

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

## YEAR 1

Semester 1		Semester 2	
Course Number	Credit Hours	Course Number	Credit Hours
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) P: A grade of C or better in ENG 1301 or placement by examination	3
*CS 1410 (CS I – Intro to CS with		*CS 2410 (CS II – Intro to Data	
C++) P: Credit or enrollment in MATH 1404 or 1505 or 1306; and placement in ENG 1301 or above	4	Structures and Algorithms) P: C or better in CS 1410 and credit or enrollment in MATH 2401	4
*MATH 2401 (Calculus I)#		*MATH 2402 (Calculus II)	
P: C or better in MATH 1404 or MATH 1505 or placement by exam taken at UHD	4	P: C or better in MATH 2401	4
UHD 1303 (Freshman Seminar)		*MATH 2305 (Discrete	
Transfer students see advisor for options	3	Mathematics) <sup>&amp;</sup> 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 <sup>&amp;</sup> P: Refer to catalog	4	Laboratory Science <sup>&amp;</sup> P: Refer to catalog	4
*CS 3304 (Data and Information Structures) P: A grade of C or better in CS 2410 and MATH 2305	3	*CS 2302 (Digital Logic) P: Grade of C or better in CS 1410 and MATH 2305	3
*CS 2301 (Intro. to Computer Organization) P: C or better in CS 1410 or CS 1408	3	*CS 3306 (Intro. to Theory of Computation) P: Grade of C or better in CS 2410 and MATH 2305	3
Approved Language, Philosophy, and Culture course (p. 60) P: Refer to catalog	3	MATH 2307 (Linear Algebra) P: C or better in MATH 2401 or MATH 2305 or MATH 2409	3
<b>CS Elective</b> (any level beyond CS 1305) P: Refer to catalog	3	CS Elective (3000 or 4000 level) P: Refer to catalog	3
Total Semester Hours	16	Total Semester Hours	16

### YEAR 3

Semester 5		Semester 6	
Course Number	Credit	Course Number	Credit
CS 3321 (Software Engineering) P: Grade of C or better in CS 3304	3	CS 4318 (Database Systems) P: Grade of C or better in CS 3304	3
CS 4315 (Operating Systems) P: Grade of C or better in CS 2301, CS 2302, and CS 3304	3	CS Elective (3000 or 4000 level) P: Refer to catalog	3
*TCOMM 3302 (Business & Technical Report Writing) P: Successful completion of ENG 1302 and the Language, Philosophy & Culture core comp.	3	MATH 3302 (Probability & Statistics) P: C or better in MATH 2402 or MATH 2421 OR STAT 3311 (Statistical Analysis for Natural Sciences) P: C or better in MATH 1404 or MATH 1505	3
POLS 2306 (Texas Government) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	*COMM 1304 (Intro. to Communication)& P: None	3
Approved American History course (p. 60) 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	
Course Number	Credit Hours	Course Number	Credit Hours
CS Elective (3000 or 4000 level) P: Refer to catalog	3	CS 4395 (Senior Project) P: COMM 1304, TCOM3302, grade of B or better in CS 4294, 3.0 GPA, senior standing, and departmental approval (or approved W course)	3
*CS 4294 (Senior Seminar) P: COMM 1304, TCOM 3302, senior standing, and departmental approval	2	CS Elective (3000 or 4000 level) P: Refer to catalog	3
CS 4303 (Programming Language Concepts) P: Grade of C or better in CS 3304 and CS 3306	3	CS Elective (3000 or 4000 level) P: Refer to catalog	3
Approved Am. Hist. course (p. 60) P: Enrollment in or completion of ENG 1301 or 010 core complete	3	Free Elective (if needed)	3
Approved Social and Behavioral Sciences course (p. 60) P: Refer to catalog	3	Free Elective (if needed)	1
Total Semester Hours	14	Total Semester Hours	13

**Total Credit Hours Required** 120

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 $<sup>\</sup>ensuremath{^{\pmb{\ast}}}$  Critical course required to stay on track within major and take subsequent courses

<sup>#</sup> 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