

| MANUFACTURING ENGINEERING TECHNOLOGY |  |         |  |         |   |         |   |         |   |         | 2019-2020   |         |  |                                      |  |
|--------------------------------------|--|---------|--|---------|---|---------|---|---------|---|---------|---|---------|--|--------------------------------------|--|
| Cr. Hrs                              | SEM 1  | Cr. Hrs | SEM 2  | Cr. Hrs | SEM 3   | Cr. Hrs | SEM 4   | Cr. Hrs | SEM 5   | Cr. Hrs | SEM 6   | Cr. Hrs | SEM 7  | Cr. Hrs                              | SEM 8  |
| 4                                    | <b>MATH 1180</b><br><b>Pre-Calculus</b>  | 4       | <b>MATH 1220</b><br>or <b>1700</b><br><b>Calculus I</b>                  | 4+1     | <b>PHYS 1150+1160</b><br><b>General Physics II</b><br><b>(L)</b>                                | 3       | <b>EDMM 2001</b><br><b>Applied Electricity &amp;</b><br><b>Electronics (L)</b><br><b>(F, Sp, Sul)</b> | 3       | <b>EDMM 3480</b><br><b>Designing for</b><br><b>Production (L) (F)</b>                     | 3       | <b>EDMM 3260</b><br><b>Operations Planning</b><br><b>&amp; Control</b><br><b>(F, Sp, Sul)</b> | 3       | <b>EDMM 3200</b><br><b>Engineering Cost</b><br><b>Analysis</b><br><b>(F, Sp, Sul)</b>    | 3                                    | <b>EDMM 4020</b><br><b>Engineering</b><br><b>Leadership</b><br><b>(F, Sp, Sul)</b>                   |
|                                      | MATH 1110 ≥ C or placement   |         | MATH 1180 ≥ C  |         | PHYS 1130 ≥ C   |         | PHYS 1070+1080 ≥ C or PHYS 1150+1160 ≥ C or PHYS 2070+2080 ≥ C  |         | EDMM 1420, EDMM 2540, EDMM 2810 & EDMM 2460 ≥ C   |         | STAT 2160 or 2600 or IEE 2610 ≥ C   |         | MATH 1220 or 2000 or 1700 ≥ C  |                                      | Junior Standing  |
| 3                                    | <b>IEE 1020</b><br><b>Technical</b><br><b>Communication</b><br><b>(F, Sp)</b>      | 3+1     | <b>CHEM 1100+1110</b><br><b>General Chemistry I</b><br><b>(L)</b>        | 3       | <b>EDMM 2460</b><br><b>Intro to Computer-</b><br><b>Aided Design (L)</b><br><b>(F, Sp, Sul)</b> | 3       | <b>EDMM 2500</b><br><b>Plastics Properties</b><br><b>and Processing (L)</b><br><b>(F, Sp)</b>         | 3       | <b>EDMM 3520</b><br><b>Metal Casting (L) (F)</b>  | 3       | <b>EDMM 3280</b><br><b>Quality Assurance</b><br><b>and Control</b><br><b>(F, Sp, Sul)</b>     | 3       | <b>EDMM 4540</b><br><b>Fabrication,</b><br><b>Assembly, Finishing</b><br><b>(L) (F)</b>  | 3                                    | <b>EDMM 4570</b><br><b>Manufacturing for</b><br><b>Sustainability (Sp)</b>                           |
|                                      | ENGL 1000 or placement   |         | MATH 1110 ≥ C  |         | EDMM 1420 ≥ C   |         | CHEM 1100/1110 recommended  |         | EDMM 2540 and (EDMM 2560 or ME 2500) ≥ C  |         | STAT 2160 or 2600 or IEE 2610 ≥ C   |         | EDMM 2810 ≥ C  |                                      |  |
| 3                                    | <b>EDMM 1420</b><br><b>Engineering</b><br><b>Graphics (F, Sp, Sul)</b>             | 4+1     | <b>PHYS 1130+1140</b><br><b>General Physics I (L)</b>                    | 3       | <b>IEE 2610</b><br><b>Engineering</b><br><b>Statistics (F, Su1)</b>                             | 4       | <b>EDMM 2810</b><br><b>Statics and Strength</b><br><b>of Materials</b><br><b>(F, Sp, Sul)</b>         | 3       | <b>EDMM 3540</b><br><b>Metrology (L) (F)</b>  | 3       | <b>EDMM 3580</b><br><b>Computer-Aided</b><br><b>Manufacturing (L)</b><br><b>(Sp)</b>          | 3       | <b>EDMM 4580</b><br><b>Manufacturing</b><br><b>Systems Integration</b><br><b>(L) (F)</b> | 2                                    | <b>EDMM 4920</b><br><b>Multidisciplinary</b><br><b>Senior Project</b><br><b>(F, Sp)</b>              |
