

# PRE-ENGINEERING

Students wishing to major in any of the many fields of engineering may take their first two years in pre-engineering at Sam Houston State University and transfer to a college of engineering to complete their degree requirements.

| Code                                | Title   | Hours |
|-------------------------------------|---|-------|
| <b>Pre-Engineering</b>              |   |       |
| <b>Core Curriculum</b>              |   |       |
|                                     | Component Area I (Communication)                      | 6     |
|                                     | Component Area II (Mathematics)                       | 3     |
|                                     | Component Area III (Life and Physical Science)        | 8     |
|                                     | Component Area IV (Language, Philosophy, and Culture) | 3     |
|                                     | Component Area V (Creative Arts)                      | 3     |
|                                     | Component Area VI (U.S. History)                      | 6     |
|                                     | Component Area VII (Political Science/Government)     | 6     |
|                                     | Component Area VIII (Social and Behavioral Sciences)  | 3     |
|                                     | Component Area IX (Component Area Option)             | 4     |
| <b>Degree Specific Requirements</b> |   |       |
| MATH 1420                           | Calculus I <sup>1</sup>                               | 4     |
| MATH 1430                           | Calculus II   | 4     |
| MATH 2440                           | Calculus III  | 4     |
| CHEM 1411                           | General Chemistry I <sup>1</sup>                      | 4     |
| CHEM 1412                           | General Chemistry II <sup>1</sup>                     | 4     |
| COSC 1436                           | Programming Fundamentals I                            | 4     |
| ENGL 3330                           | Intro To Technical Writing                            | 3     |
| ETDD 1361                           | Engineering Graphics                                  | 3     |
| <b>Major Core</b>                   |   |       |
| PHYS 1401                           | Physics Boot Camp                                     | 4     |
| PHYS 1411                           | Introduction To Physics I                             | 4     |
| PHYS 1422                           | Introduction To Physics II                            | 4     |
| Total Hours                         |   | 72    |

<sup>1</sup> CHEM 1411 and CHEM 1412 satisfy the Core Curriculum requirement for Component Area III (Life and Physical Science) and MATH 1420 satisfies the Core Curriculum requirement for Component Area II (Mathematics), one semester credit hour of Component Area IX (Component Area Option), and the Degree Specific requirement. This is to satisfy the first two years toward an engineering degree.