Applied Environmental Biology
CEEGR	3420	342	Environmental Engineering Chemistry
CEEGR	3510	351	Engineering Geology
CEEGR	3530	353	Soil Mechanics
CEEGR	3710	371	Water Resources I
CEEGR	3760	376	Environmental Law and Impact Studies
CEEGR	3860	386	Green Engineering
CEEGR	3910	391, 392, 393	Special Topics
CEEGR	3960	396	Independent Study
CEEGR	4450	445	Structural Mechanics
CEEGR	4470	447	Structural Design I
CEEGR	4490	449	Structural Design II
CEEGR	4550	455	Foundation Design
CEEGR	4720	472	Water Resources II
CEEGR	4730	473	Principles of Environmental Engineering
CEEGR	4740	474	Water Supply and Wastewater Engineering
CEEGR	4750	475	Hazardous Waste Engineering
CEEGR	4870	487	Engineering Design I
CEEGR	4880	488	Engineering Design II
CEEGR	4890	489	Engineering Design III
CEEGR	4910	491, 492, 493	Special Topics
CEEGR	4950	495	Internship
CEEGR	4960	496	Independent Study
CEEGR	4990	499	Undergraduate Research

Subject	Old #	New #	New Long Title	Old Course Title
CHEM	121	1500	General Chemistry I	General Chemistry I
CHEM	122	1510	General Chemistry II	General Chemistry II
CHEM	123	1520	General Chemistry III	General Chemistry III
CHEM	131	1501	General Chemistry Lab I	General Chemistry Lab I
CHEM	132	1511	General Chemistry Lab II	General Chemistry Lab II
CHEM	133	1521	Qualitative Inorganic Laboratory	Qualitative Inorganic Laboratory
CHEM	191, 192, 193	1910	Special Topics	Special Topics
CHEM	196	1960	Independent Study	Independent Study
CHEM	215	2100	Fundamental Inorganic Chemistry	Fundamental Inorganic Chemistry
CHEM	255	2500	Organic Chemistry: Structure and Reactivity	Foundations of Organic Chemistry I
CHEM	256	2510	Organic Chemistry: Functional Group Interconversions	Foundations of Organic Chemistry II
CHEM	260	2700	Laboratory Safety	Laboratory Safety
CHEM	265	2501	Organic Chemistry Lab: Techniques	Foundations of Organic Chemistry Lab I
CHEM	266	2511	Organic Chemistry Lab: Applications	Foundations of Organic Chemistry Lab II
CHEM	291, 292, 293	2910	Special Topics	Special Topics
CHEM	296	2960	Independent Study	Directed Study
CHEM	319	3000	Quantitative Analysis	Quantitative Analysis
CHEM	357	2520	Organic Chemistry: Reactions of Pi-Systems	Organic Chemistry
CHEM	360	3500	Physical Chemistry: Quantum Theory, Spectroscopy and Molecular Bonding	Physical Chemistry I
CHEM	361	3510	Physical Chemistry: Thermodynamics and Kinetics	Physical Chemistry II
CHEM	362	3520	Physical Chemistry: Photochemistry, Mixtures and Statistical Thermodynamics	Physical Chemistry III
CHEM	367	2521	Organic Chemistry Lab: Projects	Organic Chemistry Lab
CHEM	371	3511	Physical Chemistry Lab: Techniques and Analysis	Physical Chemistry Lab I
CHEM	372	3521	Physical Chemistry Lab: Applications and Modeling	Physical Chemistry Laboratory II
CHEM	391, 392, 393	3910	Special Topics	Special Topics
CHEM	396	3960	Independent Study	Directed Study
CHEM	415	4700	Advanced Inorganic Chemistry	Advanced Inorganic Chemistry
CHEM	425	4701	Synthetic Inorganic Chemistry Laboratory	Synthetic Inorganic Chemistry Laboratory
CHEM	426	4000	Instrumental Analysis	Instrumental Analysis
CHEM	436	4800	Advanced Organic Chemistry	Advanced Organic Chemistry
CHEM	436	4802	Physical Organic Chemistry	Advanced Organic Chemistry
CHEM	436	4804	Environmental Organic Chemistry	Advanced Organic Chemistry
CHEM	454	4500	Biochemistry: Protein and Lipid Structure and Function	Biochemistry I
CHEM	455	4510	Biochemistry: Mechanisms of Nucleic Acid Chemistry	Biochemistry II
CHEM	456	4520	Biochemistry: Metabolism	Biochemistry III
CHEM	464	4501	Biochemistry Lab: Methods of Protein Analysis	Biochemistry Lab I
CHEM	465	4511	Biochemistry Lab: Methods of Nucleic Acid Analysis	Biochemistry Lab II
CHEM	480	2800	Forensic Science	Forensic Science
CHEM	488	4985	Senior Synthesis Seminar I	Senior Synthesis Seminar I
CHEM	489	4995	Senior Synthesis Seminar II	Senior Synthesis Seminar II
CHEM	491, 492, 493	4910	Special Topics	Special Topics
CHEM	495	4950	Internship	Internship
CHEM	496, 497, 498	4960	Independent Study	Independent Study
CHEM	499	4990	Undergraduate Research	Undergraduate Research

