# COMPUTER SCIENCE
## CAREER PATHWAY MAP

<table>
<thead>
<tr>
<th>RECOMMENDED COURSE SEQUENCE+</th>
<th>SEMESTERS OFFERED</th>
<th>CREDIT HOURS</th>
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<tbody>
<tr>
<td>1. COSC 1436 Programming Fundamentals I</td>
<td>F, Sp, Su</td>
<td>4</td>
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<tr>
<td>2. ENGL 1301 Composition I</td>
<td>F, Sp, Su</td>
<td>3</td>
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<tr>
<td>3. HIST 1301 United States History I</td>
<td>F, Sp, Su</td>
<td>3</td>
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<tr>
<td>4. MUSI 1306 Music Appreciation</td>
<td>F, Sp, Su</td>
<td>3</td>
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<tr>
<td>5. PHIL 1301 Introduction to Philosophy</td>
<td>F, Sp, Su</td>
<td>3</td>
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**16 hours**

| 6. COSC 1437 Programming Fundamentals II | F, Sp, Su | 4 |
| 7. ENGL 1302 Composition II* | F, Sp, Su | 3 |
| 8. HIST 1302 United States History II | F, Sp, Su | 3 |
| 9. MATH 2413 Calculus I | F, Sp, Su | 4 |

**30 hours**

| 10. COSC 2436 Program Fundamentals III | F | 4 |
| 11. GOVT 2305 Federal Government | F, Sp, Su | 3 |
| 12. MATH 2414 Calculus II | F, Sp | 4 |
| 13. PHYS 2425 University Physics I | F, Sp, Su | 4 |

**45 hours**

| 14. COSC 2325 Computer Organization | Sp | 3 |
| 15. GOVT 2306 Texas Government | F, Sp, Su | 3 |
| 16. MATH 2305 Discrete Mathematics | Sp | 3 |
| 17. PHYS 2426 University Physics II | F, Sp, Su | 4 |
| 18. PSYC 2301 General Psychology* | F, Sp, Su | 3 |

**61 hours**

### CAREER OPPORTUNITIES
- Computer Engineer
- Computer Programmer
- Game Developer
- Software Engineer

### ADVANCED DEGREE/ CREDENTIAL OPPORTUNITIES
- B.S. in Computer Science
- B.S. in Software Engineering
- B.S. in Computer Engineering
- Industry certifications in programming languages

### LINKS TO COLLEGES AND PROFESSIONAL ORGANIZATIONS:
- Association for Computing Machinery (ACM) [http://www.acm.org/](http://www.acm.org/)
- IEEE Computer Society [https://www.computer.org/](https://www.computer.org/)

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**READ ALL NOTES CAREFULLY:**

* Refer to Core Curriculum and KC Catalog for all possible course options.

** MATH 2412 Pre-Calculus is not part of the Computer Science Field of Study, but is a prerequisite to MATH 2413 Calculus I.

+ Computer Competency Requirement must be met in order to earn an AA Degree. Click Here For Computer Competency Information

a) Courses in **bold** have a pre-requisite (previous course required).

b) Courses in *italics* can be taken in any order.

c) ENGL 1301 and the first MATH class may require a co-requisite and/or developmental course depending on TSI Scores.

d) Refer to KC Catalog for Field of Study and AS Degree Requirements.

*** COMPUTER SCIENCE FIELD OF STUDY COMPLETED ***

NOTE: Additional core curriculum courses you may take are listed below – check with your transfer institution.

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**Revised 10/22/2021**