Northeastern University

In general, combined majors associated with eligible listed undergraduate majors will also be eligible to pursue the given Master's degree program. Students should check with their advisor to confirm eligibility.

Index:

Bouvé	MA/MS Degree Name	Eligible Undergrad Majors	Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)
			In Bouvé ** many courses are 3 credits each so students may take up to five courses (15 credits) and still double count them in the PlusOne Pathway.
	Master of Public Health	Health Science, BS; Healthcare Administration (formerly Health Management);	PHTH 5212 - Public Health Administration and Policy PHTH 6200 - Principles and History of Urban Health PHTH 5120 - Race, Ethnicity and Health PHTH 6204 - Society, Behavior, and Health And in final UG semester, complete one of the following courses: PHTH 5214 - Environmental Health PHTH 5202 - Introduction to Epidemiology PHTH 5210 - Biostatistics in Public Health
		Bachelor of Science in Nursing (BSN)	There will be 5 unique course maps for BSN students on the 4- or 5-year plans. All students complete 12 credits: PHTH 5540: Health Education and Program Planning (online) PHTH 6200: Principles and History of Urban Health (online) And two of the following three courses depending on their co-op schedule: PHTH 5214: Environmental Health (online) PHTH 6204: Society, Behavior and Health (on campus) PHTH 6208: Urban Community Health Assessment (online)
		BS Pharmacy Studies / Early Assurance PharmD	PHTH 5212 - Public Health Administration and Policy PHTH 5214 - Environmental Health PHTH 6200 - Principles and History of Urban Health PHTH 6204 - Society, Behavior, and Health
	Master of Public Health	All others	PHTH 5212 - Public Health Administration and Policy PHTH 5214 - Environmental Health PHTH 6200 - Principles and History of Urban Health PHTH 6204 - Society, Behavior, and Health
	Master of Science in Exercise Science	Majors in Health Science, Biology, Neuroscience, Engineering, Computer Science, Business and Students completing minors in Exercise Science, Nutrition	Prerequisite coursework: BIOL 1117 & BIOL 1119 - Anatomy & Physiology I and II, needed prior to EXSC 4500 EXSC 4500 - Exercise Physiology, needed before taking the grad courses Graduate Courses: EXSC 5210 - Physical Activity and Exercise: Prescription, Measurement, and Testing EXSC 5220 - Advanced Exercise Physiology EXSC 5200 - Cardiopulmonary Physiology or EXSC 5230 Physical Activity and Exercise: Effects on Musculoskeletal Health and Disease
		Psychology, BS (CPS or COS)	CAEP 6326 – Behavioral Concepts and Principles CAEP 6327 - Behavior Assessment CAEP 6328 - Research and Design Methods

Master of Science in Applied Behavioral Analysis		CAEP 6329 - Service Administration CAEP 6334 - Applied Programming Seminar 1 (COS)
	BS Behavioral Neuroscience	CAEP 6326 Behavioral Concepts and Principles (3 credits) counts for Advanced PSYC elective. CAEP 6327 Behavior Assessment (3 credits) counts for BNS Breadth course (substitute for PHYS 1 requirement) CAEP 6328 Research and Design Methods (3 credits) counts for BNS Core Research course CAEP 6329 Service Administration (3 credits) General elective for credit hours
	All others	CAEP 6326 - Behavioral Concepts and Principles (3 credits) counts for Advanced PSYC elective. CAEP 6327 - Behavior Assessment (3 credits) counts for BNS Breadth course (substitute for PHYS 1 requirement) CAEP 6328 - Research and Design Methods (3 credits) counts for BNS Core Research course CAEP 6329 - Service Administration (3 credits) General elective for credit hours
Master of Science in Applied Psychology	For undergraduate students in Psychology, Health Sciences, Human Services	**Choose up to 16 SH from the following:** **MS Core:** CAEP 5877 Research Methods in Applied Psychology (Fall) HLTH 5410 Introduction to Statistics in Health and Behavioral Science (Spring) <u>Child, Adolescent and Family Psychology Concentration:</u> CAEP 5150 Early Intervention: Family Systems (Fall) CAEP 5878 Pediatric Psychology (Fall) CAEP 5879 Trauma and mental health (Spring) <u>Prevention Science Concentration:</u> CAEP 5876 Mental Health Education and Program Planning (Spring)
Master of Science Applied Educational Psychology/School Psychology	Psychology, BS	CAEP 6206 – Learning Principles CAEP 6218- Infant, Child, and Adolescent Development CAEP 6247 – Child and Adolescent Psychopathology CAEP 6203 - Understanding Culture and Diversity
Master of Science in Medicinal Chemistry and Drug Chemistry	Pharmaceutical Sciences, BS and All other BS programs with similar science-based courses	PHSC 5100 -Concepts in Pharmaceutical Science (2 SH) CHEM 5628 -Principles of Spectroscopy of Organic Compounds (3 SH) CHEM 5626 -Organic synthesis I (3 SH) CHEM 5676 -Bioorganic Chemistry (3 SH) In addition to the courses listed above students can select from 5000 level (or higher if course is deemed appropriate for an undergraduate student) elective credits in the following course subjects: PHSC, PMLC, PMST, NNMD, BIOL, BIOT, CHEM to increase the number of shared graduate credits that may count towards the MS degree up to a maximum of 16 shared credits.
Master of Science in Pharmaceutics and Drug Delivery	Pharmaceutical Sciences, BS and All other BS programs with similar science based courses	PHSC 5100 - Concepts in Pharmaceutical Science (2 SH) PHSC 5300 -Pharmaceutical Biochemistry (2 SH) PHSC 5310 - Cellular Physiology (2 SH) PMST 6250 - Advanced Physical Pharmacy (2 SH) In addition to the courses listed above students can select up to 8 SH from 5000 level (or higher if course is deemed appropriate for an undergraduate student) elective credits in the following course subjects: PHSC, PMLC, PMST, NNMD, BIOL, BIOT, CHEM to increase the number of shared graduate credits that may count towards the MS degree up to a maximum of 16 shared credits.
Master of Science in Pharmacology	Pharmaceutical Sciences, BS and All other BS programs with similar science-based courses	PHSC 5100 - Concepts in Pharmaceutical Science (2 SH) PHSC 5300 - Pharmaceutical Biochemistry (2 SH) PHSC 5310 - Cellular Physiology (2 SH) PMCL 6260 - Pharmacology 1 (2 SH) PMCL 6262 - Receptor Pharmacology (2 SH) In addition to the courses listed above students can select from 5000 level (or higher if course is deemed appropriate for an undergraduate student) elective credits in the following course subjects: PHSC, PMLC, PMST, NNMD, BIOL, BIOT, CHEM to increase the number of shared graduate credits that may count towards the MS degree up to a maximum of 16 shared credits.
Master of Science in Biomedical Sciences	Pharmaceutical Sciences, BS and All other BS programs with similar science-based courses	PHSC 510 - Concepts in Pharmaceutical Science (2 SH) PHSC 5300 - Pharmaceutical Biochemistry (2 SH) PHSC 5310 - Cellular Physiology (2 SH) In addition to the courses listed above students can select up to 10 SH from 5000 level (or higher if course is deemed appropriate for an undergraduate student) elective credits in the following course subjects: PHSC, PMLC, PMST, NNMD, BIOL, BIOT, CHEM to increase the number of shared graduate credits that may count towards the MS degree up to a maximum of 16 shared credits.
Master of Science in Speech-Language Pathology	Speech-Language Pathology and Audiology, BS	SLPA6305 - Articulation & Phonology (Yr. 4/Fall) (3 SH) SLPA5109 - Neurology of Communication (Yr. 4/Fall) (3 SH) SLPA6340 - Language Disorders in Children 1 (Yr. 4/Fall) (3 SH) SLPA5107 - Clinical Procedures (Yr. 4/Fall) (3 SH) SLPA6342 - S&L Disorders in Adults 1 (Yr. 4/Spring) (3 SH)

