

Materials Science and Engineering Technology, B.S.

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This is a sample plan of study with a suggested sequencing of classes for the major. University electives may be applied to earn additional academic majors, minors, or certificates. Students should regularly meet with their academic advisor to plan their specific semester schedule to include UNIFI/General Education program and/or university elective hours required.

| Course | Title | Hour |
|---|---|-----------|
| Freshman | | |
| Fall | | |
| CHEM 1110 | General Chemistry I | 4 |
| MATH 1420 | Calculus I | 4 |
| PHYSICS 1701 | Physics I for Science and Engineering | 4 |
| ENGR 1000 | Introduction to Engineering & Professional Practice | 3 |
| Hours | | 15 |
| Spring | | |
| UNIFI/General Education or University Electives | | 6 |
| CHEM 1120 | General Chemistry II | 4 |
| PHYSICS 1702 | Physics II for Science and Engineering | 4 |
| Hours | | 14 |
| Sophomore | | |
| Fall | | |
| UNIFI/General Education or University Electives | | 3 |
| CHEM 2320 | Chemical Analysis | 3 |
| TECH 1024 | Engineering Design with CAD | 3 |
| ENGR 2080 | Statics | 2 |
| ENGR 2089 | Engineering Seminar: (Topic) | 1 |
| ENGLISH 3772/5772 | Technical Writing for Engineering Technologists | 3 |
| Hours | | 15 |
| Spring | | |
| PHIL 1560 | Science, Technology, and Ethics (STE) | 3 |
| TECH 2072 | Engineering Materials | 3 |
| CHEM 2330 | Chemical Analysis Laboratory | 2 |
| ENGR 2180 | Strength of Materials | 2 |
| Technical Elective Course | | 3 |
| UNIFI/General Education or University Electives | | 3 |
| Hours | | 16 |
| Junior | | |
| Fall | | |
| UNIFI/General Education or University Electives | | 6 |
| TECH 3142 | Statistical Quality Control | 3 |
| TECH 3196 | Industrial Safety | 3 |
| Technical Elective Course | | 3 |
| Hours | | 15 |
| Spring | | |
| UNIFI/General Education or University Electives | | 6 |
| TECH 3127 | Applied Thermodynamics | 3 |

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| TECH 3164 | Programmable Logic Controllers (PLCs) | 3 |
| TECH 3192/5192 | Non-Destructive Evaluation of Materials/Scanning Electron Microscopy | 3 |
| Hours | | 15 |
| Senior | | |
| Fall | | |
| TECH 3136 | Principles of Metal Casting | 3 |
| UNIFI/General Education or University Electives | | 9 |
| Technical Elective Course | | 3 |
| Hours | | 15 |
| Spring | | |
| ENGR 4500 | Senior Design | 3 |
| UNIFI/General Education or University Electives | | 9 |
| Technical Elective Course | | 3 |
| Hours | | 15 |
| Total Hours | | 120 |