Subject	New Course #	Old Course #	Long Title
CPSC	1000	100	Introduction to Computer Science
CPSC	1100	103	Introduction to Computers and Applications
CPSC	1220	NEW	Data-driven Problem Solving and Programming
CPSC	1230	NEW	Programming and Data Types
CPSC	1420	151	Programming and Problem Solving I
CPSC	1430	152	Programming and Problem Solving II
CPSC	1910	191, 192, 193	Special Topics
CPSC	2430	250	Data Structures
CPSC	2500	251	Computer Organization
CPSC	2600	210	Foundations of Computer Science
CPSC	2910	291, 292, 293	Special Topics
CPSC	2960	296	Directed Study
CPSC	3200	320	Object-Oriented Development
CPSC	3300	370	Fundamentals of Databases
CPSC	3400	315	Languages and Computation
CPSC	3500	351	Computing Systems
CPSC	3700	365	The Art of Web Design
CPSC	3910	391, 392, 393	Special Topics
CPSC	3960	396	Directed Study
CPSC	4100	310	Design and Analysis of Algorithms
CPSC	4210	434	Software Testing and Debugging
CPSC	4230	422	Design Patterns and Refactoring
CPSC	4300	471	Physical Database Design and Optimization
CPSC	4400	485	Compiler Principles and Techniques
CPSC	4510	460	Computer Networks
CPSC	4520	444	Distributed Systems
CPSC	4530	NEW	Embedded Systems
CPSC	4600	NEW	Parallel Computing
CPSC	4610	470	Artificial Intelligence
CPSC	4700	465	Computer Graphics
CPSC	4710	472	Security in Computing
CPSC	4800	308	Technical Communication and Project Management
CPSC	4870	487	Software Engineering and Project Development I
CPSC	4880	488	Software Engineering and Project Development II
CPSC	4890	489	Software Engineering and Project Development III
CPSC	4910	491, 492	Special Topics
CPSC	4960	496	Independent Study
CPSC	4990	498	Directed Research
CPSC	5010	NEW	Software Design and Engineering (certificate)
CPSC	5020	NEW	Computing System Principles (certificate)
CPSC	5030	NEW	Fundamentals of Algorithms and Analysis (certificate)
CPSC	5200	532	Software System Design
CPSC	5210	534	Software Testing and Debugging
CPSC	5230	522	Design Patterns and Refactoring
CPSC	5300	571	Physical Database Design & Optimization
CPSC	5400	585	Compiler Principles and Techniques
CPSC	5500	545	Computing Systems
CPSC	5510	560	Computer Networks
CPSC	5520	544	Distributed Systems
CPSC	5530	NEW	Embedded Systems
CPSC	5600	NEW	Parallel Computing
CPSC	5610	570	Artificial Intelligence
CPSC	5700	565	Computer Graphics
CPSC	5710	572	Security in Computing
CPSC	5800	580	Ethics and Professional Issues in Computing
CPSC	5910	591	Special Topics
CPSC	5950	595	Internship
CPSC	5960	596	Independent Study
CPSC	5990	586	Graduate Project