			SLPA6308 - Dysphagia (Yr. 4/Spring) (3 SH) SLPA6415 - SLP Advanced Clinical Practicum 1 (Yr. 4/Spring) (3 SH) SLPA6341 - Language Disorders in Children 2 (Yr. 4/Spring) (3 SH)
	Master of Science in Human Movement and Rehabilitation Sciences	Master of Science in Human Movement and Rehabilitation Sciences	HLTH 5410 (4SH) PT 5321 (4SH) and 2 electives from the following MIE electives: ME 5250. Robot Mechanics and Control. (4SH) ME 5659. Control Systems Engineering. (4SH) ME 5665. Musculoskeletal Biomechanics. (4SH) IE 5630 Biosensor and Human Behavior Measurement (4SH)
		Electrical and Computer Engineering	HLTH 5410 (4SH) PT 5321 (4SH) Please consult with the program director for additional course options up to 16SH.
	Master of Science in Human Movement and Rehabilitation Sciences	Electrical and Computer Engineering	Choose 16SH from the following: HLTH 5410 (4SH) PT 5321 (4SH) EECE 5580. Classical Control Systems. (4 Hours) EECE 5644. Introduction to Machine Learning and Pattern Recognition. (4SH) EECE 5664. Biomedical Signal Processing (4SH)
		Bioengineering	HLTH 5410 (4SH) PT 5321 (4SH) BIOE 5810. Design of Biomedical Instrumentation. (4SH) BIOE 5235. Biomedical Imaging. (4SH)
	Master of Science in Health Informatics (no concentration option)	All	HINF 5101 (3SH) HINF 5105 (3SH) Additionally, in consultation with the program director, students may select three more courses from the MS Health Informatics no concentration curriculum.
	Game Science and Design	Game Design & Combined Majors	Up to 3 double count toward the major as game electives GSND 5130 User Research Methods Game Design or Development Elective GSND Elective GSND Elective Note: GSND 5110/1 automatically waived and credit must be substituted with another GSND elective.
		Game Design Minors	Up to 1 double count toward a game design elective: GSND 5130 User Research Methods Game Design or Development Elective GSND Elective GSND Elective Note: GSND 5110/1 automatically waived and credit must be substituted with another GSND elective.
CAMD	**MA/MS Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
	Game Science and Design	All majors	All courses count as general electives: GSND 5110 Game Design and Analysis (with GSND 5111 Seminar for GSND 5110, 1 SH) GSND 5130 User Research Methods Game Design or Development Elective GSND Elective
	Journalism - Media Innovation	Journalism majors Journalism Practice minors	Journalism majors: JRNL 6340, 6341, and 6306 count toward the Journalism Elective(s) in the undergraduate program requirements. The fourth course will count as a general elective. Journalism combined majors: JRNL 6340/6341 count toward the Journalism Elective(s) in the undergraduate program requirements. The other two courses will count as general electives. Journalism Studies and Journalism Practice minors, JRNL 6340 can count toward the Journalism Elective(s) in the undergraduate minor requirements. The other three courses will count as general electives.
	Journalism - Professional	All majors	Journalism combined majors, JRNL 6200 and 6201 count toward the Journalism Elective(s) in the undergraduate program requirements. Journalism Studies and Practice minors, JRNL 6200 counts toward the Journalism Elective(s) in the undergraduate program requirements. All other students, substitute four general electives with JRNL6200, 6201, 6340, 6202
	Information Design and Visualization	Design Majors	Up to 3 double count toward the major as design concentration electives: ARTG5100, 5150, 5320, 5330 Interaction Design concentrators can substitute 2 design concentration electives and 1 “Art and Design Elective”
		Design Combined Majors	Up to 1 double counts toward a design elective: ARTG5100, 5150, 5320, 5330
		Design Minors	Up to 1 double counts toward a design elective: ARTG5100, 5150, 5310, 5320, 5330
		All majors	All courses count as general electives: ARTG 5100, 5310, 5320, 5330
			SUEN 6210 - Implementation and Visualization for Urban Environments 1 SUEN 6220 - Implementation and Visualization for Urban Environments 2 SUEN 6340 - Topics in Urban Environmental Design SUEN 7320 - Pro-Seminar: Issues in Designed Urban Environments

	Master of Design for Sustainable Urban Environments—One-Year Program	Landscape Architecture and Environmental Science Combined Majors	Up to 4 double count toward the major as LARC requirements and electives: LARC Requirement: SUEN 6340: Topics in Urban Environmental Design in lieu of LARC 2340: Cities, Landscape, and Contemporary Culture LARC Electives: SUEN 7320: Pro-Seminar: Issues in Designed Urban Environments; SUEN 6210: Implementation and Visualization for Urban Environments 1; SUEN 6220: Implementation and Visualization for Urban Environments 2
		Architectural Studies Majors	Up to 4 double count toward the major as electives: SUEN 6340: Topics in Urban Environmental Design SUEN 7320: Pro-Seminar: Issues in Designed Urban Environments SUEN 6210: Implementation and Visualization for Urban Environments 1 SUEN 6220: Implementation and Visualization for Urban Environments 2
		All other majors and minors	All courses count as general electives: SUEN 6340: Topics in Urban Environmental Design SUEN 7320: Pro-Seminar: Issues in Designed Urban Environments SUEN 6210: Implementation and Visualization for Urban Environments 1 SUEN 6220: Implementation and Visualization for Urban Environments 2
	Media Advocacy	Journalism (majors, combined majors)	JRNL 5400 and COMM 5xxx can count toward the Journalism Elective(s) in the undergraduate program
		Communication Studies (majors, combined majors, minors)	COMM 5xxx Advocacy, Communication, and Research can count toward the Communication Studies Electives in the undergraduate program requirements. JRNL 5400 will count as a general elective
		Journal Studies and Practice minors	JRNL 5400 can count toward the Journalism Elective(s) in the undergraduate program requirements. COMM 5xxx will count as a general elective
		Art & Design (majors, combined majors, minors)	any graduate ARTD and ARTG courses can count toward available A+D Elective(s) in the undergraduate program
	Media Advocacy	Criminal Justice, Economics, Environmental Sciences, Health Science, Human Services, International Affairs, International Business, Jewish Studies, Business/Art and Design, Business/Communication Studies, Languages & Linguistics, Management, Marketing, Media Arts, Philosophy, Political Science, Psychology,	Substitute four general electives with courses listed above.
	Media Innovation and Data Communication, MS	Journalism, BA	JRNL 6306 - Media Innovation Studio 1 JRNL 6340 - Fundamentals of Digital Journalism JRNL 6341 - Telling Your Story with Data ARTG 5330 - Visualization Technologies 1: Fundamentals Must have at least four electives available between junior and senior years.
	Experience Design	Design Majors	Up to 3 double count toward the major as design concentration electives: ARTG 5120, 5600, 5610, 5620. Note: Interaction Design concentrators can double count 2 as design concentration electives and 1 as "Art and Design Elective
		Design Combined Majors	Up to 2 double count toward design electives: ARTG 5120, 5600, 5610, 5620, 5000-level or above elective
		Design Minors	up to 1 double count toward a design elective: ARTG 5120, 5600, 5610, ARTG 5620
		All majors	all courses count as general electives: ARTG 5120, 5600, 5610, ARTG 5620
	Creative Practice Leadership	Specified Minors	Music Industry minors, Performing Arts Administration minors, and other CAMD minors with approval of the advisor: either INAM 6100 or INAM 6200 may double count as an elective within the minor.
		Music with Concentration in Music Industry, BS	INAM 6100 - Critical Foundations of Creative Practice INAM 6200 - Topics in Communication Strategies INAM 6210 - Projects in Interdisciplinary Creative Practice INAM 6300 - Models for Applied Inquiry in Creative Practice
		All majors	All courses count as general electives: INAM 6100, INAM 6200, Graduate CAMD Electives 1 and 2
	Architecture	BS in Architecture	ARCH 6330 - Seminar in Modern Architecture ARCH 6340 - Graduate Topics in Architecture ARCH Grad Elective - Course ARCH Grad Elective The three specified courses will be taken as general electives, beyond major and core requirements. No substitutions allowed
COE	**MA/MS Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
		Bioengineering + CHME 2308	Select no more than two of the following: CHME 7320 Chemical Engineering Mathematics CHME 7330 Chemical Engineering Thermodynamics or CHME 7235 Introduction to Statistical Thermodynamics CHME 7340 Chemical Engineering Kinetics CHME 7350 Transport Phenomena Select remaining shared courses from the following range: Any 5000-6999 approved MS elective as listed in the catalog
		Chemical Engineering	Select no more than two of the following: CHME 7320 Chemical Engineering Mathematics CHME 7330 Chemical Engineering Thermodynamics or CHME 7235 Introduction to Statistical Thermodynamics CHME 7340 Chemical Engineering Kinetics CHME 7350 Transport Phenomena Select remaining shared courses from the following range: Any 5000-6999 approved MS elective as listed in the catalog

