

## Engineering – Materials Concentration

2021-2022 Undergraduate Catalog

| Semester 1 – Fall                      |           |       |       |     |
|----------------------------------------|-----------|-------|-------|-----|
|                                        | Credits   | Major | Other | GEP |
| ENES 100 – Intro to Engineering Design | 3         | TF    |       |     |
| ENGL 101 – First-Year Composition      | 3         |       |       | CS1 |
| MATH 236 – Calculus I                  | 4         | X     |       | CS3 |
| PHYS 261 – Physics I                   | 4         | X     |       | C   |
| ORIE 101 – Intro to Higher Education   | 1         |       | X     |     |
|                                        |           |       |       |     |
| <b>Semester Total</b>                  | <b>15</b> |       |       |     |

| Semester 2 - Spring                 |           |       |       |     |
|-------------------------------------|-----------|-------|-------|-----|
| **Spring Only                       | Credits   | Major | Other | GEP |
| ENES 102** - Statics                | 3         | X     |       |     |
| IDIS 150 – First-Year FSU Colloquia | 3         |       |       | E   |
| MATH 237 – Calculus II              | 4         | X     |       |     |
| PHYS 262 – Physics II               | 4         | X     |       |     |
| GEP Fine & Performing Arts          | 3         |       |       | A   |
|                                     |           |       |       |     |
| <b>Semester Total</b>               | <b>17</b> |       |       |     |

| Semester 3 – Fall              |           |       |       |     |
|--------------------------------|-----------|-------|-------|-----|
| *Fall Only                     | Credits   | Major | Other | GEP |
| CHEM 201 – General Chemistry I | 4         | X     |       | C   |
| ENES 221* - Dynamics           | 3         | X     |       |     |
| ENME 272* – Intro to C.A.D.    | 2         | X     |       |     |
| MATH 238 – Calculus III        | 4         | X     |       |     |
| PHYS 263 – Physics III         | 4         | X     |       |     |
|                                |           |       |       |     |
| <b>Semester Total</b>          | <b>17</b> |       |       |     |

| Semester 4 - Spring               |           |       |       |     |
|-----------------------------------|-----------|-------|-------|-----|
| **Spring Only                     | Credits   | Major | Other | GEP |
| ENME 271** - Numerical Methods    | 3         | X     |       |     |
| ENME 232** Thermodynamics         | 3         | X     |       |     |
| MATH 432 – Differential Equations | 3         | X     |       |     |
| GEP Humanities                    | 3         |       |       | B   |
| GEP Identity & Difference         | 3         |       |       | F   |
|                                   |           |       |       |     |
| <b>Semester Total</b>             | <b>15</b> |       |       |     |

| Semester 5 – Fall                      |           |       |       |     |
|----------------------------------------|-----------|-------|-------|-----|
| *Fall Only                             | Credits   | Major | Other | GEP |
| ENES 220* -- Mechanics of Materials    | 3         | X     |       |     |
| ENME 331* -- Fluid Mechanics           | 3         | X     |       |     |
| ENME 350* --Electronics & Instrument I | 3         | X     |       |     |
| GEP Humanities                         | 3         |       |       | B   |
|                                        |           |       |       |     |
| <b>Semester Total</b>                  | <b>12</b> |       |       |     |

| Semester 6 - Spring                    |           |       |       |     |
|----------------------------------------|-----------|-------|-------|-----|
| **Spring Only                          | Credits   | Major | Other | GEP |
| ENME 332** - Transfer Processes        | 3         | X     |       |     |
| ENME 351** - Electro. & Instruments II | 3         | X     |       |     |
| ENME 382** - Materials & Mfg.          | 3         | X     |       |     |
| ENES 401** - Energy Engineering        | 3         | X     |       |     |
| GEP Social Science                     | 3         |       |       | D   |
|                                        |           |       |       |     |
| <b>Semester Total</b>                  | <b>15</b> |       |       |     |

| Semester 7 – Fall                 |           |       |       |     |
|-----------------------------------|-----------|-------|-------|-----|
| *Fall Only                        | Credits   | Major | Other | GEP |
| ENME 405* - Materials Engineering | 4         | X     |       |     |
| ENME 481* - Project Development   | 3         | X     |       |     |
| ENGL 3xx – Advanced Writing       | 3         |       |       | CS2 |
| GEP Social Science                | 3         |       |       | D   |
| Engineering Elective (1 of 2)     | 3         | X     |       |     |
|                                   |           |       |       |     |
| <b>Semester Total</b>             | <b>16</b> |       |       |     |

| Semester 8 - Spring           |           |       |       |     |
|-------------------------------|-----------|-------|-------|-----|
| **Spring Only                 | Credits   | Major | Other | GEP |
| ENME 410** - Capstone Design  | 3         | X     |       |     |
| ENME 425** - Microfabrication | 3         | X     |       |     |
| GEP FSU Colloquia II          | 3         |       |       | E   |
| Engineering Elective (2 of 2) | 3         | X     |       |     |
| General elective              | 1         |       | X     |     |
|                               |           |       |       |     |
| <b>Semester Total</b>         | <b>13</b> |       |       |     |