# BSE Engineering: UTeach *(Major Code: 3236)*

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| **Engineering Courses (59hrs)** | | | ☑ |
| ENGR 1030/1030L | Basic Engineering Science & lab | 4 | |
| ENGR 1040 | Vector Statistics | 3 | |
| ENGR 1011 | Introduction to Two- and Three Dimensional Modeling | 1 | |
| ENGR 1850 | Introduction to Engineering Design | 2 | |
| ENGR 2700/2700L | Electric Circuits | 4 | |
| ENGR 2240 *or*<br>ENGR 2250 | Intro to Engineering Computations *or*<br>Engineering Programming | 3 | |
| ENGR 2220 | Probability and Statistics: Engineering (Every semester) | 3 | |
| ENGR 2460/2460L | Mechanics of Materials & lab | 4 | |
| ENGR 2480 | Dynamics | 3 | |
| ENGR 3520 | Engineering Economy (Every semester) | 3 | |
| ENGR 3700 | Energy Conservation & Electronics (Spring semesters only) | 3 | |
| ENGR 3280/3280L | Control Systems & lab | 4 | |
| ENGR 3850 | Interdisciplinary Design I | 3 | |
| ENGR 3050 *or*<br>ENGR3030 | Thermo-Fluids (Fall semesters only) *or*<br>Thermodynamics (Fall and Summer semesters only) | 3 | |
| ENGR 4850 | Interdisciplinary Design II | 3 | |
| | Engineering electives (courses must be at the 3000-4000 level) | 13 | |
| **Related Courses (28hrs)** | | | |
| MATH 1910/1911 | Calculus I & lab | 4 | |
| MATH 1920/1921 | Calculus II & lab | 4 | |
| MATH 2200 | Elementary Linear Algebra | 3 | |
| MATH 2450 | Introduction to Differential and Difference Equations | 3 | |
| MATH 2550 | Multivariable Calculus | 3 | |
| MATH 2300 | Functions & Modeling | 3 | |
| CHEM 1110/1110L | General Chemistry I & lab | 4 | |
| PHYS 2310/2310L | Principles of Physics: Electricity and Magnetism/Lab | 4 | |
| **General Education (beyond what is above) (18hrs)** | | | |
| ENGL 1010 | Rhetoric & Composition I | 3 | |
| ENGL 1020 | Rhetoric & Composition II | 3 | |
| | Fine Arts | 3 | |
| | Behavioral and Social Science | 6 | |
| | Cultures and Civilizations | 3 | |
| **UTeaChattanooga Courses (23hrs)** | | | |
| UTSM 1010 | Step 1: Inquiry Approaches to Teaching Mathematics and Science | 1 | |
| UTSM 1020 | Step 2: Inquiry Based Lesson Design in Mathematics and Science | 1 | |
| UTSM 2010 | Knowing and Learning in Mathematics and Science | 3 | |
| UTSM 2020 | Classroom Interactions | 3 | |
| UTSM 3010 | Perspectives on Science and Mathematics | 3 | |
| UTSM 3020 | Research Methods in Science | 3 | |
| UTSM 4010 | Project-Based Instruction | 3 | |
| UTSM 4020 | Apprentice Teaching in Secondary Mathematics and Science | 6 | |
| | **TOTAL** | **128** | |

*** This form should be used for planning purposes only. Please refer to your course catalog for the most recent prerequisites and course descriptions. Information is subject to change.***