Chemical Engineering	Environmental Engineering + CHME 2308	Select no more than two of the following: CHME 7320 Chemical Engineering Mathematics CHME 7330 Chemical Engineering Thermodynamics or CHME 7235 Introduction to Statistical Thermodynamics CHME 7340 Chemical Engineering Kinetics CHME 7350 Transport Phenomena Select remaining shared courses from the following range: Any 5000-6999 approved MS elective as listed in the catalog
	Mechanical Engineering + CHME 2308	Select no more than two of the following: CHME 7320 Chemical Engineering Mathematics CHME 7330 Chemical Engineering Thermodynamics or CHME 7235 Introduction to Statistical Thermodynamics CHME 7340 Chemical Engineering Kinetics CHME 7350 Transport Phenomena Select remaining shared courses from the following range: Any 5000-6999 approved MS elective as listed in the catalog
	Chemistry + CHME 2308 (COS)	Select no more than two of the following: CHME 7320 Chemical Engineering Mathematics CHME 7330 Chemical Engineering Thermodynamics or CHME 7235 Introduction to Statistical Thermodynamics CHME 7340 Chemical Engineering Kinetics CHME 7350 Transport Phenomena Select remaining shared courses from the following range: Any 5000-6999 approved MS elective as listed in the catalog
	Biochemistry + CHME 2308 (COS)	Select no more than two of the following: CHME 7320 Chemical Engineering Mathematics CHME 7330 Chemical Engineering Thermodynamics or CHME 7235 Introduction to Statistical Thermodynamics CHME 7340 Chemical Engineering Kinetics CHME 7350 Transport Phenomena Select remaining shared courses from the following range: Any 5000-6999 approved MS elective as listed in the catalog
	Physics + CHME 2308 (COS)	Select no more than two of the following: CHME 7320 Chemical Engineering Mathematics CHME 7330 Chemical Engineering Thermodynamics or CHME 7235 Introduction to Statistical Thermodynamics CHME 7340 Chemical Engineering Kinetics CHME 7350 Transport Phenomena Select remaining shared courses from the following range: Any 5000-6999 approved MS elective as listed in the catalog
Civil and Environmental Engineering, Concentration in Water, Environmental, Coastal Systems	All COE Undergraduate Majors + CIVE 2331, CIVE 2334, CIVE 2340	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 5536 Hydrologic and Hydraulic Design
	BS in Environmental Science + CIVE 2331, CIVE 2334, CIVE 2340 (COS)	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 5536 Hydrologic and Hydraulic Design
	BS in Ecology and Evolutionary Biology + CIVE 2331, CIVE 2334, CIVE 2340 (COS)	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 5536 Hydrologic and Hydraulic Design
	BS in Physics + CIVE 2331, CIVE 2334, CIVE 2340 (COS)	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 5536 Hydrologic and Hydraulic Design
	BS in Chemistry + CIVE 2331, CIVE 2334, CIVE 2340 (COS)	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 5536 Hydrologic and Hydraulic Design
MS in Civil Engineering, Concentration in Construction Management	All COE Undergraduate Majors	Select up to four of the following: CIVE 7220 Construction Management CIVE 7230 Legal Aspects of Civil Engineering EMGT 6305 Financial Management for Engineers IE 6200 Engineering Probability and Statistics
MS in Civil Engineering, Concentration in Geotechnical/Geoenvironmental	BS in Civil Engineering + CIVE 2340, CIVE 2221, CIVE 2331	Select up to four of the following: CIVE 7311 Soil and Foundation Dynamics CIVE 7312 Earthquake Engineering CIVE 7330 Advanced Structural Analysis CIVE 7331 Structural Dynamics
	BS in Environmental Engineering + CIVE 2340, CIVE 2221, CIVE 2331	Select up to four of the following: CIVE 7311 Soil and Foundation Mechanics CIVE 7312 Earthquake Engineering CIVE 7330 Advanced Structural Analysis

		CIVE 7331 Structural Dynamics
MS in Civil Engineering, Concentration in Structures	All COE Undergraduate Majors	Select up to four of the following: CIVE 5520 Structural Systems CIVE 5522 Structural Systems Modeling CIVE 5543 Special Topics in CE: Vibration-based Structural Health Monitoring SBSY 5250 Special Topics in CE: Building Energy Performance Simulation CIVE 7330 Advanced Structural Analysis CIVE 7331 Structural Dynamics
MS in Civil Engineering, Concentration in Transportation	All COE Undergraduate Majors	Select up to four of the following: CIVE 5373 Transportation Systems: Analysis and Planning CIVE 5376 Traffic Engineering and Sustainable Urban Street Design CIVE 7381 Transportation Demand Forecasting and Model Estimation IE 6200 Engineering Probability and Statistics
	BS in Physics (COS)	Select up to four of the following: CIVE 5373 Transportation Systems: Analysis and Planning CIVE 5376 Traffic Engineering and Sustainable Urban Street Design CIVE 7381 Transportation Demand Forecasting and Model Estimation IE 6200 Engineering Probability and Statistics
	BS in Math (COS)	Select up to four of the following: CIVE 5373 Transportation Systems: Analysis and Planning CIVE 5376 Traffic Engineering and Sustainable Urban Street Design CIVE 7381 Transportation Demand Forecasting and Model Estimation IE 6200 Engineering Probability and Statistics
	BS in Computer Science (Khoury)	Select up to four of the following: CIVE 5373 Transportation Systems: Analysis and Planning CIVE 5376 Traffic Engineering and Sustainable Urban Street Design CIVE 7381 Transportation Demand Forecasting and Model Estimation IE 6200 Engineering Probability and Statistics
	Bs in Data Science (Khoury)	Select up to four of the following: CIVE 5373 Transportation Systems: Analysis and Planning CIVE 5376 Traffic Engineering and Sustainable Urban Street Design CIVE 7381 Transportation Demand Forecasting and Model Estimation IE 6200 Engineering Probability and Statistics
	BS in Economics (CSSH)	Select up to four of the following: CIVE 5373 Transportation Systems: Analysis and Planning CIVE 5376 Traffic Engineering and Sustainable Urban Street Design CIVE 7381 Transportation Demand Forecasting and Model Estimation IE 6200 Engineering Probability and Statistics
MS in Engineering and Public Policy	All COE Undergraduate Majors	Select up to four of the following: CIVE 5250 Organic Pollutants in the Environment CIVE 5261 Dynamic Modeling for Environmental Investment and Policymaking CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 5363 Special Topics in CE: Climate Science, Engineering Adaptation, and Policy ENGR 5670 Sustainable Energy: Materials, Conversion, Storage, and Usage ENSY 5100 Hydropower IE 5500 Systems Engineering in Public Programs IE 5640 Data Mining for Engineering Applications INSH 5301 Introduction to Computational Statistics ME 5645 Environmental Issues in Manufacturing and Product Use PHTH 5214 Environmental Health PHTH 5230 Global Health PPUA 5260 Ecological Economics PPUA 5262 Big Data for Cities PPUA 5263 Geographic Information Systems for Urban and Regional Policy PPUA 5264 Energy Democracy and Climate Resilience: Technology, Policy, and Social Change PPUA 5270 Food Systems and Public Policy
	All COS Undergraduate Majors (COS)	Select up to four of the following: CIVE 5250 Organic Pollutants in the Environment CIVE 5261 Dynamic Modeling for Environmental Investment and Policymaking CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Engineering Laboratory CIVE 5699 Special Topics in CE: Climate Science, Engineering Adaptation, and Policy ENGR 5670 Sustainable Energy: Materials, Conversion, Storage, and Usage ENSY 5100 Fundamentals of Energy System Integration IE 5500 Systems Engineering in Public Programs IE 5640 Data Mining for Engineering Applications INSH 5301 Introduction to Computational Statistics ME 5645 Environmental Issues in Manufacturing and Product Use PHTH 5214 Environmental Health PHTH 5230 Global Health PPUA 5260 Ecological Economics PPUA 5262 Big Data for Cities PPUA 5263 Geographic Information Systems for Urban and Regional Policy PPUA 5264 Energy Transitions and Climate Resilience: Technology, Policy, and Social Change PPUA 5270 Food Systems and Public Policy
		Select up to four of the following: CIVE 5250 Organic Pollutants in the Environment

