Course Requirements and Registration Priorities School of Engineering (Undergraduate), Fall 2016

| # | Abbr | Title | Cr(US) | Cr(ECTS) | PreRequisite | CoRequisite | AntiRequisite | 1st priority registration | 2nd priority registration | 3rd priority registration | 4th priority registration |
|----|----------|---|--------|----------|---|--|---------------|---------------------------|---------------------------|---------------------------|---------------------------|
| | | | | | SEn | 9 | | | | | |
| | | | | | Chemical En | ngineering | | | | | |
| 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 321 | Chemistry II | 3 | 6 | | | | | | | |
| 5 | ECHE 331 | Process Control and Optimization | 3 | 6 | | | | | | | |
| 6 | ECHE 333 | Separation Processes-I | 3 | 6 | ECHE 319 Chemical Engineering Thermodynamics (D and above) | | | | | | |
| 7 | ECHE 369 | Transport Phenomena-II | 3 | 6 | | | | | | | |
| 8 | ECHE 418 | Capstone project 1 | 3 | 6 | ECHE 323 Computational methods in Chemical Engineering-I (D and above) | | | | | | |
| 9 | 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) | | | | | |
| 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-l (D and above) | | | | | | |
| | | | | | Civil Engi | neering | | | | | |
| | 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 300 | Hydraulic Systems | 3 | 6 | | | | | |
| 16 | ECE 303 | Construction Management and Practice | 3 | 6 | BENG 148 Engineering Practice (D and above) | | | | |
| 17 | ECE 307 | Engineering Geology and Rock Mechanics | 3 | 6 | | | | | |
| 18 | ECE 314 | Structural Engineering Applications I | 3 | 6 | ECE 213 Structural Engineering Analysis (D and above) OR ECE 217 Structural Analysis I (D and above) | | | | |
| 19 | ECE 401 | Capstone Project 1 | 3 | 6 | | | | | |
| 20 | ECE 404 | Construction Technologies and Processes | 3 | 6 | BENG 148 Engineering Practice (D and above) AND ECE 302 Civil Engineering Materials (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 Electr | ronic Engineering | | | |
| 23 | EEE 238 | Digital Signal and Image Processing | 3 | 6 | | | | | |
| 24 | EEE 250 | Microelectronic Devices and Circuits | 3 | 6 | BENG 114 Introduction to Electrical Systems (D and above) | | | | |
| 25 | EEE 251 | Electronic Engineering Design Principles | 3 | 6 | BENG 114 Introduction to Electrical Systems (D and above) | | | | |
| 26 | EEE 341 | Digital Electronic System Design | 3 | 6 | | | | | |
| 27 | EEE 342 | Electromagnetics | 3 | 6 | | | | | |
| 28 | EEE 343 | Embedded Microcontrollers | 3 | 6 | | | | | |
| 29 | EEE 345 | Power Electronics | 3 | 6 | | | | | |
| 30 | EEE 382 | Antennas and Propagation | 3 | 6 | | | | | |
| 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 | | | | | |
| | | | | | Mechanical E | ngineering | | | |
| 37 | EME 253 | Computer Aided Engineering | 3 | 6 | | | | | |
| 38 | EME 254 | Mechanics of Materials | 3 | 6 | | | | | |
| 39 | EME 352 | Computational Fluid Dynamics | 3 | 6 | | | | | |
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| 40 | EME 357 | Fluid Mechanics 2 | 3 | 6 | | | | | |
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| 41 | EME 358 | Heat Transfer | 3 | 6 | | | | | |
| 42 | EME 361 | Machine Design | 3 | 6 | | | | | |
| 43 | EME 451 | Capstone project 1 | 3 | 6 | | | | | |
| 44 | EME 464 | Materials and Manufacturing 1 | 3 | 6 | | | | | |
| 45 | EME 467 | Vehicle Propulsion Systems | 3 | 6 | | | EME 456 Feasibility Analysis of Clean Energy Technologies (C- and above) | | |
| 46 | EME 485 | Applied Statistics and Probability | 3 | 6 | EME 485 Applied Statistics and Probability (D and above) | | | | |
| 47 | EME 486 | Oscillations of mechanical systems | 3 | 6 | | | | | |
| | | | | | School of En | gineering | | | |
| 48 | BENG 117 | Position and an Marchanian | | | | | | | |
| 40 | | Engineering Mechanics | 3 | 6 | | | | | |
| 49 | BENG 124 | Engineering Mechanics Engineering Mathematics I | 3 | 6 | | | | | |
| 50 | BENG 124 BENG 145 | | | | | | | | |
| | | Engineering Mathematics I Occupal & Environment Health | 3 | 6 | | | | | |
| 50 | BENG 145 | Engineering Mathematics I Occupal & Environment Health and Safety | 3 | 6 | | | | | |
| 50 51 | BENG 145 BENG 146 | Engineering Mathematics I Occupal & Environment Health and Safety Programming for Engineers | 3 3 3 | 6 6 6 | | | | | |
| 50 51 52 53 | BENG 145 BENG 146 BENG 201 | Engineering Mathematics I Occupal & Environment Health and Safety Programming for Engineers Engineering Economy | 3 3 3 3 | 6 6 6 6 | | | | | |
| 50 51 52 53 54 | BENG 145 BENG 146 BENG 201 BENG 215 | Engineering Mathematics I Occupal & Environment Health and Safety Programming for Engineers Engineering Economy Sensors and Actuators | 3 3 3 3 3 | 6 6 6 6 | BENG 124 Engineering Mathematics I (D and above) AND BENG 225 Engineering Mathematics II (D and above) | | | | |
| 50 51 52 53 54 55 | BENG 146 BENG 201 BENG 215 BENG 221 | Engineering Mathematics I Occupal & Environment Health and Safety Programming for Engineers Engineering Economy Sensors and Actuators Engineering Materials | 3 3 3 3 3 3 | 6 6 6 6 6 | Mathematics I (D and above) AND BENG 225 Engineering | | | | |