AS Computer Science to
Bachelor of Science in Computer Science
Software Engineering Concentration ᵀ
Guided Pathway
Effective for the 2019-2020 Catalog

First Year – Central Texas College

FIRST SEMESTER	SECOND SEMESTER
ᶜ COSC 1301 Introduction to Computing	ᶜ COSC 1336 Programming Fundamentals I
ᶜ COSC 1315 Introduction to Computer Programming	ᶜ SPCH 1321 or 1318
ᶜ ENGL 1301 Composition I	ᶜ PHYS 1415 Physical Science I
ᶜ MATH 1342 Elementary Statistics	ᶜ ANTH 2351 Cultural Anthropology
ᶜ HIST 1301 United States History I	ᶜ HIST 1302 United States History II

Total Semester Hours: 15   Total Semester Hours: 16

Second Year – Central Texas College

It's best to apply to Tarleton State University a full semester before you plan to transfer. It will help if you submit a copy of this pathway with your application.

FIRST SEMESTER	SECOND SEMESTER
ᶜ COSC 1337 Programming Fundamentals II	ᶜ COSC 2336 Programming Fundamentals III
ᶜ COSC 2325 Computer Organization	ᶜ GOVT 2306 Texas Government
ᶜ HUMA 1315 Fine Arts Appreciation	ᶜ ENVR 1401 Environmental Science I
ᶜ GOVT 2305 Federal Government	*Approved Elective
ᶜ PSYC 2315 Psychology of Adjustment	

Total Semester Hours: 15   Total Semester Hours: 13

AS: Computer Science

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 CTC (if offered) or TSU	
MATH 2413 – Calculus I	ᶜ**ENGL 1302** – Composition II
ᶜ**PHYS 2425** – University Physics I	**MATH 2414** – Calculus II

Total Semester Hours: 15

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 2448 – Introduction to Digital Systems Design	**COSC 4478** – Computer Networks

Total Semester Hours: 14   Total Semester Hours: 11

TOTAL: 125

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.
  * You may take a different course to meet this requirement. A specific list is available from your advisor.
  ᶜ This course counts for the Core Curriculum at any public college or university in Texas.
  () Course numbers shown in parentheses are equivalent to these courses at Tarleton State University.
  ᵀ Degree availability varies by campus; consult www.tarleton.edu for more information.
  ˣ Choose any course with the following prefix: BIOL, CHEM, COSC, ENGR, ENGT, MATH, PHYS

For questions regarding the university portion of this pathway,
contact the Engineering and Computer Science Department at 254-968-9863.