

## Courses offered in Spring 2025-26

<u>Code</u>	<u>Title</u>	<u>Remarks</u>
BIEN1600	Introduction to Bioengineering	
BIEN2410	Cellular and Systems Physiology for Engineers	
BIEN3320	Data Science for Biology and Medicine	
BIEN3420	Biosensors and Bioinstrumentation for Healthcare	
CENG1110	Introduction to Chemical Engineering	
CENG2210	Chemical and Biological Engineering Thermodynamics	
CENG3110	Process Dynamics and Control	
CENG3150	Integrated Chemical Process and Product Design	
CENG3950	Chemical and Environmental Engineering Laboratory	<i>Not for pre-enrollment</i>
CIVL1121	Introduction to Computation for Civil Engineers	
CIVL1140	Environment and Society: Sustainable Development Goals and Carbon Neutrality	
CIVL1210	Fundamental of Green Buildings	
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	
CIVL4220	Scientific Machine Learning for Infrastructure Systems	
CIVL4270	Construction Law and Contract Administration	
CIVL4340	Prestressed Concrete Design	
CIVL4430	Environmental Impact Assessment	
CIVL4450	Carbon Footprint Analysis and Reduction	
CIVL4480	Climate Modeling and Risk Assessment	
CIVL4640	Introduction to Smart City Economics	
CIVL4710	Soil Slope Engineering	
COMP1001	Exploring Multimedia and Internet Computing	<i>Not for pre-enrollment</i>
COMP1021	Introduction to Computer Science	
COMP1023	Introduction to Python Programming	
COMP1029C	C Programming Bridging Course	<i>Not for pre-enrollment</i>
COMP1029J	Java Programming Bridging Course	<i>Not for pre-enrollment</i>
COMP1029P	Python Programming Bridging Course	<i>Not for pre-enrollment</i>
COMP1029V	Excel VBA Programming Bridging Course	<i>Not for pre-enrollment</i>
COMP1029X	Extended Python Programming Bridging Course	<i>Not for pre-enrollment</i>
COMP1942	Exploring and Visualizing Data	
COMP1944	Artificial Intelligence Ethics	<i>Not for pre-enrollment</i>
COMP1945	Artificial Intelligence for Everyone	
COMP1991	Industrial Experience	
COMP2011	Programming with C++	
COMP2012	Object-Oriented Programming and Data Structures	
COMP2211	Exploring Artificial Intelligence	<i>Not for pre-enrollment</i>
COMP2611	Computer Organization	
COMP2711	Discrete Mathematical Tools for Computer Science	
COMP3071	Honors Competitive Programming	<i>Not for pre-enrollment</i>
COMP3111	Software Engineering	
COMP3211	Fundamentals of Artificial Intelligence	<i>Not for pre-enrollment</i>
COMP3511	Operating Systems	
COMP3633	Competitive Programming in Cybersecurity II	<i>Not for pre-enrollment</i>
COMP3711	Design and Analysis of Algorithms	
COMP4021	Internet Computing	<i>Not for pre-enrollment</i>
COMP4121	Modern Compiler Construction	<i>Not for pre-enrollment</i>
COMP4211	Machine Learning	<i>Not for pre-enrollment</i>
COMP4221	Introduction to Natural Language Processing	<i>Not for pre-enrollment</i>
COMP4321	Search Engines for Web and Enterprise Data	<i>Not for pre-enrollment</i>
COMP4332	Big Data Mining and Management	<i>Not for pre-enrollment</i>
COMP4421	Image Processing	<i>Not for pre-enrollment</i>

COMP4431	Multimedia Computing	<i>Not for pre-enrollment</i>
COMP4441	Music Video Creation	<i>Not for pre-enrollment</i>
COMP4462	Data Visualization	<i>Not for pre-enrollment</i>
COMP4471	Deep Learning in Computer Vision	<i>Not for pre-enrollment</i>
COMP4521	Mobile Application Development	<i>Not for pre-enrollment</i>
COMP4531	IoT and Smart Sensing	<i>Not for pre-enrollment</i>
COMP4551	Large-Scale Machine Learning System for Foundation Models	<i>Not for pre-enrollment</i>
COMP4621	Computer and Communication Networks	<i>Not for pre-enrollment</i>
COMP4632	Practicing Cybersecurity: Attacks and Counter-measures	<i>Not for pre-enrollment</i>
COMP4651	Cloud Computing and Big Data Systems	<i>Not for pre-enrollment</i>
COMP4901C	AI and Misinformation	<i>Not for pre-enrollment</i>
COMP4901D	Embedded AI Systems	<i>Not for pre-enrollment</i>
COMP4911	IT Entrepreneurship	<i>Not for pre-enrollment</i>

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	
ELEC2400-1	Electronic Circuits	
ELEC2600	Probability and Random Processes in Engineering	
ELEC3100	Signal Processing and Communications	
ELEC3180	Data-Driven Portfolio Optimization	
ELEC3200	System Modeling, Analysis and Control	
ELEC3300	Introduction to Embedded Systems	
ELEC3350	Principles of Machine Learning	
ELEC3400	Introduction to Integrated Circuits and Systems	
ELEC3500	Integrated Circuit Devices	
ELEC3600	Electromagnetics: From Wireless to Photonic Applications	
ELEC4130	Machine Learning on Images	
ELEC4260	Introduction to Mobile Robotics (previous code: ELEC 3210)	
ELEC4350	AI Processor Architecture	
ELEC4430	Integrated Power Electronics	
ELEC4520	Integrated Circuit Fabrication Technology	
ELEC4530	Fundamentals of Photovoltaic and Renewable Energy	
ELEC4610	Engineering Optics	
ELEC4840	Artificial Intelligence for Medical Image Analysis	
ELEC4010P	Quantum Mechanics for Electronic Engineers	
ELEC4010S	Microwave Theory and Applications	

ENEG1700	Introduction to Energy and Environmental Engineering	
ENEG3910	Sustainable Energy Laboratory	<i>Not for pre-enrollment</i>

IEDA2100S	Computing in Industrial Applications	
IEDA2540	Statistics for Engineers	
IEDA3410	Routing and Fleet Management	
IEDA3460	Demand and Supply Analytics	
IEDA3560	Predictive Analytics	
IEDA4100	Integrated Production Systems	
IEDA4130	System Simulation	
IEDA4200	Design of Logistics and Manufacturing Systems	
IEDA4331	Quantitative Methods in Financial Engineering	
IEDA4500	Engineering Foundations of Fintech	

ISDN1004	Sketching	
ISDN1007	From Design Thinking to Design Action: Defining Problems for Better Solutions	
ISDN2200	System Thinking and Design	
ISDN2400	Physical Prototyping	
ISDN2603	Materials, Shape and Design	

\*MECH courses are for reference from Spring 2025 as the new tentative list is not yet available.

MECH1905	Buildings for Contemporary Living	
MECH1906	Mechanical Engineering for Modern Life	
MECH2040	Solid Mechanics I	
MECH2210	Fluid Mechanics	

MECH2410	Engineering Materials I	
MECH2520	Design and Manufacturing I	
MECH3510	CAD/CAM	
MECH3620	Aircraft Design	
MECH3630	Electrical Technology	
MECH3660	Gas Turbines & Jet Propulsion	
MECH3680	Avionics Systems	
MECH4340	Air Conditioning Systems	
MECH4710	Introduction to Robotics	
MECH4890	Introduction to Nanosatellite Engineering	

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