	All Khoury Undergraduate Majors (Khoury)	CIVE 5261 Dynamic Modeling for Environmental Investment and Policymaking CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Engineering Laboratory CIVE 5699 Special Topics in CE: Climate Science, Engineering Adaptation, and Policy ENGR 5670 Sustainable Energy: Materials, Conversion, Storage, and Usage ENSY 5100 Fundamentals of Energy System Integration IE 5500 Systems Engineering in Public Programs IE 5640 Data Mining for Engineering Applications INSH 5301 Introduction to Computational Statistics ME 5645 Environmental Issues in Manufacturing and Product Use PHTH 5214 Environmental Health PHTH 5230 Global Health PPUA 5260 Ecological Economics PPUA 5262 Big Data for Cities PPUA 5263 Geographic Information Systems for Urban and Regional Policy PPUA 5264 Energy Transitions and Climate Resilience: Technology, Policy, and Social Change PPUA 5270 Food Systems and Public Policy
	BS in Economics (CSSH)	Select up to four of the following: CIVE 5250 Organic Pollutants in the Environment CIVE 5261 Dynamic Modeling for Environmental Investment and Policymaking CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5280 Remote Sensing of the Environment CIVE 5281 Coastal Dynamics and Design CIVE 5300 Environmental Engineering Laboratory CIVE 5699 Special Topics in CE: Climate Science, Engineering Adaptation, and Policy ENGR 5670 Sustainable Energy: Materials, Conversion, Storage, and Usage ENSY 5100 Fundamentals of Energy System Integration IE 5500 Systems Engineering in Public Programs IE 5640 Data Mining for Engineering Applications INSH 5301 Introduction to Computational Statistics ME 5645 Environmental Issues in Manufacturing and Product Use PHTH 5214 Environmental Health PHTH 5230 Global Health PPUA 5260 Ecological Economics PPUA 5262 Big Data for Cities PPUA 5263 Geographic Information Systems for Urban and Regional Policy PPUA 5264 Energy Transitions and Climate Resilience: Technology, Policy, and Social Change PPUA 5270 Food Systems and Public Policy
MS Bioengineering	All COE Undergraduate Majors	Select up to four of the following: BIOE 5235, Biomedical Imaging BIOE 5250, Design, Manufacture, and Evaluation of Medical Devices BIOE 5410, Molecular Bioengineering BIOE 5420, Cellular Engineering BIOE 5630, Physiological Fluid Mechanics BIOE 5640, Computational Biomechanics BIOE 5650, Multiscale Biomechanics BIOE 5810, Design of Biomedical Instrumentation BIOE 6100, Medical Physiology
MS in Environmental Engineering	BS in Bioengineering	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 7250 Environmental Chemistry CIVE 7251 Environmental Biological Processes CIVE 7255 Environmental Physical/Chemical Processes CIVE 7260 Hydrologic Modeling CIVE 7261 Surface Water Quality Modeling CIVE 7272 Air Quality Management
	BS in Chemical Engineering	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 7250 Environmental Chemistry CIVE 7251 Environmental Biological Processes CIVE 7255 Environmental Physical/Chemical Processes CIVE 7260 Hydrologic Modeling CIVE 7261 Surface Water Quality Modeling CIVE 7272 Air Quality Management
	BS in Civil Engineering	Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 7250 Environmental Chemistry CIVE 7251 Environmental Biological Processes CIVE 7255 Environmental Physical/Chemical Processes CIVE 7260 Hydrologic Modeling CIVE 7261 Surface Water Quality Modeling CIVE 7272 Air Quality Management
		Select up to four of the following: CIVE 5271 Solid and Hazardous Waste Management

	BS in Environmental Engineering	CIVE 5275 Life Cycle Assessment of Materials, Products, and Infrastructure CIVE 5300 Environmental Sampling and Analysis [coreq: CIVE 5301 Lab for CIVE 5300] CIVE 7250 Environmental Chemistry CIVE 7251 Environmental Biological Processes CIVE 7255 Environmental Physical/Chemical Processes CIVE 7260 Hydrologic Modeling CIVE 7261 Surface Water Quality Modeling CIVE 7272 Air Quality Management
MS in Electrical and Computer Engineering, Concentration in Communications, Control, Signal Processing	All COE Undergraduate Majors + EECE 2150, EECE 2412, EECE 2413, EECE 2520, EECE 3468* *May be replaced with another probability course	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Computer Science + EECE 2150, EECE 2412, EECE 2413, EECE 2520, EECE 3468* (Khoury) *May be replaced with another probability course	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Math + EECE 2150, EECE 2412, EECE 2413, EECE 2520, EECE 3468*(COS) *May be replaced with another probability course	Select up to four of the following: ECE Depth Courses as listed in the catalog
MS in Electrical and Computer Engineering, Concentration in Computer Systems and Software	All COE Undergraduate Majors + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Computer Science + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Math + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560 (COS)	Select up to four of the following: ECE Depth Courses as listed in the catalog
MS in Electrical and Computer Engineering, Concentration in Computer Networks and Security	All COE Undergraduate Majors + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Computer Science + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560 (Khoury)	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Math + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560 (COS)	Select up to four of the following: ECE Depth Courses as listed in the catalog
MS in Electrical and Computer Engineering, Concentration in Computer Vision, Machine Learning, Algorithms	All COE Undergraduate Majors + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Computer Science + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560 (Khoury)	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Math + EECE 2150, EECE 2160, EECE 2412, EECE 2413, two of the following: EECE 2322 (with EECE 2323), EECE 2540, or EECE 2560 (COS)	Select up to four of the following: ECE Depth Courses as listed in the catalog
	All COE Undergraduate Majors + EECE 2150, EECE 2160, EECE 2412, EECE 2413	Select up to four of the following:

