## Bachelor of Science - Computer Science Major (Four Year Plan)

YEAR 1

| Semester 1 |  | Semester 2 |  |
| :---: | :---: | :---: | :---: |
| Course Number | Credit Hours | Course Number | Credit Hours |
| ENG 1301 (Composition I)\# <br> P: One of the following: (1) TSI ESSAY score of 4 and WRITING score of 340 , (2) TSI ESSAY score of 5 and ABE WRITING diagnostic level 4, (3) TSI WRITING complete, OR (4) TSI WRITING exempt | 3 | ENG 1302 (Composition II) <br> P: A grade of C or better in ENG 1301 or placement by examination | 3 |
| *CS 1410 (CS I - Intro to CS with C++) <br> P: Credit or enrollment in MATH 1404 or 1505 or 1306; and placement in ENG 1301 or above | 4 | *CS 2410 (CS II - Intro to Data Structures and Algorithms) <br> P: C or better in CS 1410 and credit or enrollment in MATH 2401 | 4 |
| *MATH 2401 (Calculus I) ${ }^{\text {\# }}$ <br> P: C or better in MATH 1404 or MATH <br> 1505 or placement by exam taken at UHD | 4 | *MATH 2402 (Calculus II) <br> P: C or better in MATH 2401 | 4 |
| UHD 1303 (Freshman Seminar) Transfer students see advisor for options | 3 | *MATH 2305 (Discrete <br>  <br> P: C or better in MATH 1404 or MATH 1505, or both of MATH 1305 and MATH 1306, or placement by exam taken at UHD | 3 |
|  |  | POLS 2305 (Federal Government) P: Enrollment in or completion of ENG 1301 or 010 core complete | 3 |
| Total Semester Hours | 14 | Total Semester Hours | 17 |

YEAR 2

| Semester 3 |  | Semester 4 |  |
| :--- | :---: | :--- | :---: |
| Course Number | Credit Hours | Course Number | Credit Hours |
| Laboratory Science <br> P: Refer to catalog | 4 | Laboratory Science ${ }^{\text {\& }}$ <br> P: Refer to catalog |  |
| *CS 3304 (Data and Information <br> Structures) <br> P: A grade of C or better in CS 2410 and MATH <br> 2305 | 3 | *CS 2302 (Digital Logic) <br> P: Grade of C or better in CS 1410 and MATH <br> 2305 | 3 |
| *CS 2301 (Intro. to Computer <br> Organization) <br> P: cor better in CS 1410 or CS 1408 | 3 | *CS 3306 (Intro. to Theory of <br> Computation) <br> P: Grade of C or better in CS 2410 and MATH <br> 2305 | 3 |
| Approved Language, Philosophy, <br> and Culture course (p. 60) <br> P: Refer to catalog | 3 | MATH 2307 (Linear Algebra) <br> P: C or better in MATH 2401 or MATH 2305 or <br> MATH 2409 | 3 |
| CS Elective (any level beyond CS 1305) <br> P: Refer to catalog | 3 | CS Elective (3000 or 4000 level) <br> P: Refer to catalog | 3 |
| Total Semester Hours | $\mathbf{1 6}$ | Total Semester Hours | $\mathbf{1 6}$ |

YEAR 3

| Semester 5 |  | Semester 6 |  |
| :---: | :---: | :---: | :---: |
| Course Number | Credit | Course Number | Credit |
| CS 3321 (Software Engineering) <br> P: Grade of C or better in CS 3304 | 3 | CS 4318 (Database Systems) <br> P: Grade of C or better in CS 3304 | 3 |
| CS 4315 (Operating Systems) <br> P: Grade of C or better in CS 2301, CS 2302, and CS 3304 | 3 | CS Elective (3000 or 4000 level) <br> P: Refer to catalog | 3 |
| *TCOMM 3302 (Business \& Technical Report Writing) <br> P: Successful completion of ENG 1302 and the Language, Philosophy \& Culture core comp. | 3 | MATH 3302 (Probability \& Statistics) <br> P: C or better in MATH 2402 <br> OR <br> STAT 3311 (Statistical Analysis for <br> Natural Sciences) P: C or better in MATH <br> 1404 or MATH 1505 | 3 |
| POLS 2306 (Texas Government) <br> P: Enrollment in or completion of ENG 1301 or 010 core complete | 3 |  <br> P: None | 3 |
| Approved American History course (p. 60) <br> P: Enrollment in or completion of ENG 1301 or 010 core complete | 3 | Approved Creative Arts course (p. 60) P: Refer to catalog | 3 |
| Total Semester Hours | 15 | Total Semester Hours | 15 |

YEAR 4

| Semester 7 | Semester 8 | Credit Hours |  |
| :--- | :---: | :--- | :---: |
| Course Number | Credit Hours | Course Number | 3 |
| CS Elective (3000 or 4000 level) <br> P: Refer to catalog | 3 | CS 4395 (Senior Project) <br> P: COMM 1304, TCOM3302, grade of B or <br> better in CS 4294, 3.0 GPA, senior standing, <br> and departmental approval (or approved W <br> course) | 3 |
| *CS 4294 (Senior Seminar) <br> P: COMM 1304, TCOM 3302, senior <br> standing, and departmental approval | 2 | CS Elective (3000 or 4000 level) <br> P: Refer to catalog | 3 |
| CS 4303 (Programming Language <br> Concepts) <br> P: Grade of Cor better in CS 3304 and CS 3306 | 3 | CS Elective (3000 or 4000 level) <br> P: Refer to catalog | 3 |
| Approved Am. Hist. course (p. 60) <br> P: Enrollment in or completion of ENG 1301 or <br> 010 core complete | 3 | Free Elective (if needed) | 3 |
| Approved Social and Behavioral <br> Sciences course (p. 60) <br> P: Refer to catalog | 3 | Free Elective (if needed) | 1 |
| Total Semester Hours | $\mathbf{1 4}$ |  | $\mathbf{1 3}$ |

## Total Credit Hours Required

120

Updated: June 23, 2021

* Critical course required to stay on track within major and take subsequent courses
\# Students are expected to place into ENG 1301 and MATH 2401 via CLEP or Bypass exams - placement tests determine which english or math course students should start with and additional courses may be necessary
\& Satisfies both common core and major requirement/prerequisite