|                                      |  |         | MATH 1110 ≥ C or placement   |         | MATH 1220 or 1700 ≥ C   |         | MATH 1220 or 1700 or 2000 ≥ C   |         | IEE 2610 ≥ C<br>Co-requisite EDMM 3480  |         | EDMM 2540 ≥ C<br>EDMM 2460 ≥ C  |         | EDMM 2460 ≥ C<br>EDMM 2001 and EDMM 3580 recommended                                     |                                      | EDMM 4910 ≥ C<br>Department Approval   |
| 3                                    | <b>EDMM 1500</b><br><b>Intro to</b><br><b>Manufacturing</b><br><b>(F, Sp, Sul)</b> | 3       | <b>GEN ED IV*</b><br><b>Other Cultures &amp;</b><br><b>Civilizations</b> | 1       | <b>CS 1021</b><br><b>Intro. Engr. Comp. I:</b><br><b>Spreadsheets</b>                           | 3       | <b>EDMM 3020</b><br><b>Engr. Teams: Theory</b><br><b>&amp; Practice (F, Sp,</b><br><b>Sul)</b>        | 3       | <b>EDMM 3840</b><br><b>Fluid Mechanics and</b><br><b>Hydraulics (L)</b><br><b>(F, Sp)</b> | 3       | <b>APPROVED</b><br><b>ELECTIVE**</b>  | 2       | <b>EDMM 4910</b><br><b>Multidisciplinary</b><br><b>Senior Proposal</b><br><b>(F, Sp)</b> | 1                                    | <b>EDMM 4930</b><br><b>Multidisciplinary</b><br><b>Senior Project</b><br><b>Consultation (F, Sp)</b> |
|                                      |  |         |  |         | MATH 1180 ≥ C   |         | IEE 1020 ≥ C  |         | EDMM 2810 ≥ C<br>PHYS 1130+1140 ≥ C   |         |   |         | Department Approval  | EDMM 4910 ≥ C<br>Department Approval |  |
| 2                                    | <b>GEN ED VIII*</b><br><b>Health &amp; Well Being</b>                              |         |  | 3       | <b>EDMM 2540</b><br><b>Machining</b><br><b>Processes (L)</b><br><b>(F, Sp, Sul)</b>             | 3       | <b>EDMM 2560</b><br><b>Properties of</b><br><b>Materials (L) (F, Sp)</b>                              | 3       | <b>APPROVED</b><br><b>ELECTIVE**</b>  | 3       | <b>GEN ED II*</b><br><b>Humanities</b>  | 3       | <b>APPROVED</b><br><b>ELECTIVE**</b>   | 3                                    | <b>APPROVED</b><br><b>ELECTIVE**</b>   |
|                                      |  |         |  |         | EDMM 1500 recommended   |         | CHEM 1100 + 1110 ≥ C<br>or  |         |   |         |   |         |  |                                      |  |
|                                      |  |         |  | 2       | <b>EDMM 2830</b><br><b>Thermodynamics (L)</b><br><b>(F, Sp)</b>                                 | 3       | <b>ME 2500</b><br><b>Materials Science (F,</b><br><b>Sp, Sul)</b>                                     |         |   |         |   | 3       | <b>GEN ED I*</b><br><b>Fine Arts</b>   | 3                                    | <b>GEN ED III*</b><br><b>U.S. Culture &amp;</b><br><b>Issues</b>                                     |
|                                      |  |         |  |         | PHYS 1130 +1140 ≥ C   |         | CHEM 1100 + 1110 ≥ C  |         |   |         |   |         |  |                                      |  |
|                                      |  |         |  |         | MATH 1220 or 1700 or 2000 ≥ C   |         | MATH 1220 or 1700 ≥ C<br>ME 2615 or EDMM 1500 ≥ C   |         |   |         |   |         |  |                                      |  |
|                                      | 15 hours   |         | 16 hours   |         | 17 hours  |         | 16 hours  |         | 15 hours  |         | 15 hours  |         | 17 hours   |                                      | 15 hours   |
|                                      |  |         |  |         |   |         |   |         |   |         |   |         |  |                                      | 126 total hours  |

NOTE: Prerequisite courses are shown in smaller print.