MS in Electrical and Computer Engineering, Concentration in Electromagnetics, Plasma, Optics	All COE Undergraduate Majors + EECE 2150, EECE 2160, EECE 2412, EECE 2413, EECE 2530, EECE 2531	ECE Depth Courses as listed in the catalog
MS in Electrical and Computer Engineering, Concentration in Microsystems, Materials, Devices	All COE Undergraduate Majors + EECE 2150, EECE 2412, EECE 2413, one of the following: EECE 3392, EECE 3410, or EECE 4524 (with EECE 4525)	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Physics + EECE 2150, EECE 2412, EECE 2413, one of the following: EECE 3392, EECE 3410, or EECE 4524 (with EECE 4525) (COS)	Select up to four of the following: ECE Depth Courses as listed in the catalog
MS in Electrical and Computer Engineering, Concentration in Power Systems	All COE Undergraduate Majors + EECE 2150, EECE 2412, EECE 2413, EECE 2520	Select up to four of the following: ECE Depth Courses as listed in the catalog
MS in Electrical and Computer Engineering, Concentration in Power Systems	BS in Computer Science + EECE 2150, EECE 2412, EECE 2413, EECE 2520 (Khoury)	Select up to four of the following: ECE Depth Courses as listed in the catalog
	BS in Math + EECE 2150, EECE 2412, EECE 2413, EECE 2520 (COS)	Select up to four of the following: ECE Depth Courses as listed in the catalog
MS in Data Analytics Engineering	All COE Undergraduate Majors	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Computer Science (Khoury)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Physics (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Chemistry (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Biology (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Environmental Science (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Math (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Business Administration + MATH 2341, IE 4XXX* (DMSB) *IE 4XXX will be a course on Computational Methods for Industrial Engineering (in development)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Economics + MATH 2341 (CSSH)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	All COE Undergraduate Majors	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Computer Science (Khoury)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		Complete the following:

	MS in Engineering Management	BS in Physics (COS)	IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Chemistry (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Biology (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Environmental Science (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Math (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Psychology + MATH 2341, IE 4XXX* (COS) *IE 4XXX will be a course on Computational Methods for Industrial Engineering (in development)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	MS in Industrial Engineering	BS in Business Administration + Math 2341, IE 4XXX* (DMSB) *IE 4XXX will be a course on Computational Methods for Industrial Engineering	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Economics + Math 2341 (CSSH)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Sociology + Math 2341, IE 4XXX* (CSSH) *IE 4XXX will be a course on Computational Methods for Industrial Engineering (in development)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	MS in Energy Systems	BS in Bioengineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
		BS in Chemical Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
		BS in Civil Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
		BS in Environmental Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
		BS in Mechanical Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
		BS in Industrial Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
		BS in Electrical Engineering + ME 2380	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
		BS in Computer Engineering + ME 2380	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
		BS in Computer Science + ME 2380 (Khoury)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
		BS in Physics + ME 2380 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list:

		Any approved ENSY 5000 level class as listed in the catalog
	BS in Chemistry + ME 2380 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
	BS in Biology + ME 2380 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
	BS in Environmental Science + ME 2380 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
	BS in Math + ME 2380 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
	BS in Business Administration + ME 2380 (DMSB)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
	BS in Economics + ME 2380 (CSSH)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ENSY 5000 level class as listed in the catalog
MS in Human Factors	All COE Undergraduate Majors	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
	BS in Computer Science (Khoury)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
	BS in Physics (COS)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
	BS in Chemistry (COS)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
	BS in Biology (COS)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
	BS in Environmental Science (COS)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
		Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering

		BS in Math + MATH 2341 (COS)	IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
		BS in Psychology + MATH 2341, IE 4XXX* (COS) *IE 4XXX will be a course on Computational Methods for Industrial Engineering (in development)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
		BS in Business Administration + MATH 2341, IE 4XXX* (DMSB) *IE 4XXX will be a course on Computational Methods for Industrial Engineering (in development)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
		BS in Economics + MATH 2341 (CSSH)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
		BS in Sociology + MATH 2341, IE 4XXX* (CSSH) *IE 4XXX will be a course on Computational Methods for Industrial Engineering (in development)	Complete the following: IE 6500 Human Performance in Sociotechnical Systems IE 7280 Statistical Methods in Engineering IE 7315 Human Factors in Engineering EMGT 5300 Engineering/Organizational Psychology Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog
	MS in Industrial Engineering	All COE Undergraduate Majors	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Computer Science (Khoury)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Physics (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Chemistry (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Biology (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Environmental Science (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Math (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
		BS in Psychology + MATH 2341, IE 4XXX* (COS) *IE 4XXX will be a course on Computational Methods for Industrial Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
		BS in Business Administration + MATH 2341,	Complete the following:

	IE 4XXX* (DMSB) *IE 4XXX will be a course on Computational Methods for Industrial Engineering (in development)	IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Economics + MATH 2341 (CSSH)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Sociology + MATH 2341, IE 4XXX (CSSH)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
MS in Mechanical Engineering, General Concentration	BS in Bioengineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Chemical Engineering + ME 2355, ME 2350	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Civil Engineering + ME 2355	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Environmental Engineering + ME 2355	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Mechanical Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Industrial Engineering + ME 2355	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Electrical Engineering + ME 2355, ME 2350	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Computer Engineering + ME 2355, ME 2350	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Computer Science + ME 2355, ME 2350 (Khoury)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Physics + ME 2355, ME 2350 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Chemistry + ME 2355, ME 2350 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Biology + ME 2355, ME 2350 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Environmental Science + ME 2355, ME 2350 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Math + ME 2355, ME 2350 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME or MATL 5000 level class as listed in the catalog
	BS in Bioengineering	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Chemical Engineering + ME 2340, ME 2341, ME 2355	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Civil Engineering + ME 2340, ME 2341	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Environmental Engineering + ME 2340, ME 2341	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Mechanical Engineering	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Industrial Engineering + ME 2340, ME 2341	Select four courses from this list:

MS in Mechanical Engineering, Materials Concentration	BS in Industrial Engineering + ME 2340, ME 2341	Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Electrical Engineering + ME 2340, ME 2341, ME 2355	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Computer Engineering + ME 2340, ME 2341, ME 2355	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Computer Science + ME 2340, ME 2341, ME 2355 (Khoury)	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Physics + ME 2340, ME 2341, ME 2355 (COS)	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Chemistry + ME 2340, ME 2341, ME 2355 (COS)	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Biology + ME 2340, ME 2341, ME 2355 (COS)	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Environmental Science + ME 2340, ME 2341, ME 2355 (COS)	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
	BS in Math + ME 2340, ME 2341, ME 2355 (COS)	Select four courses from this list: Any approved ME 5000 or MATL 5000 or 6000 level class as listed in the catalog
MS in Mechanical Engineering, Mechanics Concentration	BS in Bioengineering	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Chemical Engineering + ME 3455, ME 2355	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Civil Engineering + ME 3455, ME 2355	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Environmental Engineering + ME 3455, ME 2355	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Mechanical Engineering	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Industrial Engineering + ME 3455, ME 2355	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Electrical Engineering + ME 3455, ME 2355	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Computer Engineering + ME 3455, ME 2355	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Computer Science + ME 3455, ME 2355 (Khoury)	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Physics + ME 3455, ME 2355 (COS)	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Chemistry + ME 3455, ME 2355 (COS)	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Biology + ME 3455, ME 2355 (COS)	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list:

		Any approved ME 5000 level class as listed in the catalog
	BS in Environmental Science + ME 3455, ME 2355 (COS)	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Math + ME 3455, ME 2355 (COS)	Complete the following: ME 5650 Advanced Mechanics of Materials ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Bioengineering	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Chemical Engineering + ME 3455, ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Civil Engineering + ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Environmental Engineering + ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Mechanical Engineering	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Industrial Engineering + ME 3455, ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Electrical Engineering + ME 3455, ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
MS in Mechanical Engineering, Mechatronics Concentration	BS in Computer Engineering + ME 3455, ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Computer Science + ME 3455, ME 4555 (Khoury)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Physics + ME 3455, ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Chemistry + ME 3455, ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Biology + ME 3455, ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Environmental Science + ME 3455, ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Math + ME 3455, ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list:

