**FIRST TERM**

|  |  |
| --- | --- |
| **Credit** | **Class** |
| 4 | MATH 0221  Calculus I |
| 3 | CHEM 0150 (previously Chem 0111)  General Chem Eng 1 |
| 4 | PHYS 0150  Phys for Eng 1 |
| 3 | ENGR 0017  Intro to Eng Analysis |
| 3 | ENGCMP 0005  Composition *1 (or a 650 or better on reading writing portion of SAT)* |
| 0 | ENGR 0081 Freshman Seminar 1 |
| **17** | **TOTAL** |

**THIRD TERM**

|  |  |  |
| --- | --- | --- |
| **Credit** | **Class** | **Pre/*Co* Req** |
| 4 | MATH 241  Calculus III | Calc II (C- or better) |
| 3 | MATH 1181  Linear Algebra | Calc II |
| 3 | ENGR 0022  Materials | Calc II, Phys for Eng 1 |
| 3 | ENGR 0132  Statics | Phys for Eng 1, *Calc II* |
| 3 | ME 0024  Intro ME Design | Intro Eng Analysis |
| 0 | ME 1085 Dept Seminar |  |
| **16** | **TOTAL** |  |

**FIFTH TERM**

|  |  |  |
| --- | --- | --- |
| **Credit** | **Class** | **Pre/*Co* Req** |
| 3 | ME 0071 Fluids | Calc II, *Diff Eq* |
| 3 | ENGR 0152  Rigid Body Dynamics | Calc II, Statics |
| 3 | ME 1026  Mechanical Design I | Statics, Mech of Matls, Materials |
| 3 | Engineering Elective |  |
| 3 | WOK (S&C, GH&C, A&CE) |  |
| 0 | ME 1085 Dept Seminar |  |
| **15** | **TOTAL** |  |

**SEVENTH TERM**

|  |  |  |
| --- | --- | --- |
| **Credit** | **Class** | **Pre/*Co* Req** |
| 3 | ME 1046  Measurements 2 | Meas 1 |
| 3 | ME 1054  Heat & Mass Transf | Intro Thermo, *Fluids* |
| 3 | ME 1095  Professional Practices | *Mechanical Design 2* |
| 3 | Dyn System Elective |  |
| 3 | WOK (S&C, GH&C, A&CE) |  |
| 0 | ME 1085 Dept Seminar |  |
| **15** | **TOTAL** |  |

**SECOND TERM**

|  |  |  |
| --- | --- | --- |
| **Credit** | **Class** | **Pre/*Co* Req** |
| 4 | MATH 0231  Calculus II | Calc I (C- or better) |
| 3 | CHEM 0151 with Lab (prevously Chem 0115)  General Chem Eng 2 | Chem Eng 1 |
| 4 | PHYS 0152  Phys for Eng 2 | Phys for Eng 1, *Calc II* |
| 3 | ENGR 0018  Intro Eng Computing | Intro to Eng Analy, *Calc I* |
| 3 | WOK (S&C, GH&C, A&CE) |  |
| 0 | ENGR 0082 Fresh. Seminar 2 |  |
| **17** | **TOTAL** |  |

**FOURTH TERM**

|  |  |  |
| --- | --- | --- |
| **Credit** | **Class** | **Pre/*Co* Req** |
| 3 | MATH 1271  Differential Eq’s | Calc III |
| 3 | ENGR 0142  Mechanics of Mat’ls | Statics, Calc II |
| 3 | EE 0031  Linear Circuits | Calc II, Phys for Eng 2 |
| 3 | ME 0040  Mat’l & Mfging | *Materials* |
| 3 | ME 0052  Intro Thermo | Phys for Eng 1, Chem I, *Calc III* |
| 3 | COMMRE 0052  Public Speaking |  |
| 0 | ME 1085 Dept Seminar |  |
| **18** | **TOTAL** |  |

**SIXTH TERM**

|  |  |  |
| --- | --- | --- |
| **Credit** | **Class** | **Pre/*Co* Req** |
| 3 | ME 1013  Dynamic Systems | Diff Eq, Intro to Eng Computing, Circuits, Dynamics, *Linear Alg* |
| 3 | ME 1027  Mechanical Design 2 | Intro ME Design, Mechanical Design 1 |
| 3 | ME 1044  Measurements I | Circuits, Diff Eq, *Dynamic Systems* |
| 3 | ME 1053  Applied Thermo | Intro Thermo |
| 3 | WOK (S&C, GH&C, A&CE) | Or ME TECH Elective |
| 0 | ME 1085 Dept Seminar |  |
| **15** | **TOTAL** |  |

