

Course Requirements and Registration Priorities School of Engineering (Undergraduate), Fall 2017

| # | Abbr | Title | Cr(US) | Cr(ECTS) | PreRequisite | CoRequisite | AntiRequisite | 1st priority registration | 2nd priority registration | 3rd priority registration | 4th priority registration |
|-----------------------------|----------|--|--------|----------|---|---|---------------|---------------------------|---------------------------|---------------------------|---------------------------|
| SEng | | | | | | | | | | | |
| Chemical Engineering | | | | | | | | | | | |
| 1 | ECHE 126 | Introduction to Chemical Engineering | 3 | 6 | | | | | | | |
| 2 | ECHE 222 | Chemistry I | 3 | 6 | | | | | | | |
| 3 | ECHE 319 | Chemical Engineering Thermodynamics | 3 | 6 | | | | | | | |
| 4 | ECHE 333 | Separation Processes-I | 3 | 6 | ECHE 319 Chemical Engineering Thermodynamics (D and above) | | | | | | |
| 5 | ECHE 369 | Transport Phenomena-II | 3 | 6 | | | | | | | |
| 6 | ECHE 385 | Research Practice | 3 | 6 | | | | | | | |
| 7 | ECHE 418 | Capstone project 1 | 3 | 6 | ECHE 323 Computational methods in Chemical Engineering-I (D and above) | | | | | | |
| 8 | ECHE 419 | Advanced Process Simulation | 3 | 6 | ECHE 323 Computational methods in Chemical Engineering-I (D and above) | ECHE 482 Computational Methods in Chemical Engineering-II (D and above) | | | | | |
| 9 | ECHE 481 | Chemical Reaction Engineering | 3 | 6 | ECHE 126 Introduction to Chemical Engineering (D and above) AND BENG 124 Engineering Mathematics I (D and above) AND BENG 225 Engineering Mathematics II (D and above) | | | | | | |
| 10 | ECHE 482 | Computational Methods in Chemical Engineering-II | 3 | 6 | ECHE 319 Chemical Engineering Thermodynamics (D and above) AND ECHE 333 Separation Processes-I (D and above) AND ECHE 383 Separation Processes II (D and above) AND ECHE 481 Chemical Reaction Engineering (D and above) AND ECHE 323 Computational methods in Chemical Engineering-I (D and above) | | | | | | |
| 11 | ECHE 484 | Multi-Phase Flows | 3 | 6 | ECHE 319 Chemical Engineering Thermodynamics (D and above) AND ECHE 270 Transport Phenomena-I (D and above) | | | | | | |
| Civil Engineering | | | | | | | | | | | |

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|--|---------|--|---|---|---|--|--|--|--|--|
| 12 | ECE 215 | Surveying | 3 | 6 | | | | | | |
| 13 | ECE 216 | Civil Engineering CAD | 3 | 6 | | | | | | |
| 14 | ECE 217 | Structural Analysis I | 3 | 6 | BENG 117 Engineering Mechanics (D and above) | | | | | |
| 15 | ECE 302 | Civil Engineering Materials | 3 | 6 | BENG 221 Engineering Materials (D and above) | | | | | |
| 16 | ECE 307 | Engineering Geology and Rock Mechanics | 3 | 6 | | | | | | |
| 17 | ECE 318 | Structural Design - Concrete | 3 | 6 | ECE 479 Structural Analysis II (C- and above) | | | | | |
| 18 | ECE 401 | Capstone Project 1 | 3 | 6 | | | | | | |
| 19 | ECE 404 | Construction Technologies and Processes | 3 | 6 | BENG 148 Engineering Practice (D and above) AND ECE 302 Civil Engineering Materials (D and above) | | | | | |
| 20 | ECE 405 | Environmental Engineering | 3 | 6 | ECE 473 Environmental Systems (D and above) OR ECE 218 Environmental Chemistry (D and above) | | | | | |
| 21 | ECE 416 | Highway Engineering | 3 | 6 | ECE 302 Civil Engineering Materials (D and above) | | | | | |
| 22 | ECE 473 | Environmental Systems | 3 | 6 | | | | | | |
| Electrical and Electronic Engineering | | | | | | | | | | |
| 23 | EEE 212 | Signals and Systems | 3 | 6 | BENG 225 Engineering Mathematics II (D and above) | | | | | |
| 24 | EEE 238 | Digital Signal and Image Processing | 3 | 6 | | | | | | |
| 25 | EEE 250 | Microelectronic Devices and Circuits | 3 | 6 | BENG 114 Introduction to Electrical Systems (D and above) | | | | | |
| 26 | EEE 251 | Electronic Engineering Design Principles | 3 | 6 | BENG 114 Introduction to Electrical Systems (D and above) | | | | | |
| 27 | EEE 342 | Electromagnetics | 3 | 6 | | | | | | |
| 28 | EEE 345 | Power Electronics | 3 | 6 | | | | | | |
| 29 | EEE 382 | Antennas and Propagation | 3 | 6 | | | | | | |
| 30 | EEE 384 | Digital Integrated Circuits Design | 3 | 6 | EEE 250 Microelectronic Devices and Circuits (C- and above) | | | | | |
| 31 | EEE 435 | Digital Communications | 3 | 6 | | | | | | |
| 32 | EEE 437 | Capstone Project 1 | 3 | 6 | | | | | | |
| 33 | EEE 448 | Power Transmission and Distribution plants | 3 | 6 | | | | | | |
| 34 | EEE 450 | RF and Microwave Circuit Design | 3 | 6 | | | | | | |
| 35 | EEE 451 | High Voltage Engineering | 3 | 6 | | | | | | |
| 36 | EEE 452 | Power Systems Protection | 3 | 6 | | | | | | |