		Any approved ME 5000 level class as listed in the catalog
MS in Mechanical Engineering, Thermofluids Concentration	BS in Bioengineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Chemical Engineering + ME 3475, ME 4570	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in CIvil Engineering + ME 3475	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Environmental Engineering + ME 3475	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Mechanical Engineering	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Industrial Engineering + ME 3475	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Electrical Engineering + ME 3475, ME 4570	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Computer Engineering + ME 3475, ME 4570	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Computer Science + ME 3475, ME 4570 (Khoury)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Physics + ME 3475, ME 4570 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Chemistry + ME 3475, ME 4570 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Biology + ME 3475, ME 4570 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Environmental Science + ME 3475, ME 4570 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Math + ME 3475, ME 4570 (COS)	Complete the following: ME 6200 Mathematical Methods for Mechanical Engineers Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	All COE Undergraduate Majors	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Computer Science (Khoury)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Physics (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Chemistry (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Biology (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog

		*Equivalent courses may be substituted
MS in Operations Research	BS in Environmental Science (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Math (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Psychology + MATH 2341, IE 4XXX (COS)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Business Administration + MATH 2341, IE 4XXX (DMSB)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Economics + MATH 2341 (CSSH)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
	BS in Sociology + MATH 2341, IE 4XXX (CSSH)	Complete the following: IE 6200 Engineering Probability and Statistics* OR 6205 Deterministic Operations Research* Select remaining courses from this list: Any approved EMGT, IE, or OR 5000 and 6000 level class as listed in the catalog *Equivalent courses may be substituted
MS in Robotics, Mechanical Engineering Concentration	BS in Bioengineering	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Chemical Engineering + ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Civil Engineering + ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Environmental Engineering + ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Mechanical Engineering	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Industrial Engineering	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Electrical Engineering + ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Computer Engineering + ME 4555	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Computer Science + ME 4555 (Khoury)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	BS in Physics + ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list:

			Any approved ME 5000 level class as listed in the catalog
		BS in Chemistry + ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
		BS in Biology + ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
		BS in Environmental Science + ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
		BS in Math + ME 4555 (COS)	Complete the following: ME 5250 Robot Mechanics and Control ME 6200 Mathematical Methods for Mechanical Engineers 1 Select remaining courses from this list: Any approved ME 5000 level class as listed in the catalog
	MS in Data Architecture and Management	All COE Undergraduate Majors	Select up to four of the following: INFO 6210 Database Management and Database Design INFO 7275 Advanced Database Management Systems INFO 7370 Designing Advanced Data Architectures for Business Intelligence INFO 6105 Data Science Engineering Methods and Tools
		All Khoury Undergraduate Majors (Khoury)	Select up to four of the following: INFO 6210 Database Management and Database Design INFO 7275 Advanced Database Management Systems INFO 7370 Designing Advanced Data Architectures for Business Intelligence INFO 6105 Data Science Engineering Methods and Tools
	MS in Information Systems	All COE Undergraduate Majors	Select up to four of the following: INFO 5100 Application Engineering and Development INFO 6250 Web Development Tools and Methods INFO 6150 Web Design and User Experience Engineering INFO 6350 Smartphones-Based Web Development
		All Khoury Undergraduate Majors (Khoury)	Select up to four of the following: INFO 5100 Application Engineering and Development INFO 6250 Web Development Tools and Methods INFO 6150 Web Design and User Experience Engineering INFO 6350 Smartphones-Based Web Development
	MS in Software Engineering Systems	All COE Undergraduate Majors	Graduate Course Sharing: Select up to four of the following: CSYE 6200 Concepts of Object-Oriented Design CSYE 6220 Enterprise Software Design CSYE 6225 Network Structures and Cloud Computing INFO 6205 Program Structure and Algorithms
		All Khoury Undergraduate Majors (Khoury)	Graduate Course Sharing: Select up to four of the following: CSYE 6200 Concepts of Object-Oriented Design CSYE 6220 Enterprise Software Design CSYE 6225 Network Structures and Cloud Computing INFO 6205 Program Structure and Algorithms
	MS in Cyber-Physical Systems	All COE Undergraduate Majors	Graduate Course Sharing: Complete the following: CSYE 6510 Fundamentals of the Internet of Things Select remaining courses from this list: CSYE 6200 Concepts of Object-Oriented Design CSYE 6530 Connected Devices INFO 6105 Data Science Engineering Methods and Tools TELE 5330 Data Networking
		All Khoury Undergraduate Majors (Khoury)	Graduate Course Sharing: Complete the following: CSYE 6510 Fundamentals of the Internet of Things Select remaining courses from this list: CSYE 6200 Concepts of Object-Oriented Design CSYE 6530 Connected Devices INFO 6105 Data Science Engineering Methods and Tools TELE 5330 Data Networking
	MS in Telecommunication Networks	All COE Undergraduate Majors	Complete the following: TELE 5330 Data Networking Select remaining courses from this list: TELE 5340 Telecom Public Policy and Business Management TELE 5350 Telecom and Network Infrastructure TELE 5360 Internet Protocols and Architecture TELE 5600 Linux/UNIX for Network Engineers TELE 6350 Unified Communications and Collaboration
		All Khoury Undergraduate Majors (Khoury)	Complete the following: TELE 5330 Data Networking Select remaining courses from this list: TELE 5340 Telecom Public Policy and Business Management TELE 5350 Telecom and Network Infrastructure TELE 5360 Internet Protocols and Architecture TELE 5600 Linux/UNIX for Network Engineers TELE 6350 Unified Communications and Collaboration
COS	**MA/MS Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program** **(Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
	Applied Math	All math majors OR a Junior or Senior	Any 4 graduate courses in the MS in Applied Math program
			CHEM 5620 Protein Chemistry