**EIGHTH TERM**

|  |  |  |
| --- | --- | --- |
| **Credit** | **Class** | **Pre/*Co* Req** |
| 3 | ME 1099  Senior Project | Prof. Practices |
| 3 | ME 1071  Applied Fluids | Fluids |
| 3 | ME Tech Elective |  |
| 3 | ME Tech Elective | Or WOK |
| 3 | WOK (S&C, GH&C, A&CE) |  |
| 0 | ME 1085 Dept. Seminar |  |
| **15** | **TOTAL** |  |

**ENGINEERING ELECTIVES**

|  |  |  |
| --- | --- | --- |
| **Course** | **Pre/*Co* Req** | **Typical Term** |
| ENGR 1103  Engineering Economics | Sophomore or beyond | Fall, Spring, Summer |
| ENGR 1115  Engineering Leadership | Sophomore Status | Fall |
| CHE 0214  Intro to Chemical Process Design | Gen Chem Eng 2  Calc II, Phys for Eng 1 | Spring |
| CE 1105  Materials of Construction | *Mech of Matl’s* | Spring |
| CE 1330  Intro to Structural Analysis | CE 0110 (or Engr 0018 and permission) | Fall |
| CE 1503  Intro to Environmental Engineering | Gen Chem Eng 2 | Fall |
| CE 1610  Engineering & Sustainable Development | Sophomore  Status | Spring |
| CE 1811 Principles of Soil Mechanics | Mech of Matl’s | Fall |
| EE0445 Programming & Intro to Data Structures | Calc I, Intro to Eng Computing | Fall |
| EE 1552  Signals & Systems | Linear Circuits, Calc II | Fall |
| ME 1172  CADD/CAE | Intro ME Design | Spring |
| EE 1673  Control Systems | Calc III, *Diff EQ,* JME-BSE | Fall |
| EE 1177  Measurement & Industrial Control | Intro to Eng Comp, Linear Circuits | Spring |
| EE 1771\*\*  Electric Machines | Linear Circuits | Spring Sum |

***NOTE: Courses taken as an Engineering Elective cannot also be counted as a ME Technical Elective or Dynamic Systems Elective.***

**DYNAMIC SYSTEMS ELECTIVES**

|  |  |  |
| --- | --- | --- |
| **Course** | **Pre/*Co* Req** | **Typical Term** |
| ME 1061  Vehicle Dynamics | Intro to ME Design, Mech Design 2 | Fall |
| ME 1063  Simulation & Modeling in ME Design | ENGR 0152  ME 1013  ME 1027 | Fall |
| EE 1673  Control Systems | Calc III, *Diff EQ,* JME-BSE | Fall |
| EE 1177 Measurements and Industrial Controls | Intro to Eng Comp, Linear Circuits | Spring |
| EE 1771  Electric Machines | Linear Circuits | Spring Sum |
| CHE 0510  Intro to Computational Fluid Dynamics | ME 0071 Fluids | Spring |

***NOTE: Courses taken as a Dynamic Systems Elective cannot also be counted as an Engineering Elective or ME Technical Elective.***

**ME TECHNICAL ELECTIVES**

|  |  |  |
| --- | --- | --- |
| **Course** | **Pre/*Co* Req** | **Typical Term** |
| ME 1056  Energy | Applied Thermo | Fall |
| ME 1059  Heating, Ventilation, & Air Conditioning | Applied Thermo, *Heat & Mass Trans* | Fall |
| ME 1066  Fluid Power | ME 1027 Machine Dsgn 2 | Spring |
| ME 1172  CADD/CAE | Intro ME Design | Spring |
| ME 1173  Finite Element Methods | Intro Eng Comp, Diff Eq, Mech Design I | Spring |
| CHE 0510  Intro to Computational Fluid Dynamics | ME 0071 Fluids | Spring |
| EE 1177  Measurement & Industrial Control | Intro to Eng Comp, Linear Circuits | Spring |
| CHE 0520  Fuel & Energy Technology | MATH 0241, ME 1053 | Spring |

***NOTE: Courses taken as a ME Technical Engineering Elective cannot also be counted as an Engineering Elective or Dynamic Systems Elective.***