22 Cr. Gate Courses Req.

80 Cr. MFT Req.

14 Cr. Gen Ed Req.

12 Cr. MFT Elective Req.

\* See your academic advisor for general education requirements.

A 'C' or better is required for

\*\* A minor is recommended. See elective options on page 2.

admission to upper level CEAS courses

**MANUFACTURING ENGINEERING TECHNOLOGY ELECTIVES - Select any four (4) of the following\* electives**

| Cr. Hrs. | Elective   | Cr. Hrs. | Elective  | Cr. Hrs. | Elective   | Cr. Hrs. | Elective  | Cr. Hrs. | Elective  |   |   |
|----------|--|----------|---|----------|--|----------|---|----------|---|---|---|
| 3        | <b>EDMM 2220<br/>Mobile Energy<br/>Sources &amp;<br/>Lubricants</b>      | 1-3      | <b>EDMM 2990<br/>Cooperative<br/>Education</b>                                    | 3        | <b>EDMM 3120<br/>Systems Decision<br/>Making</b>                 | 3        | <b>EDMM 3240<br/>Automotive Power<br/>Systems</b>                       | 3        | <b>EDMM 3250<br/>Automotive<br/>Electrical Systems</b>                    | 3 | <b>IEE 3420<br/>Ergonomics and<br/>Design</b>                           |
|          | College Writing  |          |   |          | IEE 2610 or STAT 2600 ≥ C  |          | EDMM 1500 recommended   |          | EDMM 1500 & 2001 recommended  |   |   |
| 3        | <b>EDMM 3500<br/>Production<br/>Thermoplastic<br/>Processing</b>         | 3        | <b>EDMM 4250<br/>Automatic &amp; Automated<br/>Drive Line Control<br/>Systems</b> | 3        | <b>EDMM 4260<br/>Automotive Structure,<br/>Ride &amp; Safety</b> | 3        | <b>EDMM 4520<br/>Die Casting</b>  | 3        | <b>EDMM 4560<br/>Process Testing &amp;<br/>Measurement</b>                | 3 | <b>EDMM 4590<br/>Mold Design &amp;<br/>Construction</b>                 |
|          | EDMM 2500 ≥ C  |          | EDMM 1220 recommended   |          | EDMM 1220 recommended  |          | EDMM 2540 ≥ C<br>ME 2500  |          | EDMM 2810 ≥ C<br>IEEM 2610 or STAT 2600 ≥ C<br>ME 2500                    |   | EDMM 2500 & 2540 ≥ C  |
|          |  |          |   |          |  |          | EDMM 3520 recommended   |          |   |   |   |
| 3        | <b>EDMM 4870<br/>Manufacturing<br/>Productivity<br/>Techniques</b>       | 3        | <b>EDMM 4880<br/>Applied Process<br/>Reengineering</b>                            | 3        | <b>EDMM 5500<br/>Advanced Plastics<br/>Processing</b>            | 3        | <b>EDMM 5520<br/>Casting Simulation<br/>&amp; Solidification</b>        | 4        | <b>MATH 1230 or 1710<br/>Calculus II</b>                                  | 4 | <b>MATH 2720<br/>Multivariate<br/>Calculus &amp; Matrix<br/>Algebra</b> |
|          | Senior Standing  |          | Senior Standing<br>ISM minors only  |          | EDMM 2500 or equivalent  |          | Upperclass student  |          | MATH 1220 or 1700 ≥ C   |   | MATH 1230 or 1710 ≥ C   |
| 4        | <b>MATH 3740<br/>Differential<br/>Equations &amp; Linear<br/>Algebra</b> | 1        | <b>MSL 1020<br/>Intro to the<br/>Profession of Arms</b>                           | 2        | <b>MSL 2020<br/>Army Doctrine &amp;<br/>Team Development</b>     | 3        | <b>MSL 3020<br/>Applied Leadership<br/>In Small Unit<br/>Operations</b> | 3        | <b>MSL 4020<br/>Mission Command<br/>and the Company<br/>Grade Officer</b> |   |   |
|          | MATH 2720 ≥ C  |          | Approval of department chair  |          | Approval of department chair                                     |          | Approval of department chair  |          | Approval of department chair  |   |   |

\* This is not an exhaustive list; please talk with your Academic Advisor for other options and/or to discuss a minor.