Biotechnology (17 credits)	Biology, Biochemistry and Cell and Molecular Biology	BIOL 5591 Advanced Genomics BIOT 5120 Foundations in Biotechnology BIOT 5631 Cell Culture Process for Biopharmaceutical Production BIOT 5219 The Biotech Enterprise BIOT 6214 Experimental Design and Biostatistics
	Biotechnology (CPS) or Chemistry (COS)	BIOT 5120 Foundations in Biotechnology BIOT 5631 Cell Culture Processes for Biopharmaceutical Production BIOT 5219 The Biotech Enterprise BIOT 5145 Basic Biotech Lab Skills OR if enrolling in Enterprise concentration BIOT 1 credit elective CHEM 5620 Protein Chemistry BIOL 6299 Molecular Cell Biology for Biotechnology BIOT 6214 Experimental Design and Biometrics BIOT 6500 Professional Development for Co-Op (CPS students)
Bioinformatics	Behavioral Neuroscience	BINF 6308 Bioinformatics Computational Methods 1 BINF 6309 Bioinformatics Computational Methods 2 BIOL 5587 Comparative Neurobiology 5000+ level BIOL course
	Biology, Data Science and Behavioral Neuroscience, Computer Science and Behavioral Neuroscience	BINF 6308 Bioinformatics Computational Methods 1 BINF 6309 Bioinformatics Computational Methods 2 5000+ level BIOL course 5000+ level BIOL course
	Biochemistry	BINF 6308 Bioinformatics Computational Methods 1 BINF 6309 Bioinformatics Computational Methods 2 CHEM 5260 Protein Chemistry
	Biochemistry and Data Science	BINF 6308 Bioinformatics Computational Methods 1 BINF Bioinformatics Computational Methods 2 CHEM 5620 Protein Chemistry BIOL 5100 Biology Colloquium DS or CS 5000+ level course listed under Computer Science electives
	Biotechnology (CPS)	BINF 6308 - Bioinformatics Computational Methods 1 BINF 6309 - Bioinformatics Computational Methods 2 BIOL 6381 - Ethics in Biological Research BIOT 5219 - The Biotechnology Enterprise BINF 6200 - Bioinformatics Programming
	Cell and Molecular Biology	BINF 6308 Bioinformatics Computational Methods 1 BINF 6309 Bioinformatics Computational Methods 2 BIOL 5591 Advanced Genomics 5000 level course listed as intermediate/advanced
	Computer Science (Khoury)	BINF 6308 Bioinformatics Computational Methods 1 BIOL 6309 Bioinformatics Computational Methods 2 2 5000+ level course listed under Computer Science electives
	Computer Science and Biology	BINF 6308 Bioinformatics Computational Methods 1 BIOL 6309 Bioinformatics Computational Methods 2 5000+ level course listed under Computer Science elective courses or graduate equivalent course
		5000+ level course listed under Biology Intermediate and Advanced courses
Environmental Science and Policy	Environmental Studies, Environmental Science, Marine Biology and Ecology and Evolutionary Biology and CSSH majors	PPUA 6101 Environmental Science & Policy Seminar 1 ENVR 6102 Environmental Science & Policy Seminar 2 ENVR 5210 Environmental Planning, ENVR 5220 Ecosystem Management OR ENVR 5450 Systems Modeling PPUA 5260 Ecological Economics, PPUA 5264 Energy Transitions OR PPUA 5268 International Environmental Policy
Chemistry	Chemistry	CHEM 5261 Principles of Chemical Biology for Chemists with CHEM 5622 Lab CHEM 5628 Principles of Spectroscopy of Organic Compounds 3 5000+ level Chemistry courses
Chemistry Marine Biology	Biochemistry	CHEM 5620 Protein Chemistry BIOL 6401 Research Methods and Critical Analysis in Molecular Cell Biology 3 5000 + level courses
	BS in Marine Biology BS in Ecology and Evolutionary Biology, BS in Environmental and Sustainability Sciences Earth, Oceans, and Environmental Change concentration & Conservation, Restoration, and Management concentration)	Undergraduate Summer II Semester Marine Science Center/Coastal Sustainability Institute Nahant, MA • EEMB 5546 Sustainability of the land-sea interface (3 SH) • EEMB 5525 Advanced Field Methods (3 SH) • EEMB 5589 Dive Research Methods (2 SH) Undergraduate Fall Semester Abroad • EEMB 5508: Marine Birds and Mammals (3 SH) • EEMB 5520: Tropical Marine Ecology (2 SH) • EEMB 5538 Conservation and Restoration of Marine Systems (3 SH) • EEMB 5506/07: Biology and Ecology of Fishes (2+1 SH) • EEMB 5504/05: Biology of Corals (2+1 SH) • EEMB 5518/19: Ocean and Coastal Processes (2+1 SH) • EEMB 5533/5535 Marine Invertebrate Zoology and Botany (2+1 SH) Graduate Spring Semester Boston Main Campus • EEMB 5305 Professional development for Ocean Sciences (2 SH) • EEMB 5542 Marine Spatial Planning (4 SH) • Elective (graduate-level) (4 SH) Graduate Summer Semester • EEMB 7674 Marine Biology Research Project (1 SH)

			Graduate Fall Semester (Second Year) • EEMB 7674 Marine Biology Research Project (1 SH)
CPS	**MA/MS Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
	MPS Analytics	BS Information Technology	ALY 6000/ALY 6010/ALY 6015/ALY 6030/ALY 6050/ALY 6070/ALY elective credit
	MS Commerce and Economic Development	BS Finance and Accounting Management	CED 6050 - Commerce and Economic Development CED 6010 - Applied Microeconomic Theory 1 CED 6020 - Applied Macroeconomic Theory 1 CED 6030 - Mathematical Methods for Economics 1 CED 6040 - Applied Econometrics CED Elective - Course CED Elective CED Elective - Course CED Elective
	MPS Enterprise Intelligence	BS Analytics	EAI 6000/EAI 6010/EAI 6020/EAI 6080/EAI 6030/ALY 6110/EAI elective credit
	MPS Geospatial Services	BS Analytics	GIS 5103/GIS 5201/RMS 5105/GIS elective credit
		BS Information Technology	ITC 6300/ITC 6460/GIS 5103/RMS5105/GIS elective credit
	MS Human Resource Management	BS Management	HRM 6025 - Workforce Analytics HRM 6042 - Strategic Workforce Planning HRM 6060 - Organizational Design HRM 6005 - Creating a High-Performance Organization: Strategic Organizational and HRM Choices HRM Elective - Course HRM Elective HRM Elective - Course HRM Elective
	MPS Informatics	BS Analytics	ALY 6040/ALY 6110/ITC 6400/ITC 6010/ITC 6035/ITC 6020/ITC elective credit
		BS Project Management	ITC 6400 - Foundations of Informatics ITC 6000 - Database Management Systems ITC 6010 - Information Technology Strategy and Governance ITC 6035 - Information Technology Project Management ITC 6035 Information Technology Project Management would be waived, and students would be allowed to choose two (2) ITC electives - Course ITC 6035 Information Technology Project Management would be waived, and students would be allowed to choose two (2) ITC electives not Found ITC 6020 - Information Systems Design and Development
		BS Information Technology	ITC 6300/ITC 6400/ITC 6010/ITC elective credit
	MS Nonprofit Management	BS Management	NPM 6100 - Strategic Management for the Nonprofit Sector NPM 6110 - Legal and Governance Issues in Nonprofit Organizations NPM 6120 - Financial Management for Nonprofit Organizations NPM 6130 - Fundraising and Development for Nonprofit Organizations NPM 6140 - Grant and Report Writing NPM 6962 - Elective
	MS Project Management	BS Information Technology	ITC 4500 - IT Project Management PJM 6000 - Project Management Practices PJM 6005 - Project Scope Management PJM 6015 - Project Risk Management PJM 6025 - Project Scheduling and Cost Planning PJM 6135 - Project Quality Management PJM 6205 - Leading and Managing Technical Projects PJM 6810 - Principles of Agile Project Management
		BS Management	PJM 6005 - Project Scope Management PJM 6015 - Project Risk Management PJM 6025 - Project Scheduling and Cost Planning PJM 6135 - Project Quality Management PJM 6962 - Elective PJM 6962 - Elective
	MS Regulatory Affairs	BS Biotechnology	RGA 6000/RGA 6001/RGA 6203/RGA 6106/RGA 6202
	Teaching, Elementary Licensure, MAT	BS Psychology	Students will be required to take a total of 20 QH. 16 QH during term 8 and 4 QH in term 9. EDU 6107 Inclusion, Equity and Diversity (4 QH) EDU 6086 Foundations of Literacy Development and Instruction (4 QH) EDU 6102 Reflection, Community Engagement and Agency in (2 QH) Education EDU 6101 Critical Issues in Education: Past and Present (2 QH) EDU 6104 Child and Adolescent Development, Learning, and Teaching (4 QH) EDU 6051 Culture, Equity, Power & Influence (4 QH)
	Cross-College Graduate Program	**UG Program**	
	MS Applied Behavior Analysis (Bouvé)	BS Psychology (CPS)	CAEP 6326/CAEP 6329/CAEP 6327/CAEP 6328/CAEP 6334
	MS Applied Nutrition	BS Health Science (Bouvé)	NTR 6100 - Advanced Nutrition and Metabolism NTR 6110 - Medical Nutrition Therapy NTR 6112 - Research Methods in Nutrition

