STEM

GUIDED PATHWAY: MATHEMATICS

For more information, visit www.dcccd.edu/math and your academic advisor at your college.

Studying mathematics develops such skills as arguing logically and rigorously, thinking abstractly, formulating and solving problems, analyzing data, and creating and analyzing mathematical models. The guided pathway in Mathematics will provide a foundation for you to move on toward a baccalaureate degree. An Associate of Science (AS) degree with courses in this pathway prepares you to transfer to a university to earn a bachelor's degree that will prepare you for jobs in statistics, actuarial sciences, mathematical modeling, cryptography, and mathematics education, as well as prepare you for graduate school leading to a research career in engineering, mathematics or statistics.

This is an example course sequence for students interested in pursuing Mathematics. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an AS degree [ii], which will increase your chances of transfer to bachelor's-level programs. Courses that complete the Degree (D) are noted below. For official degree requirements, 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 ALL Colleges

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:

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**
IF TSI OR ENGLISH LANGUAGE PROFICIENCY NOT MET, INSERT COURSE(S) NEEDED		
☐ DREA / DWRI / DIRW *(CIRCLE ONE)* _____ ☐ OTHER: _____	☐ DMAT_____ ☐ OTHER: _____	☐ ESOL: _____ ☐ 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.

PROGRAM SPECIFIC REQUIREMENTS [iii]

- ☐ MATH 1314 [iii]
- ☐ MATH 1316 [iii]
- ☐ MATH 2412 [iii]

[iii] ***These are pre-reqs to MATH 2413.***

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)*	☐ 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 Mathematics. ○ *Course requirements vary. Be sure to research different course needs at universities to which you want to transfer.* ☐ Meet with a career advisor/coach to research career options with a Math degree.
♦	**HIST 1301** – United States History I *(core course)*	
♦	**MATH 2413** – Calculus I [iii] [v] [vi] *(core course)*	
♦	**EDUC 1300** – Learning Framework [vii]	
♦	**SPCH 1311** – Introduction to Speech Communication [vi] *(core course)* ***OR*** **SPCH 1315** – Public Speaking [vi] *(core course)*	
	TOTAL SEMESTER CREDIT HOURS: 16	

D	SEMESTER 2	ACTION ITEMS
♦	**ENGL 1302** – Composition II *(core course)*	☐ Meet with your 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 at the university to which you intend to transfer.
♦	**HIST 1302** – United States History II [vi] *(core course)*	
♦	**PHED 1164** – Introduction to Physical Fitness and Wellness *(core course)*	
♦	**MATH 2414** – Calculus II	
♦	***Choose One:*** **PHYS 2425** – University Physics I [viii] *(core course)* **CHEM 1411** – General Chemistry I [viii] *(core course)* **BIOL 1406** – Biology for Science Majors I [viii] *(core course)*	
	TOTAL SEMESTER CREDIT HOURS: 15	

D	SEMESTER 3	ACTION ITEMS
♦	***Choose One:*** **ENGL 2326** – American Literature [vi] *(core course)* **ENGL 2331** – World Literature [vi] *(core course)* **PHIL 1301** – Introduction to Philosophy [vi] *(core course)*	☐ 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 2018, you can complete the FAFSA if you plan to register for classes at a university Fall 2019)* ☐ Check with your advisor for important deadlines and dates.
♦	**GOVT 2305** – Federal Government *(core course)*	
♦	**MATH 2415** – Calculus III	
♦	***Choose One:*** **ECON 2301** – Principles of Macroeconomics [vi] *(core course)* **PSYC 2301** – General Psychology [vi] *(core course)* **SOCI 1301** – Introduction to Sociology [vi] *(core course)*	
♦	***Choose One:*** **PHYS 2426** – University Physics II [viii] *(core course)* **CHEM 1412** – General Chemistry II [viii] *(core course)* **BIOL 1407** – Biology for Science Majors II [viii] *(core course)*	
	TOTAL SEMESTER CREDIT HOURS: 17	

D	SEMESTER 4	ACTION ITEMS
♦	**MATH 2318 or 2418** – Linear Algebra [viii]	☐ After reviewing your degree plan and program of study, apply for Graduation. ○ Meet with your advisor to apply for the Associate of Science degree. ○ Sign up for commencement. ☐ Request final transcripts to be sent to the college or university to where you will transfer. ☐ Join the Alumni Network!
♦	***Choose One:*** **COSC 1436** – Programming Fundamentals I [viii] **COSC 1437** – Programming Fundamentals II [viii] **COSC 1301** – Introduction to Computing [viii]	
♦	**GOVT 2306** – Texas Government *(core course)*	
♦	***Choose One:*** **ARTS 1301** – Art Appreciation [vi] *(core course)* **DRAM 1310** – Introduction to Theater [vi] *(core course)* **MUSI 1306** – Music Appreciation [vi] *(core course)*	
♦	**MATH 2320 or 2420** – Differential Equations [viii] ***OR*** **MATH 2305** – Discrete Mathematics [viii]	
	TOTAL SEMESTER CREDIT HOURS: 15 – 18	

AS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS | PATHWAY TOTAL: 63 – 66 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] All college students with fewer than 12 semester credit hours of successful college credit (grade of "C" or above) should take a student success course in the first semester.
[viii] Choose the appropriate Science, Math, and Computer Science course based on the university to which you will transfer. See your academic advisor for details.

Dallas County Community College District

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