



**Associate of Science to
Bachelor of Science in Computer Science
Software Engineering Concentration †
Guided Pathway
Effective for the 2019-2020 catalog¹**



STEM

BHC CVC EFC ECC MVC NLC RLC

First Year – Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland College²

FIRST SEMESTER	SECOND SEMESTER
^C ENGL 1301 – Composition I (010)	^C ENGL 1302 – Composition II (010)
^C HIST 1301 – United States History I (060)	^C HIST 1302 – United States History II* (060) OR ^C HIST 2301 – Texas History* (060)
Choose One: ^C ARTS 1301 – Art Appreciation* (050) ^C DRAM 1310 – Introduction to Theater* (050) ^C MUSI 1306 – Music Appreciation* (050)	MATH 2414 – Calculus II
EDUC 1300 – Learning Framework [®]	COSC 1436 – Programming Fundamentals I+ OR MATH 2305 – Discrete Mathematics+
^C MATH 2413 – Calculus I [^] (020)	
Total Semester Hours: 16	Total Semester Hours: 13-14

SUMMER SEMESTER
^C GOVT 2305 – Federal Government (070)
^C PHYS 2425 – University Physics I (030)
Total Semester Hours: 7

Second Year – Brookhaven, Cedar Valley, Eastfield, El Centro, Mountain View, North Lake, and Richland College
It's best to apply to Tarleton State University a full semester before you plan to transfer.

FIRST SEMESTER	SECOND SEMESTER
^C GOVT 2306 – Texas Government (070)	COSC 2436 – Programming Fundamentals II+
^C PHYS 2426 – University Physics II (030)	^C ECON 2301 – Principles of Macroeconomics I+* (080)
COSC 1437 – Programming Fundamentals II+	Choose One: ^C ENGL 2331 – World Literature* (040) ^C PHIL 1301 – Introduction to Philosophy* (040) ^C PHIL 2306 – Introduction to Ethics* (040)
ENGR 1201 – Introduction to Engineering+ OR MATH 2415 – Calculus III+ OR COSC 2425 – Computer Organization+	^C SPCH 1315 – Public Speaking+* (090) OR ^C SPCH 1321 – Business and Professional Communication+* (090)
	^C PHED 1164 – Introduction to Physical Fitness and Wellness (090)
Total Semester Hours: 13-15	Total Semester Hours: 14

Associate of Science (63-66 hours)

You will need to apply for the associate's degree at your community college. Contact your advisor there for more information.

These courses may be completed at DCCCD or TSU

Technical Elective	Technical Elective
^C MATH 1342 – Elementary Statistical Methods	
Total Semester Hours: 9	

Third Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
COSC 2331 – Introduction to Java Programming	COSC 3380 – Operating Systems
MATH 3310 – Discrete Mathematics	COSC 3489 – Software Engineering I
COSC 3443 – Computer Architecture	COSC 1310 – Procedural Programming
COSC 1302 – Introduction to Computer Science	COSC 2321 – Object Oriented Programming
Total Semester Hours: 13	Total Semester Hours: 13

Fourth Year – Tarleton State University

FIRST SEMESTER	SECOND SEMESTER
COSC 3390 – Software Engineering II	COSC 4389 – Programming Language Fundamentals
COSC 4451 – Distributed Applications	COSC 4401 – Database Theory and Practice
COSC 2341 – Data Structures	COSC 4478 – Computer Networks
COSC 2448 – Introduction to Digital Systems Design	
Total Semester Hours: 14	Total Semester Hours: 11
	Total Degree Hours: 123-126

This is not an official degree plan. Check with an advisor; degree plans may change in later catalogs.

Part-time students may also follow this sequence. Developmental coursework may be required.

¹ You may use this pathway if you entered one of the seven colleges on or before this date.

² Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by one of the seven colleges of the DCCCD awarding the degree.

[®] All college students with fewer than 12 semester credit hours of successful college credit (grade of "C" or above) must take a student success course in the first semester.

[^] To register for MATH 2413, you must have completed the prerequisite math courses as follows: MATH 1314, MATH 1316, MATH 2412

^C This course counts for the Core Curriculum at any public college or university in Texas.

^{*} There are several options to fulfill this requirement. See your academic advisor for a specific list.

⁺ Elective courses should be selected according to the intended university to which you will transfer. See your academic advisor for assistance with course selection.

⁺⁺ It is recommended you complete either ENGR 2305 or ENGR 2306 (choose which course based on the university you plan to transfer to) prior to transferring.

You must earn a grade of "C" or better in English 1301 and the selected college-level mathematics course and receive a GPA of at least 2.50 on all college-level course work.

(^l) Course numbers shown in parentheses are equivalent to these courses at Tarleton State University.

[†] Degree availability varies by campus; consult www.tarleton.edu for more information.

Approved: 2019-2020 Guided Pathway

For questions about the university portion of this pathway,
contact the Computer Information Systems & Marketing department at 254-968-9047.

