

| <b>1st Semester (Fall)</b>   |   | <b>13 credits</b> | <b>Prerequisites/Co-requisites</b>                                  |
|------------------------------|---|-------------------|---|
| COMP 208                     | Computers in Engineering                          | 3                 | P - MATH 140, MATH 141  |
| MATH 262                     | Intermediate Calculus                             | 3                 | P - MATH 141, MATH 133  |
| MECH 201                     | Introduction to Mechanical Engineering            | 2                 | -   |
| MECH 210                     | Mechanics 1                                       | 2                 | -   |
| EC                           | Elective - 1                                      | 3                 | -   |
| <b>2nd Semester (Winter)</b> |   | <b>17 credits</b> | <b>Prerequisites/Co-requisites</b>                                  |
| FACC 100                     | Introduction to the Engineering Profession        | 1                 | -   |
| MATH 263                     | Ordinary Differential Equations for Engineers     | 3                 | C - MATH 262  |
| MATH 264                     | Advanced Calculus for Engineers                   | 3                 | P - MATH 262 / C - MATH 263   |
| MECH 220                     | Mechanics 2                                       | 4                 | P - MECH 210, MATH 262 / C - MATH 263                               |
| MECH 262                     | Statistics and Measurement Laboratory             | 3                 | -   |
| MECH 289                     | Design Graphics                                   | 3                 | -   |
| <b>3rd Semester (Fall)</b>   |   | <b>16 credits</b> | <b>Prerequisites/Co-requisites</b>                                  |
| MATH 271                     | Linear Algebra and Partial Differential Equations | 3                 | P - MATH 263, MATH 264  |
| CIVE 207                     | Solid Mechanics                                   | 4                 | P - MECH 210 or CIVE 205  |
| MECH 292                     | Conceptual Design                                 | 3                 | P - MECH 260, MECH 289 / C - CIVE 207                               |
| MIME 260                     | Material Science and Engineering                  | 3                 | -   |
| EC                           | Elective - 2                                      | 3                 | -   |
| <b>4th Semester (Winter)</b> |   | <b>15 credits</b> | <b>Prerequisites/Co-requisites</b>                                  |
| CCOM 206                     | Communication in Engineering                      | 3                 | -   |
| MECH 240                     | Thermodynamics 1                                  | 3                 | -   |
| MECH 309                     | Numerical Methods in Mechanical Engineering       | 3                 | P - MATH 263, MATH 271, COMP 208                                    |
| MECH 314                     | Dynamics of Mechanisms                            | 3                 | P - MECH 220  |
| MECH 331                     | Fluid Mechanics 1                                 | 3                 | P - MECH 210 / C - MECH 220, MECH 240, MATH 271                     |
| <b>5th Semester (Fall)</b>   |   | <b>16 credits</b> | <b>Prerequisites/Co-requisites</b>                                  |
| MECH 315                     | Mechanics 3                                       | 4                 | P - MECH 220, MATH 271 / C - CIVE 207                               |
| MECH 341                     | Thermodynamics 2                                  | 3                 | P - MECH 240  |
| MECH 346                     | Heat Transfer                                     | 3                 | P - MECH 240, MECH 331, MATH 271                                    |
| MECH 360                     | Principles of Manufacturing                       | 3                 | P - CIVE 207, MECH 289, MIME 260                                    |
| MECH 393                     | Machine Element Design                            | 3                 | P - MECH 260, MECH 289, CIVE 207 / C - MECH 292, MECH 314, MIME 260 |
| <b>6th Semester (Winter)</b> |   | <b>15 credits</b> | <b>Prerequisites/Co-requisites</b>                                  |
| MECH 321                     | Mechanics of Deformable Solids                    | 3                 | P - CIVE 207  |
| MECH 383                     | Applied Electronics and Instrumentation           | 3                 | P - MECH 262, MATH 263  |
| MECH 430                     | Fluid Mechanics 2                                 | 3                 | P - MECH 240, MECH 331  |
| MIME 310                     | Engineering Economy                               | 3                 | -   |
| MECH xxx                     | Technical Complementary                           | 3                 | -   |
| <b>7th Semester (Fall)</b>   |   | <b>14 credits</b> | <b>Prerequisites/Co-requisites</b>                                  |
| ECSE 461                     | Electric Machinery                                | 3                 | -   |
| MECH 362                     | Mechanical Laboratory 1                           | 2                 | P - MECH 262  |
| MECH 412                     | Dynamics of Systems                               | 3                 | P - MECH 309 or MATH 317, MECH 315 / C - MECH 331                   |
| MECH 463D1                   | Mechanical Engineering Project                    | 3                 | -   |

