Courses offered in Spring 2021-22

Code	Title	Remarks
BIEN1010	Introduction to Biomedical Engineering	
BIEN2410	Cellular and Systems Physiology for Engineers	
BIEN3320	Data Science for Biology and Medicine	
CENG1500	A First Course on Materials Science and Applications	
CENG2210	Chemical and Biological Engineering Thermodynamics	
CENG2220	Transport Phenomena I	
CENG3110	Process Dynamics and Control	
CENG3150	Integrated Chemical Process and Product Design	
CENG3300	Data Science for Molecular Engineering	new course
CENG3950	Chemical and Environmental Engineering Laboratory	
CENG4130	Plant Design and Economics	
CENG4540	Nanomaterials and Applications in Chemical Engineering	
CENG4720	Environmental Impact Assessment and Management Systems	
CIVL1100	Discovering Civil and Environmental Engineering	
CIVL1160	Civil Engineering and Modern Society	
CIVL1170	Big History, Sustainability and Climate Change	
CIVL2110	Statics	
CIVL2120	Mechanics of Materials	
CIVL2170	Infrastructure Systems Engineering and Management	
CIVL2410	Environmental Assessment and Management	
CIVL2510	Fluid Mechanics	
CIVL3210	Introduction to Construction Management	
CIVL3320	Reinforced Concrete Design	
CIVL3420	Water and Wastewater Engineering	
CIVL3610	Traffic and Transportation Engineering	
CIVL3740	Geotechnical Analysis and Design	
CIVL4100K	Multi-agent Decision-Making in Smart Cities	
CIVL4100M	Introduction to Hydrometeorology	
CIVL4270	Construction Law and Contract Administration	
CIVL4320	Structural Steel Design	
CIVL4340	Prestressed Concrete Design	
CIVL4430	Environmental Impact Assessment	
CIVL4480	Climate Modeling and Risk Assessment	
CIVL4610	Introduction to Data Analytics for Smart Transportation Systems	new course
CIVL4710	Soil Slope Engineering	
CIVL4760	Introduction to Rock Mechanics	
COMP1001	Exploring Multimedia and Internet Computing [blended]	
COMP1021	Introduction to Computer Science	
COMP1022P	Introduction to Computing with Java [pure online only]	
COMP1029C	C Bridging Course [blended]	
COMP1029J	Java Bridging Course [blended]	

COMP1029P	Python Bridging Course [blended]	
COMP1029V	Excel VBA Bridging Course [blended]	
COMP1942	Exploring and Visualizing Data	
COMP1944	AI Ethics [blended]	
COMP2011	Programming Fundamentals and Methodology	
COMP2012	Object-Oriented Programming and Data Structures	
COMP2211	Exploring AI	new course
COMP2611	Computer Organization	
COMP2711	Discrete Mathematical Tools for Computer Science	
COMP3021	Java Programming	
COMP3071	Honors Competitive Programming	
COMP3111	Introduction to Software Engineering [blended/filipped]	
COMP3211	Fundamentals of Artificial Intelligence	
COMP3311	Database Management Systems	
COMP3511	Operating Systems	
COMP3632	Principles of Cybersecurity	
COMP3711	Design and Analysis of Algorithms	
COMP4021	Internet Computing	
COMP4211	Machine Learning	
COMP4321	Search Engines for Web and Enterprise Data	
COMP4332/RMBI4310	Big Data Mining and Management	
COMP4411	Computer Graphics	
COMP4421	Image Processing	
COMP4431	Multimedia Computing [blended]	
COMP4441	Computer Music	
COMP4451	Game Programming	
COMP4461	Human-Computer Interaction	
COMP4521	Mobile Application Development	
COMP4621	Computer Communication Networks I	
COMP4632	Cybersecurity: Attacks and Counter-measures	
COMP4651	Cloud Computing and Big Data Systems	
COMP4901S	IoT and Mobile Sensing	
COMP4901O	Competitive Programming in Cybersecurity II	
COMP4901Q	High Performance Computing	

ELEC1010	Electronic and Information Technology
ELEC1030	The Rise of Autonomous Robots
ELEC1100	Introduction to Electro-Robot Design
ELEC1200	A System View of Communications: from Signals to Packets
ELEC2100	Signals and Systems
ELEC2350	Introduction to Computer Organization and Design
ELEC2400	Electronic Circuits
ELEC2600	Probability and Random Processes in Engineering
ELEC3100	Signal Processing and Communications
ELEC3120	Computer Communication Networks
ELEC3180	Data-Driven Portfolio Optimization
ELEC3300	Introduction to Embedded Systems
ELEC3400	Introduction to Integrated Circuits and Systems
ELEC3600	Electromagnetics: From Wireless to Photonic Applications
ELEC4130	Digital Image Processing
ELEC4210	Control System Design

ELEC4220	Introduction to Robotics: From Mobile Robots to Manipulators	
ELEC4230	Deep Learning for Natural Language Processing	
ELEC4430	Integrated Power Electronics	
ELEC4530	Fundamentals of Photovoltaic and Renewable Energy	
ELEC4610	Engineering Optics	
ENEG4210	Optimization of Energy Systems	
IEDA2100E	Computing in Industrial Applications (Experiential course)	
IEDA2100S	Computing in Industrial Applications	
IEDA2200	Engineering Management	
IEDA2540	Statistics for Engineers	
IEDA3180	Data-Driven Portfolio Optimization	
IEDA3230	Engineering Economics and Accounting	
IEDA3560	Predictive Analytics	
IEDA3901	Transportation Systems	
IEDA4100	Integrated Production Systems	
IEDA4130	System Simulation	
IEDA4180	Service Engineering and Management	
IEDA4500	Engineering Foundations of FinTech	
IEDA4510	Systems Risk Management	new course
ISDN1006	Human-centered Innovation	
ISDN1100	Experiencing Design	
ISDN2200	Systems Thinking and Design	
ISDN2400	Physical Prototyping	
ISDN3200	Graphic Communication	
	*more MECH elective courses will be offered.	
MECH2410	Engineering Materials I	
MECH2040	Solid Mechanics I	
MECH2210	Fluid Mechanics	
MECH3630	Electrical Technology	
MECH3620	Aircraft Design	
MECH3660	Gas Turbines & Jet Propulsion	
MECH3680	Avionics Systems	
MECH4890	Introduction to Nanosatellite Engineering	