Subject	New Course #	Old Course #	Long Title
DIUS	3040	304	Pathophysiology - Medical Imaging
DIUS	3250	325	Vascular Sonography I
DIUS	3260	326	Vascular Sonography II
DIUS	3270	327	Vascular Sonography III
DIUS	3310	331	Abdominal Sonography I
DIUS	3320	332	Echocardiography I
DIUS	3370	337	Abdominal Sonography II
DIUS	3380	338	Ob-Gyn Sonography
DIUS	3400	340	Ob-Gyn Lab
DIUS	3410	341	Abdominal Sonography Lab I
DIUS	3420	342	Echocardiography Lab I
DIUS	3430	343	Echocardiography Lab II
DIUS	3460	346	Vascular Lab I
DIUS	3470	347	Vascular Lab II
DIUS	3500	350	Ultrasound Physics
DIUS	3600	360	Echocardiography II
DIUS	3610	361	Echocardiography III
DIUS	3700	370	Research and Professional Issues: Global Perspective in Healthcare
DIUS	3750	375	Ultrasound Instrumentation
DIUS	3910	391, 392, 393	Special Topics
DIUS	3960	396	Directed Study
DIUS	4710	471	Clinical Experience in Ultrasound I
DIUS	4720	472	Clinical Experience in Ultrasound II
DIUS	4730	473	Clinical Experience in Ultrasound III
DIUS	4740	474	Clinical Experience in Ultrasound IV
DIUS	4870	487	Ultrasound Seminar I
DIUS	4880	488	Basic Science of Ultrasound

Subject	New Course #	Old Course #	Long Title
ECEGR	1000	100	Computing for Engineers
ECEGR	1010	101	Engineering Problem Solving with MATLAB
ECEGR	1200	201	Digital Operations and Computation
ECEGR	1910	191	Special Topics
ECEGR	2010	201	Computer Tools
ECEGR	2100	210	Electrical Circuits I
ECEGR	2210	NEW	Programmable Devices
ECEGR	2220	304	Microprocessor Design
ECEGR	2960	296	Directed Study
ECEGR	3110	211	Electrical Circuits II
ECEGR	3111	227	Electrical Circuits Laboratory
ECEGR	3120	320	Semiconductor Devices and Circuits
ECEGR	3121	328	Electronic Circuits Laboratory
ECEGR	3130	315	Elements of Electrical Engineering
ECEGR	3210	NEW	Embedded Systems
ECEGR	3300	330	Fields and Waves
ECEGR	3500	NEW	Electrical Energy Systems
ECEGR	3710	312	Signals and Systems
ECEGR	3711	317	Signals and Systems Laboratory
ECEGR	3910	391, 392, 393	Special Topics
ECEGR	3960	396	Directed Study
ECEGR	4110	321	Analog Electronic Circuits
ECEGR	4111	428	Advanced Electronics Laboratory
ECEGR	4120	422	Special Topics in Electronics
ECEGR	4130	421	Analog CMOS Integrated Circuits
ECEGR	4140	404	Introduction to VLSI Circuit Design
ECEGR	4150	424	Power Electronics
ECEGR	4160	414	Active Networks and Filters
ECEGR	4210	401	VHDL for Digital Design
ECEGR	4220	405	Advanced Digital Design
ECEGR	4310	331	Distributed Systems
ECEGR	4320	432	Microwave Systems
ECEGR	4330	433	Introduction to Antennas
ECEGR	4331	437	Antennas Laboratory
ECEGR	4340	462	Modern Optics
ECEGR	4410	440	Control Systems
ECEGR	4510	450	Electromechanical Energy Conversion
ECEGR	4511	NEW	Electromechanical Energy Conversion Laboratory
ECEGR	4520	451	Power Systems
ECEGR	4530	452	Renewable Energy Systems
ECEGR	4610	360	Communication Systems
ECEGR	4611	467	Communications Laboratory
ECEGR	4620	461	Data Communications
ECEGR	4630	463	Wireless Communications Systems
ECEGR	4701	477	Data Acquisition Laboratory
ECEGR	4710	407	Digital Signal Processing
ECEGR	4711	371	Digital Signals Processing Laboratory
ECEGR	4720	403	Introduction to Digital Image Processing
ECEGR	4730	402	Introduction to Data Compression
ECEGR	4870	487	Engineering Design I
ECEGR	4880	488	Engineering Design II
ECEGR	4890	489	Engineering Design III
ECEGR	4910	491, 492, 493	Special Topics
ECEGR	4940	494	Undergraduate Design Project
ECEGR	4960	496	Independent Study
ECEGR	4990	499	Undergraduate Research

