



# Associate of Science in Engineering Science

| <b>Bridging Semester</b>                   |                                  | <b>sch</b> |           |   | <b>sch</b>                          |            |
|--|----------------------------------|------------|-----------|---|-------------------------------------|------------|
| EDUC 1100                                  | Learning Frameworks <sup>0</sup> | 1          | <b>or</b> | COLS 0300                               | College Success Skills <sup>0</sup> | 3          |
| <b>SWTJC Fall Semester Year 1</b>          |                                  |            |           | <b>SWTJC Spring Semester Year 1</b>     |                                     |            |
| HIST 1301✓                                 | U.S. History I                   | 3          |           | ENGR 1304                               | Engineering Graphics                | 3          |
| ENGL 1301✓                                 | Composition & Rhetoric I         | 3          |           | ENGL 1302✓                              | Composition & Rhetoric II           | 3          |
| MATH 2413✓                                 | Calculus I                       | 4          |           | MATH 2414                               | Calculus II                         | 4          |
| CHEM 1311✓                                 | General Chemistry I              | 3          |           | PHYS 2325✓                              | University Physics I                | 3          |
| CHEM 1111                                  | General Chemistry I Lab          | 1          |           | PHYS 2125                               | University Physics I Lab            | 1          |
| ENGR 1201                                  | Introduction to Engineering      | 2          |           | GOVT 2306✓                              | Texas Government                    | 3          |
|  |                                  | <b>16</b>  |           |   |                                     | <b>17</b>  |
| <b>SWTJC Fall Semester Year 2</b>          |                                  | <b>sch</b> |           | <b>SWTJC Spring Semester Year 2</b>     |                                     | <b>sch</b> |
| ENGR 2304                                  | Programming for Engineers        | 3          |           | ENGR 2305                               | Circuit Analysis I                  | 3          |
| ENGR 2301                                  | Engineering Mechanics - Statics  | 3          |           | ENGR 2105                               | Circuits Analysis I Lab             | 1          |
| MATH 2415                                  | Calculus III                     | 4          |           | MATH 2320                               | Differential Equations              | 3          |
| PHYS 2326✓                                 | University Physics II            | 3          |           | Elective                                | Engineering Elective <sup>1</sup>   | 3          |
| PHYS 2126                                  | University Physics II Lab        | 1          |           | ECON 2301✓                              | Principles of Macroeconomics        | 3          |
|  |                                  | <b>14</b>  |           |   |                                     | <b>13</b>  |
| <b>✓ Core Courses (27 sch)<sup>2</sup></b> |                                  |            |           | <b>ASES Complete SWTJC Total 60 sch</b> |                                     |            |

<sup>0</sup> EDUC 1100 required of all first time in college students. COLS 0300 required for students with any TSI deficiencies and does not count toward a degree.

<sup>1</sup> For mechanical or civil engineering choose ENGR 2302 Engineering Mechanics – Dynamics; for electrical engineering choose COSC 1320 C/C+ Structured Programming; for industrial engineering choose ENGR 2308 Engineering Economics.

<sup>2</sup> Though not necessary to complete the ASES degree, completing the General Education Core may provide advantages in transfer. To complete the General Education Core, take HIST 1302; GOVT 2305; SPCH 1311, 1315, or SPCH 1321; a creative arts course selected from ARTS 1301 or MUSI 1306; and a literature course selected from ENGL 2322/23 or ENGL 2332/33. See current catalog for more detailed choices.

For more information, please contact:

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