			NTR 6115 - Health Promotion/Disease Prevention NTR 6118 - Clinical Health Behavior Change
	MS Biotechnology (COS)	BS Biotechnology (CPS)	BIOT 5120/BIOT 5631/BIOT 5219/BIOT 5145/BIOT 6299/BIOT 6214/CHEM 5620
	MS Computer Science (Khoury)	BS Information Technology (CPS)	ALIGN: CS 5001/CS 5200/CS 5004/CS 5006/CS 5007. MSCS: CS 5800/CS 5500/CS 5200/CS 5600
	MS Management (MS)	BS Finance and Accounting Management	ENTR 6200 - Enterprise Growth and Innovation INTB 6200 - Managing the Global Enterprise HRMG 6200 - Managing People and Organizations MGMT 6214 - Negotiations MKTG 6200 - Creating and Sustaining Customer Markets FINA 6309 - Foundations of Accounting and Finance ACCT 6200 - Financial Reporting and Managerial Decision Making 1 SCHM 6201 - Operations and Supply Chain Management FINA 6309 - Foundations of Accounting and Finance
	MS Public Health (Bouvé)	BS Health Management (CPS)	PHTH 5212/ PHTH 5214/PHTH 5202/PHTH 5210/PHTH 6204
CSSH	**MA/MS Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
	Security and Resilience Studies	All majors	POLS 7341: Security and Resilience Policy; CRIM 7200: Criminology or POLS 7369: International Security or POLS 7346: Resilient Cities or POLS 7343: Counterterrorism or POLS 7441: Cyberconflict or PPUA 5390: Special Topics in Public Policy and Urban Affairs
	Political Science		pending
	MPP	All majors	PPUA 6502 Economic Institutions and Analysis; INSH 6500 Statistical Analysis; INSH 6300 Research Methods
	MPA		PPUA 6502 Economic Institutions and Analysis; PPUA 6505 Public Budgeting and Financial Management; INSH 6500 Statistical Analysis
	Urban Planning and Policy		PPUA 6201 The 21st Century City: Urban Opportunities and Challenges; PPUA 6502 or SUEN 6340; Gateway Course; Methods Course
	Economics		ECON 5105 Mathematics and Statistics for Economists or ECON 6105 Advanced Mathematics and Statistics for Economists ECON 5110 Microeconomic Theory or ECON 6110 Advanced Microeconomic Theory ECON 5120 Macroeconomic Theory or ECON 6120 Advanced Macroeconomic Theory ECON 5140 Applied Econometrics or ECON 6140 Advanced Applied Econometrics
	English		ENGL 5103 Proseminar; ENGL 7281, 7282, or 7283; ENGL 7284 or 7351; ENGL 7360 or 7395
	History		***Public History Concentration*** - HIST 5101 Methodology I; HIST 5237 Issues and Methods in Public History. ***World History Concentration*** - HIST 5101 Methodology I; HIST 5102 Methodology II
	Criminology and Criminal Justice		CRIM 7200 Criminology or CRIM 7202 Criminal Justice Process; INSH 6500 Statistics or INSH 6300 Research Methods
	International Affairs		POLS 7387 Global Governance; SOCL 7221 Globalization, Development, and Social Justice; Social Science Methods Core Course; Public Policy Core Course
	Urban Informatics		PPUA 5262 Big Data for Cities; PPUA 5263 Geographic Information Systems for Urban and Regional Policy; INSH 5301 Introduction to Computational Statistics; INSH 5302 Information Design and Visual Analytics
DMSB	**MA/MS Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
	MS in Accounting	BSBA with Accounting Major	
	MS in Business Analytics	All STEM majors and/or non-STEM majors with the requirement of college level statistics course with a final grade of B or better	**CHOOSE TWO**: MKTG 6200 Creating and Sustaining Customer Markets, MKTG 6234 Marketing Analytics, MISM 6200 Introduction to Business Analytics, MISM 6203 Business Analytics Methods
	MS in Finance (Quantitative Finance)	Mathematics, Economics, Statistic, Computer Science	FINA 6301 Corporate Finance, FINA 6203 Investment Analysis
	MS in International Management	International affairs, Political science	INTB 6226 Becoming a Global Leader, INTB 6200 International Business Management
	MS in Management	Finance and Accounting Management, BS (CPS) Management, BS (CPS)	ENTR 6200 - Enterprise Growth and Innovation INTB 6200 - Managing the Global Enterprise HRMG 6200 - Managing People and Organizations MGMT 6214 - Negotiations MKTG 6200 - Creating and Sustaining Customer Markets FINA 6309 - Foundations of Accounting and Finance ACCT 6200 - Financial Reporting and Managerial Decision Making 1 SCHM 6201 - Operations and Supply Chain Management FINA 6309 - Foundations of Accounting and Finance
Khoury	**MA/MS Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
			Up to four graduate courses may be taken while an undergraduate. It is strongly recommended that students take the following courses: CS 5400 Principles of Programming Language; CS 5600 Computer Systems; CS 5800 Algorithms Below is a standard list of substitutions for graduate replacements of undergraduate degree requirements. However, these are only guidelines and specific substitutions require consultation with the undergraduate major advisor to ensure fulfillment of undergraduate degree requirements. Undergraduate Requirement CS 3000 Algorithms & Data

	MS in Computer Science	Students in Computer Science, Information Science, Data Science, and Cybersecurity degree programs can complete a PlusOne with the MS in Computer Science degree. Includes combined degrees with these majors.	CS 3200 Database Design CS 3650 Computer Systems CS 3700 Networks & Distributed Systems CS 4100 Artificial Intelligence CS 4150 Game Artificial Intelligence CS 4300 Computer Graphics CS 4400 Programming Languages CS 4500 Software Development CS 4520 Mobile Application Development CS 4550 Web Development CS 4850 Building Game Engines IS 4300 Human Computer Interaction
	MS in Data Science	Students in Data Science degree programs can complete a PlusOne with the MS in Data Science degree. Includes combined degrees with Data Science.	Students in Data Science degree programs can complete a PlusOne with the MS in Data Science degree. Students must complete all four listed masters courses while in their undergraduate program. All four will be applied to both the undergraduate and graduate degree programs. Students who have already taken the undergraduate version of any of the below courses are not eligible for the PlusOne degree in Data Science. Undergraduate Requirement DS 3000 Foundations of Data Science DS 4400 Machine Learning and Data Mining 1 DS 4420 Machine Learning and Data Mining 2
	MS in Data Science	Students in Data Science degree programs can complete a PlusOne with the MS in Data Science degree. Includes combined degrees with Data Science.	CS 3000 Algorithms & Data
	MS in Cybersecurity	Students in the Cybersecurity degree programs can complete a PlusOne with the MS in Cybersecurity degree. Includes combined degrees with Cybersecurity.	Up to four graduate level courses may be applied toward both the undergraduate and graduate degree programs. Undergraduate Course Requirement Cybersecurity Elective CS 4170 The Law, Ethics and Policy of Data and Digital Technologies Cybersecurity Elective Cybersecurity Elective CS 4710 Mobile and Wireless Systems CS 5770 Software Vulnerabilities and Security CS 4740 Network Security CS 4770 Cryptography CS 3650 Computer Systems CS 4500 and CS 4501 Software Development CS 3700 Networks and Distributed Systems
LAW	**Degree Name**	**Eligible Undergrad Majors**	**Grad Courses Recommended to be taken during Undergrad Program (Where fewer than four courses are listed, the remaining courses will be determined on the basis of the student's program in consultation with the graduate and undergraduate advisors)**
	JD (the JD program)	All	The first year of the JD program has a set curriculum that includes LAW 6100: Civil Procedure (5 credits), LAW 6105: Property (4 credits), LAW 6106: Torts (4 credits), LAW 6160: Legal Skills in Social Context (4 credits in total), LAW 6165: Legal Skills in Social Context: Legal Research & Writing Component (4 credits in total), LAW 6101: Constitutional Law (4 credits), LAW 6102: Contracts (5 credits), and LAW 6103: Criminal Justice (4 credits). Individual students and advisors must determine whether these courses can be used to fulfill undergraduates' curricular requirements.