Bachelor of Science – Computer Science
Degree Plan (checklist)

NOTE: Overall GPA ≥ 2.0 AND In-Major GPA ≥ 2.0 REQUIRED for graduation

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<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>M.I.</th>
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<table>
<thead>
<tr>
<th>Degree Plan (checklist)</th>
<th>Catalog: 2020-21</th>
<th>Expires: 08/01/2027</th>
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<tbody>
<tr>
<td>Core Curriculum (45 SCH)</td>
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<tr>
<td>A</td>
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<tr>
<td>1. Communication (6 credit hours required)</td>
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<tr>
<td>RWS 1301*</td>
<td>Rhetoric and Composition I</td>
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<tr>
<td>RWS 1302*</td>
<td>Rhetoric and Composition II</td>
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<tr>
<td>2. Mathematics (4)</td>
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<tr>
<td>MATH 1411*</td>
<td>Calculus I</td>
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<tr>
<td>3. Life and Physical Sciences (6) ***</td>
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<tr>
<td>Select and circle one</td>
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<tr>
<td>PHYS 2420*</td>
<td>Introduction to Mechanics</td>
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<tr>
<td>ASTR 1307* + 1107*, BIOL 1305* + 1105*, CHEM 1305* + 1105*, GEOG 1313* + 1103*, PHYS 2421*</td>
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<td>4. Language, Philosophy, and Culture (3)</td>
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<tr>
<td>ENGL 2311*, 2312*, 2313*, 2314*, 2318*, FREN 2322*, HIST 2301*, 2302*, PHIL 1301*, 2306*, RS 1301*, SPAN 2340*, WS 2300*, 2350*</td>
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<td>5. Creative Arts (3)</td>
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<tr>
<td>ART 1300*, ARTH 1305*, 1306*, DANC 1304*, FILM 1390*, MUSL 1321*, 1324*, 1327*, THEA 1313*</td>
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<tr>
<td>6. American History (6)</td>
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<tr>
<td>HIST 1301*</td>
<td>History of the U.S. to 1865</td>
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<tr>
<td>HIST 1302*</td>
<td>History of the U.S. since 1865</td>
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<tr>
<td>7. Government/Political Science (6) – all 6 SCH must be completed at the same institution</td>
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<tr>
<td>POLS 2130*</td>
<td>Introduction to Politics</td>
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<tr>
<td>POLS 2311*</td>
<td>American Govt. &amp; Politics</td>
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<td>8. Social and Behavioral Sciences (3)</td>
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<td>9. Component Area Option (6)</td>
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<tr>
<td>Take UNIV 1301 and choose one of the second option:</td>
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<tr>
<td>UNIV 1301*</td>
<td>Foundations of Engineering</td>
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<tr>
<td>CS 1310*, BUSN 1301*, COMM 1301*, 1302*, CS 1320*, SCI 1301*</td>
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<tr>
<th>Foundational Math &amp; Science (12 SCH)</th>
<th>Semester Completed</th>
<th>Final Grade</th>
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<tr>
<td>B</td>
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<tr>
<td>MATH 1312*</td>
<td>Calculus II</td>
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<tr>
<td>MATH 2300*</td>
<td>Discrete Mathematics</td>
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<tr>
<td>MATH 3323*</td>
<td>Matrix Algebra</td>
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<tr>
<td>STAT 3320</td>
<td>Probab &amp; Stat for Comp Sci</td>
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<table>
<thead>
<tr>
<th>Course on degree plan to substitute</th>
<th>Institution where course was taken</th>
<th>Name of Course as it appears on UTEP Transcript</th>
<th>Course as it appears on UTEP Transcript</th>
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<table>
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<tr>
<th>C. Major: Required Lower Division Courses (15 SCH)</th>
<th>Semester Completed</th>
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<tbody>
<tr>
<td>CS 1301**</td>
<td>Introduction to Computer Science</td>
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<td>CS 1101**</td>
<td>Introduction to Computer Science Lab</td>
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<tr>
<td>CS 2401**</td>
<td>Elementary Data Structures and Algorithms</td>
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<tr>
<td>EE 2399*</td>
<td>Digital Systems Design I</td>
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<td>EE 2169*</td>
<td>Digital Systems Design I Lab</td>
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<td>CS 2302*</td>
<td>Data Structures</td>
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<th>D. Major: Required Upper Division Courses (27 SCH)</th>
<th>Semester Completed</th>
<th>Final Grade</th>
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<tbody>
<tr>
<td>CS 3195</td>
<td>Senior Project</td>
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<tr>
<td>CS 3331*</td>
<td>Advanced Object-Oriented Programming</td>
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<td>CS 3350</td>
<td>Automata, Computability, and Formal Languages</td>
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<tr>
<td>CS 3360</td>
<td>Design and Implementation of Prog. Languages</td>
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<td>CS 3432*</td>
<td>Computer Architecture I: Basic Comp. Org. &amp; Design</td>
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<td>CS 4175</td>
<td>Parallel Computing</td>
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<tr>
<td>CS 4310*</td>
<td>Software Engineering: Requirements Engineering</td>
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<tr>
<td>CS 4311</td>
<td>Software Engineering: Design and Implementation</td>
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<tr>
<td>CS 4342</td>
<td>Database Management</td>
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<tr>
<td>CS 4375</td>
<td>Theory of Operating Systems</td>
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<tr>
<th>E. Technical Electives (15 SCH)***</th>
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<tr>
<td>CS 3370</td>
<td>Junior Professional Orientation</td>
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<td>CS 3371*</td>
<td>Advanced Object-Oriented Programming</td>
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<td>CS 3372*</td>
<td>Automata, Computability, and Formal Languages</td>
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<td>CS 3373</td>
<td>Design and Implementation of Prog. Languages</td>
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<td>CS 3431*</td>
<td>Computer Architecture I: Basic Comp. Org. &amp; Design</td>
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<tr>
<td>CS 4177</td>
<td>Parallel Computing</td>
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<td>CS 4310*</td>
<td>Software Engineering: Requirements Engineering</td>
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<tr>
<th>F. Free Elective (3 SCH) – any college-level courses offered by the colleges of Liberal Arts, Business, Science, or Engineering</th>
<th>Semester Completed</th>
<th>Final Grade</th>
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<tbody>
<tr>
<td>CS 2101 AND CS 2202 may be substituted</td>
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<td>* C or better required</td>
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*** Official substitution form available https://www.utep.edu/engineering/student-resources/student-resources-fc.html

** Substitutions**: Students must complete PHYS 2420 (in the Life and Physical Science Section)

***** Option A: Math-MATH 2313, MATH 2325, MATH 2326, MATH 3320, MATH 3325, MATH 4329, STAT 3381, STAT 4380, STAT 4385

<table>
<thead>
<tr>
<th>Option B: Science</th>
<th>Science in the core block</th>
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<tbody>
<tr>
<td>ADVISOR</td>
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<tr>
<td>CHAIR</td>
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| BSCS Total Hours | 120 |

Rev. 03-11-2020