Subject	New Course #	Old Course #	Long Title
ENSC	1000	100	Introduction to Environmental Science
ENSC	1500	150	Environmental Methods
ENSC	1910	191	Special Topic
ENSC	2910	291	Special Topic
ENSC	3250	125	Environmental Geology
ENSC	3410	341	Applied Environmental Biology
ENSC	3420	342	Environmental Engineering Chemistry
ENSC	3710	NEW	Water Resources I
ENSC	3760	376	Environmental Law and Impact Studies
ENSC	3860	386	Green Engineering
ENSC	3910	391, 392, 393	Special Topic
ENSC	4730	473	Principles of Environmental Engineering
ENSC	4820	482	Global Climate Change
ENSC	4870	NEW	Senior Capstone I: Proposal and Preliminary Research
ENSC	4880	489	Senior Capstone II: Research and Application
ENSC	4890	490	Senior Capstone III: Dissemination
ENSC	4910	491	Special Topic
ENSC	4960	496	Independent Study
ENSC	4990	498	Directed Research

Subject	New Course #	Old Course #	Long Title
ISSC	1910	191, 192, 193	Special Topics
ISSC	1960	196	Directed Study
ISSC	2100	210	Peer Mentor Training Seminar
ISSC	2910	291, 292, 293	Special Topics
ISSC	2960	296	Directed Study
ISSC	4890	489	Senior Synthesis I: Research
ISSC	4900	490	Senior Synthesis II: Seminar
ISSC	4910	491, 492, 493	Special Topics
ISSC	4950	495	Internship
ISSC	4960	496	Independent Study
ISSC	4990	498	Directed Research

Subject	New Course #	Old Course #	Long Title
MATH	1020	110	Functions and Algebraic Methods
MATH	1120	118	College Algebra for Business
MATH	1130	130	Elements of Calculus for Business
MATH	1210	141	Statistics for Life Sciences
MATH	1230	131	Calculus for Life Sciences
MATH	1321	120	Precalculus: Algebra
MATH	1322	121	Precalculus: Trigonometry
MATH	1331	132	Calculus with Algebra I (a)
MATH	1332	133	Calculus with Algebra I (b)
MATH	1334	134	Calculus I
MATH	1335	135	Calculus II
MATH	1336	136	Calculus III
MATH	1337	137	Infinite Sequences and Series
MATH	1910	191	Special Topics
MATH	2080	200	Mathematics for K-8 Teachers
MATH	2310	244	Probability and Statistics for the Sciences and Engineering
MATH	2320	233	Linear Algebra
MATH	2330	232	Multivariable Calculus
MATH	2340	234	Differential Equations
MATH	2910	291, 292, 293	Special Topics
MATH	2960	296	Directed Study
MATH	3000	310	Introduction to Advanced Mathematics
MATH	3150	341	Financial Mathematics
MATH	3411	351	Probability
MATH	3412	352	Mathematical Statistics
MATH	3420	NEW	Advanced Linear Algebra
MATH	3430	331	Introduction to Complex Variables
MATH	3440	361	Nonlinear Systems and Modeling
MATH	3450	371	Introduction to Numerical Methods
MATH	3455	NEW	Asymptotics and Perturbation Methods
MATH	3460	321	Euclidean and Modern Geometries
MATH	3470	NEW	Graph Theory
MATH	3475	NEW	Number Theory
MATH	3480	NEW	History of Mathematics
MATH	3910	391, 392, 393	Special Topics
MATH	3960	396	Directed Study
MATH	4421	411	Introduction to Abstract Algebra I
MATH	4422	412	Introduction to Abstract Algebra II
MATH	4431	431	Introduction to Real Analysis I
MATH	4432	432	Introduction to Real Analysis II
MATH	4440	461	Applied Fourier Analysis
MATH	4460	NEW	Topology
MATH	4470	NEW	Combinatorics
MATH	4481	488	Senior Synthesis I
MATH	4482	489	Senior Synthesis II
MATH	4483	490	Senior Synthesis III
MATH	4910	491, 492, 493	Special Topics
MATH	4960	496	Independent Study
MATH	4990	499	Undergraduate Research

