# Math, Science and Bachelors Programs Degree Plan

## ASSOCIATE OF SCIENCE
Field of Study in Engineering

### Student Information
- **Student Name:**
- **A#:**
- **Address:**
- **City, State, & Zip Code:**
- **Telephone:**
- **Enrollment Date:**
- **Placement Testing:**
  - **Alternative Exam:**
    - **Accuplacer/ASSET/COMPASS/THEA Date:**
  - **ACT:**
  - **SAT:**
  - **Texas Success Initiative Rules**

### Developmental Courses (enter grade)

<table>
<thead>
<tr>
<th>Reading</th>
<th>Writing</th>
<th>Math</th>
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<tbody>
<tr>
<td>None</td>
<td>ENGL 71</td>
<td>MATH 80</td>
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<tr>
<td>READ 70</td>
<td>ENGL 81</td>
<td>MATH 85</td>
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<tr>
<td>READ 80</td>
<td>ENGL 91</td>
<td>MATH 90</td>
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### Core Component Area Option - Core Curriculum

- **HIST 1301 United States History I or HIST 2327** 3
- **ENGL 1301 Composition** 3
- **MATH 2413 Calculus I** 4
- **ENGR 1101 Introduction to Engineering** 1
- **COSC 1436 Programming Fundamentals I or ENGR 1304** 3 or 4

### Major Courses

#### FIRST YEAR - FALL SEMESTER

<table>
<thead>
<tr>
<th>SCH</th>
<th>COLLEGE</th>
<th>SEM/YR</th>
<th>GRADE</th>
<th>COMMENTS</th>
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<tr>
<td>HIST 1301 United States History I or HIST 2327</td>
<td>3</td>
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<td>ENGL 1301 Composition</td>
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<tr>
<td>MATH 2413 Calculus I*</td>
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<td>ENGR 1101 Introduction to Engineering</td>
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<td>COSC 1436 Programming Fundamentals I or ENGR 1304**</td>
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#### FIRST YEAR - SPRING SEMESTER

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<tbody>
<tr>
<td>ENGL 1302 Composition II - Rhetoric</td>
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<tr>
<td>Creative Arts Elective - Core Curriculum</td>
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<td>PHYS 2425 University Physics I</td>
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<tr>
<td>ENGR 2406 Digital Systems Engineering I or CHEM 1411***</td>
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### FIRST YEAR - SUMMER

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<tr>
<td>HIST 1302 United States History II or HIST 2328</td>
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<td>PHIL 2306 Introduction to Ethics</td>
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#### SECOND YEAR - FALL SEMESTER

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<tr>
<td>GOVT 2305 Federal Government</td>
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<tr>
<td>ENGR 2301 Statics</td>
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<tr>
<td>MATH 2414 Calculus II</td>
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<td>PHYS 2426 University Physics II</td>
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### SECOND YEAR - SPRING SEMESTER

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<th>SCH</th>
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<th>SEM/YR</th>
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<tr>
<td>GOVT 2306 Texas Government</td>
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<td>ENGR 2302 Dynamics</td>
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<tr>
<td>ECON 2301 Principles of Economics I - Macro</td>
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<tr>
<td>ENGR 2405 Electrical Circuits I</td>
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<td>Core Component Area Option - Core Curriculum</td>
<td>3 or 4</td>
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<tr>
<td>(Recommended: MATH 2420 **** or MATH 2418****)</td>
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*Check catalog for course pre-requisites.

**COSC 1436 is recommended for students pursuing a degree in Electrical/Computer Engineering. ENGR 1304 is recommended for all other degrees.

***ENGR 2406 is recommended for students pursuing a degree in Electrical/Computer Engineering. CHEM 1411 is recommended for all other degrees.

****Check with transferring institution for transferability of these courses. MATH 2418 is recommended for students pursuing a degree in Mechanical Engineering.

### Student's Signature
- **Date:**

### Faculty/Advisor's Signature
- **Date:**
PRE-REQUISITES:

HIST 1301 UNITED STATES HISTORY I
Prerequisite: Completion of READ 0200 or equivalent.

HIST 2327 MEXICAN-AMERICAN HISTORY I
Prerequisite: Completion of READ 0200 or equivalent.
(May substitute for HIST 1301.)

ENGL 1301 COMPOSITION
Prerequisite: TSI complete in Reading and Writing; or completion of ENGL 0200 and READ 0200 a grade of "C" or better; or completion of INRW 0304 with a grade of "C" or better.

MATH 2413 CALCULUS I
Prerequisite: MATH 1316 or MATH 2412 with a grade of "C" or better; or a 100+ on the College Level Mathematics ACCUPLACER.

Prerequisite: TSI complete in Reading and completion of MATH 1414 with a "C" or better; or equivalent.

COSC 1436 PROGRAMMING FUNDAMENTALS I
Prerequisite: Concurrent enrollment in MATH 0090 or completion of equivalent.
Recommended: MATH 1414 with a grade of "C" or better.

ENGR 1304 ENGINEERING GRAPHICS
Prerequisite: TSI complete in Reading and completion of MATH 1414 with a "C" or better; or equivalent.

ENGL 1302 COMPOSITION II - RHETORIC
Prerequisite: A grade of "C" or higher in ENGL 1301.

PHYS 2425 UNIVERSITY PHYSICS I
Prerequisite: MATH 2413 with a grade of "C" or better.

ENGR 2406 DIGITAL SYSTEMS ENGINEERING I
Prerequisite: TSI complete in Reading and completion of MATH 1414 with a "C" or better; or equivalent.

CHEM 1411 GENERAL CHEMISTRY I
Prerequisite: TSI complete in Reading and completion of MATH 1414 with a "C" or better; or equivalent.

HIST 1302 UNITED STATES HISTORY II
Prerequisite: Completion of READ 0200 or equivalent.

HIST 2328 MEXICAN-AMERICAN HISTORY II
Prerequisite: Completion of READ 0200 or equivalent.
(May substitute for HIST 1302.)

PHIL 2306 INTRODUCTION TO ETHICS
Prerequisite: Eligible for ENGL 1301.

GOVT 2305 FEDERAL GOVERNMENT
Prerequisite: Completion of READ 0200 with a grade of "C" or better or equivalent.

ENGR 2301 STATICS
Prerequisite: PHYS 2425 and MATH 2413 with a grade of "C" or better and completion of or concurrent enrollment in MATH 2414, or permission from the instructor.

MATH 2414 CALCULUS II
Prerequisite: MATH 2413 with a grade of "C" or better.

PHYS 2426 UNIVERSITY PHYSICS II
Prerequisite: MATH 2425 with a grade of "C" or better.

GOVT 2306 TEXAS GOVERNMENT
Prerequisite: Completion of READ 0200 with a grade of "C" or better or equivalent.

ENGR 2302 DYNAMICS
Prerequisite: ENGR 2301 and MATH 2414 with a grade of "C" or better or permission from the instructor.

ECON 2301 PRINCIPLES OF ECONOMICS I- MACRO
Prerequisite: Completion of MATH 0085 or equivalent, or BNKG 1340.

ENGR 2405 ELECTRICAL CIRCUITS I
Prerequisite: PHYS 2425 and MATH 2414 with a grade of "C" or better.

CORE COMPONENT AREA OPTION - 3-4 CREDITS (Depending on the course, check the catalog for pre-requisites.)