

STEM

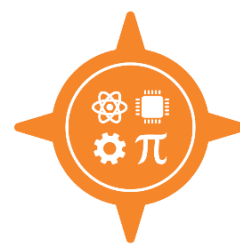
GUIDED PATHWAY: COMPUTER SCIENCE – FIELD OF STUDY

For more information, visit the [Computer Science website](#) and your academic advisor at your college.

This guided pathway is designed to meet the needs of students who plan to major in Computer Science and transfer to a four-year college or university. An Associate of Science (AS) degree in this pathway prepares you to transfer to a university to earn a bachelor's degree that can open the door to a variety of careers, including – but not limited to: Enterprise Application Development, Software Engineering, Cloud Software Services, Computer Graphics and Visualization, Machine Learning, and Artificial Intelligence.

This is an example course sequence for students interested in Computer Science. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an AS degree With a Field of Study in Computer Science ⁱⁱ, which will increase your chances of transfer to bachelor's-level programs. This degree **does not** include all core course requirements. Courses that complete the Degree (D) are noted below. For official degree requirements, please [click here](#).

Visit www.dcccd.edu/TransferServices to view the Top 15 colleges and universities to which students at the colleges of DCCCD transfer. Visit with your academic advisor to choose courses that will help you to transfer to a specific university.



Offered at:
BHC, CVC, EFC, ECC, NLC, & RLC

COLLEGE READINESS REQUIREMENTS

Enrolling in one or more courses may be necessary if assessment activities and previous academic experiences indicate a need for additional knowledge and skills:

PROGRAM SPECIFIC REQUIREMENTS ⁱⁱⁱ

READING & WRITING PLACEMENT

MATH PLACEMENT

ENGLISH LANGUAGE PROFICIENCY

TSI READING MET: YES NO
TSI WRITING MET: YES NO

TSI MATH MET: YES NO

ENGLISH PROFICIENCY: YES NO

- MATH 1314 ⁱⁱⁱ
- MATH 1316 ⁱⁱⁱ

IF TSI OR ENGLISH LANGUAGE PROFICIENCY NOT MET, INSERT COURSE(S) NEEDED

DREA / DWRI / DIRW (CIRCLE ONE)

DMAT _____

ESOL _____

OTHER: _____

OTHER: _____

OTHER: _____

Exemptions/waivers may exist. Speak with an academic advisor regarding placement in college readiness courses and your ability to enroll in core academic coursework.

SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS ^{iv}

All maps can be modified to fit the needs of part-time students

D SEMESTER 1 ACTION ITEMS

- ◆ ENGL 1301 – Composition I ^v (core course)
- ◆ HIST 1301 – United States History I (core course)
- ◆ MATH 2412 – Pre-Calculus Math ^{iii v} (core course)
- ◆ COSC 1436 – Programming Fundamentals I

- Meet with your advisor to confirm your academic and career goals by the end of the semester.
- At the end of the semester, begin researching colleges and universities where you would want to major in Computer Science.
- Meet with a career advisor/coach to research your career options with a Computer Science degree.

TOTAL SEMESTER CREDIT HOURS: 14

D SEMESTER 2 ACTION ITEMS

- ◆ ENGL 1302 – Composition II (core course)
- ◆ HIST 1302 – United States History II ^{vi} (core course)
- ◆ MATH 2413 – Calculus I
- ◆ Social and Behavioral Sciences Core Elective ^{vi} (core course)
- ◆ COSC 1437 – Programming Fundamentals II

- Meet with an advisor to confirm or update your academic/career pathway and program of study.
- Ask about transfer advising to discuss options to pursue the bachelor's degree.

TOTAL SEMESTER CREDIT HOURS: 17

D SEMESTER 3 ACTION ITEMS

- ◆ GOVT 2305 – Federal Government (core course)
- ◆ MATH 2414 – Calculus II ^{vii}
- ◆ PHYS 2425 – University Physics I (core course)
- ◆ COSC 2436 – Programming Fundamentals III

- Begin applying to your top choice universities.
- Begin applying for Financial Aid and Scholarships
 - You can start the FAFSA in October for the next academic year. (i.e., in October 2019, you can complete the FAFSA if you plan to register for classes at a college or university Fall 2020)
- Check with your advisor for important deadlines and dates.

TOTAL SEMESTER CREDIT HOURS: 15

D SEMESTER 4 ACTION ITEMS

- ◆ GOVT 2306 – Texas Government (core course)
- ◆ PHYS 2426 – University Physics II (core course)
- ◆ **Choose One:** ARTS 1301 – Art Appreciation ^{vi} (core course)
DANC 2303 – Dance Appreciation ^{vi} (core course)
DRAM 1310 – Introduction to Theater ^{vi} (core course)
HUMA 1315 – Fine Arts Appreciation ^{vi} (core course)
MUSI 1306 – Music Appreciation ^{vi} (core course)
- ◆ COSC 2425 – Computer Organization

- After reviewing your final program of study, apply for graduation.
 - Meet with your advisor to apply for the Associate of Science degree with the Computer Science Field of Study.
 - Sign up for commencement.
- Request final transcripts to be sent to the college or university to where you will transfer.
- Join the [Alumni Network!](#)

TOTAL SEMESTER CREDIT HOURS: 14

AS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS | PATHWAY TOTAL: 60 SEMESTER CREDIT HOURS

ⁱ Degree plans may change in later catalogs. You may use this pathway if you entered one of the seven colleges on or before this date.
ⁱⁱ Students must earn at least 25% of the credit hours (15 hours) required for graduation through instruction by one of the seven DCCCD colleges awarding the degree.
ⁱⁱⁱ To register for MATH 2413, students must have completed the prerequisite math courses as follows: MATH 1314, MATH 1316, MATH 2412
^{iv} This is not an official degree plan. For official degree requirements, please [click here](#).
^v 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 2.00 on all college-level course work.
^{vi} There are several options to fulfill this requirement. See your academic advisor for a specific list.
^{vii} Some universities require the completion of MATH 2415, as well.