Subject	New Course #	Old Course #	Long Title
MEGR	1000	100	Introduction to Mechanical Engineering
MEGR	1050	105	Engineering Graphics and Design
MEGR	1810	181	Innovative Design
MEGR	2100	210	Statics
MEGR	2300	230	Dynamics
MEGR	2810	281	Engineering Methods
MEGR	2910	291, 292, 293	Special Topics
MEGR	2960	296	Directed Study
MEGR	3040	304	Data Acquisition and Instrumentation
MEGR	3060	306	Machine Shop
MEGR	3210	321	Thermodynamics
MEGR	3220	322	Thermodynamics II
MEGR	3240	324	Heat Transfer
MEGR	3500	350	Materials Science
MEGR	3710	371	Machine Elements
MEGR	3720	372	Machine Elements II
MEGR	3910	391, 392, 393	Special Topics
MEGR	3960	396	Directed Study
MEGR	4040	404	Experimental Design
MEGR	4050	405	Introduction to Finite Elements
MEGR	4220	422	Energy and Environment
MEGR	4230	423	Introduction to Combustion
MEGR	4250	425	Renewable Energy
MEGR	4260	426	Heat/ventilation/refrigeration
MEGR	4300	430	Intermediate Dynamics
MEGR	4320	432	Mechanical Vibrations
MEGR	4350	435	Dynamic Systems
MEGR	4380	438	Control Systems
MEGR	4510	451	Mechanics of Composite Materials
MEGR	4710	471	Kinematics and Dynamics of Machinery
MEGR	4870	487	Engineering Design I
MEGR	4880	488	Engineering Design II
MEGR	4890	489	Engineering Design III
MEGR	4910	491, 492	Special Topics
MEGR	4960	496	Independent Study
MEGR	4990	499	Undergraduate Research

Subject	New Course #	Old Course #	Long Title
PHYS	1000	100	From Quarks to the Cosmos
PHYS	1050	105	Mechanics
PHYS	1060	106	Waves, Sound, Electricity and Magnetism
PHYS	1070	107	Thermodynamics, Optics, and Modern Physics
PHYS	1210	121	Mechanics
PHYS	1220	122	Electricity and Magnetism
PHYS	1230	123	Waves and Optics
PHYS	1910	191	Special Topics
PHYS	2030	203	Thermodynamics
PHYS	2050	205	Modern Physics
PHYS	2060	206	Modern Physics Laboratory
PHYS	2500	250	Mathematical Methods for Physics
PHYS	2910	291, 292, 293	Special Topics
PHYS	2960	296	Directed Study
PHYS	3100	310	Classical Mechanics
PHYS	3300	330	Electromagnetic Field Theory
PHYS	3400	340	Nonlinear Dynamical Systems and Chaos
PHYS	3620	362	Introduction to Astrophysics
PHYS	3630	363	Introduction to Geophysics
PHYS	3700	370	Advanced Physics Laboratory
PHYS	3850	385	Quantum Mechanics
PHYS	3910	391, 392, 393	Special Topics
PHYS	3960	396	Directed Study
PHYS	4100	410	Advanced Classical Physics
PHYS	4200	420	Statistical and Thermal Physics
PHYS	4300	430	Modern Optics for Physicists and Engineers
PHYS	4500	450	Atomic Physics
PHYS	4700	470	Solid-State Physics
PHYS	4860	486	Particle and Nuclear Physics
PHYS	4870	487	Senior Synthesis
PHYS	4910	491, 492, 493	Special Topics
PHYS	4960	496	Independent Study
PHYS	4990	499	Undergraduate Research

Subject	New Course #	Old Course #	Long Title
SEGR	5010	501	Object-Oriented Concepts
SEGR	5030	503	Data Structures and Algorithms
SEGR	5110	520	Software Requirements
SEGR	5120	526	Software Project Planning
SEGR	5150	530	Software Economics
SEGR	5160	536	Software Project Management
SEGR	5180	537	Software Quality Assurance
SEGR	5210	534	Software Testing
SEGR	5220	523	Human-Computer Interaction
SEGR	5230	521	Software Architecture and Design I
SEGR	5240	531	Software Architecture and Design II
SEGR	5250	525	Data Modeling
SEGR	5260	524	Software Construction
SEGR	5410	543	Applied Formal Methods
SEGR	5520	544	Distributed Computing
SEGR	5530	551	Embedded Systems
SEGR	5610	570	Artificial Intelligence
SEGR	5710	572	Software Security
SEGR	5800	580	Ethics and Professional Issues in Computing
SEGR	5850	585	Software Engineering Project 1
SEGR	5860	586	Software Engineering Project 2
SEGR	5870	587	Software Engineering Project 3
SEGR	5910	591	Special Topics
SEGR	5950	595	Internship
SEGR	5960	596	Independent Study