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| 37 | EEE 482 | Mobile Communications | 3 | 6 | EEE 239 Communication systems (C- and above) | | | | | | |
| Mechanical Engineering | | | | | | | | | | | |
| 38 | EME 253 | Computer Aided Engineering | 3 | 6 | | | | | | | |
| 39 | EME 254 | Mechanics of Materials | 3 | 6 | | | | | | | |
| 40 | EME 262 | Machine Dynamics I | 3 | 6 | | | | | | | |
| 41 | EME 354 | Advanced Control Systems | 3 | 6 | BENG 219 Control Systems (D and above) | | | | | | |
| 42 | EME 358 | Heat Transfer | 3 | 6 | | | | | | | |
| 43 | EME 361 | Machine Design | 3 | 6 | | | | | | | |
| 44 | EME 410 | Aerodynamics | 3 | 6 | EME 357 Fluid Mechanics 2 (D and above) | | | | | | |
| 45 | EME 412 | Heating, Ventilating, and Air Conditioning | 3 | 6 | | | | | | | |
| 46 | EME 413 | Computer Aided Geometric Design | 3 | 6 | EME 253 Computer Aided Engineering (C- and above) | | | | | | |
| 47 | EME 451 | Capstone project 1 | 3 | 6 | | | | | | | |
| 48 | EME 456 | Feasibility Analysis of Clean Energy Technologies | 3 | 6 | | | | | | | |
| 49 | EME 463 | Machine Dynamics II | 3 | 6 | | | | | | | |
| 50 | EME 467 | Vehicle Propulsion Systems | 3 | 6 | | | EME 456 Feasibility Analysis of Clean Energy Technologies (C- and above) | | | | |
| 51 | EME 486 | Oscillations of mechanical systems | 3 | 6 | | | | | | | |
| School of Engineering | | | | | | | | | | | |
| 52 | BENG 117 | Engineering Mechanics | 3 | 6 | | | | | | | |
| 53 | BENG 124 | Engineering Mathematics I | 3 | 6 | | | | | | | |
| 54 | BENG 145 | Occupal & Environment Health and Safety | 3 | 6 | | | | | | | |
| 55 | BENG 146 | Programming for Engineers | 3 | 6 | | | | | | | |
| 56 | BENG 215 | Sensors and Actuators | 3 | 6 | | | | | | | |
| 57 | BENG 221 | Engineering Materials | 3 | 6 | | | | | | | |
| 58 | BENG 228 | Engineering Mathematics III | 3 | 6 | BENG 124 Engineering Mathematics I (D and above) AND BENG 225 Engineering Mathematics II (D and above) | | | | | | |
| 59 | BENG 304 | Internship | 2 | 4 | | | | | | | |
| 60 | BENG 308 | Internship | 4 | 8 | | | | | | | |
| 61 | BENG 312 | Internship | 6 | 12 | | | | | | | |
| 62 | BENG 405 | Project Management | 3 | 6 | | | | | | | |