

**STEM**

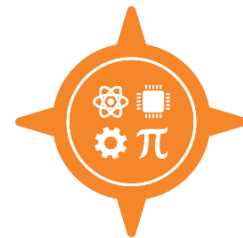
**GUIDED PATHWAY: PHYSICS**

For more information, visit [www.dcccd.edu/physics](http://www.dcccd.edu/physics) and your academic advisor at your college.

Physics, the branch of science concerned with the nature and properties of matter and energy, encompasses the study of the universe from the largest galaxies to the smallest subatomic particles. It explores motion, heat, light and other radiation, sound, electricity, magnetism and the structure of atoms. The guided pathway in Physics will provide a foundation for you to move on toward a rewarding future rich in diverse discovery. 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 opens the door to a career in just about anything.

This is an example course sequence for students interested in pursuing Physics. It does not represent a contract, nor does it guarantee course availability. Following this pathway will help you earn an AS degree <sup>ii</sup>, 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](http://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.



COLLEGE READINESS REQUIREMENTS			PROGRAM SPECIFIC REQUIREMENTS <sup>iii</sup>
<i>Enrolling in one or more courses may be necessary if assessment activities and previous academic experiences indicate a need for additional knowledge and skills:</i>			
<b>READING &amp; WRITING PLACEMENT</b>	<b>MATH PLACEMENT</b>	<b>ENGLISH LANGUAGE PROFICIENCY</b>	<input type="checkbox"/> MATH 1314 <sup>iii</sup> <input type="checkbox"/> MATH 1316 <sup>iii</sup> <input type="checkbox"/> MATH 2412 <sup>iii</sup> <sup>iii</sup> <b>These are pre-reqs to MATH 2413.</b>  <b>Consider completing prior to transfer:</b> <input type="checkbox"/> COSC 1315 <input type="checkbox"/> MATH 2318/2418 <input type="checkbox"/> MATH 2420
TSI READING MET: <u>  </u> YES <u>  </u> NO TSI WRITING MET: <u>  </u> YES <u>  </u> NO	TSI MATH MET: <u>  </u> YES <u>  </u> NO	ENGLISH PROFICIENCY: <u>  </u> YES <u>  </u> NO	
IF TSI OR ENGLISH LANGUAGE PROFICIENCY NOT MET, INSERT COURSE(S) NEEDED			
<input type="checkbox"/> DREA / DWRI / DIRW (CIRCLE ONE)  <input type="checkbox"/> OTHER: _____	<input type="checkbox"/> DMAT _____  <input type="checkbox"/> OTHER: _____	<input type="checkbox"/> ESOL: _____  <input type="checkbox"/> OTHER: _____	
<i>Exemptions/waivers may exist. Speak with an academic advisor regarding placement in college readiness courses and your ability to enroll in core academic coursework.</i>			

**SEMESTER-BY-SEMESTER MAP FOR FULL-TIME STUDENTS <sup>iv</sup>**  
 ALL MAPS CAN BE MODIFIED TO FIT THE NEEDS OF PART-TIME STUDENTS

D	SEMESTER 1	ACTION ITEMS
◆	ENGL 1301 – Composition I <sup>v</sup> (core course)	<input type="checkbox"/> Meet with your advisor to confirm your academic and career goals. <input type="checkbox"/> Meet with a career advisor/coach to research your career options with a Physics degree. <input type="checkbox"/> Ask about your options for transferring to pursue a bachelor's degree.
◆	HIST 1301 – United States History I (core course)	
◆	MATH 2413 – Calculus I <sup>iii v vi</sup> (core course)	
◆	EDUC 1300 – Learning Framework <sup>vii</sup>	
<b>TOTAL SEMESTER CREDIT HOURS: 13</b>		

D	SEMESTER 2	ACTION ITEMS
◆	ENGL 1302 – Composition II (core course)	<input type="checkbox"/> Begin researching universities where you would want to major in Physics. <input type="checkbox"/> Meet with your advisor to confirm or update your academic/career pathway and program of study.
◆	HIST 1302 – United States History II <sup>vi</sup> (core course) <b>OR</b> HIST 2301 – Texas History <sup>vi</sup> (core course)	
◆	MATH 2414 – Calculus II <sup>vi viii</sup>	
◆	CHEM 1411 – General Chemistry I <sup>vi viii</sup> (core course)	
<b>TOTAL SEMESTER CREDIT HOURS: 14</b>		

D	SEMESTER 3	ACTION ITEMS
◆	<b>Choose One:</b> ENGL 2332 – World Literature I <sup>vi viii</sup> (core course) ENGL 2333 – World Literature II <sup>vi viii</sup> (core course) PHIL 1301 – Introduction to Philosophy <sup>vi viii</sup> (core course)	<input type="checkbox"/> Begin applying to your top choice universities.
◆	CHEM 1412 – General Chemistry II <sup>vi viii</sup> (core course)	
<b>TOTAL SEMESTER CREDIT HOURS: 7</b>		

D	SEMESTER 4	ACTION ITEMS
◆	GOVT 2305 – Federal Government (core course)	<input type="checkbox"/> 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)  <input type="checkbox"/> Check with your advisor for important deadlines and dates. <input type="checkbox"/> Before enrolling in MATH 2420 or MATH 2318/2418, be sure which course, if either, will transfer to the university you want to attend.
◆	<b>Choose One:</b> ANTH 2351 – Cultural Anthropology <sup>vi viii</sup> (core course) ECON 2301 – Principles of Macroeconomics <sup>vi viii</sup> (core course) PSYC 2301 – General Psychology <sup>vi viii</sup> (core course) SOCL 1301 – Introduction to Sociology <sup>vi viii</sup> (core course)	
◆	PHYS 2425 – University Physics I	
◆	MATH 2415 – Calculus III <sup>vi viii</sup>	
<b>TOTAL SEMESTER CREDIT HOURS: 14</b>		

D	SEMESTER 5	ACTION ITEMS
◆	GOVT 2306 – Texas Government (core course)	<input type="checkbox"/> 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.  <input type="checkbox"/> Request final transcripts to be sent to the college or university to where you will transfer. <input type="checkbox"/> Join the <a href="#">Alumni Network!</a>
◆	PHYS 2426 – University Physics II	
◆	SPCH 1311 – Introduction to Speech Communication <sup>vi</sup> <b>OR</b> SPCH 1315 – Public Speaking <sup>vi</sup> (both core courses)	
◆	PHED 1164 – Introduction to Physical Fitness and Wellness (core course)	
◆	<b>Choose One:</b> ARTS 1301 – Art Appreciation <sup>vi viii</sup> (core course) DRAM 1310 – Introduction to Theater <sup>vi viii</sup> (core course) MUSI 1306 – Music Appreciation <sup>vi viii</sup> (core course)	
<b>TOTAL SEMESTER CREDIT HOURS: 14</b>		

**AS DEGREE MINIMUM: 60 SEMESTER CREDIT HOURS | PATHWAY TOTAL: 62 SEMESTER CREDIT HOURS**

<sup>i</sup> 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.  
<sup>ii</sup> 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.  
<sup>iii</sup> To register for MATH 2413, students must have completed the prerequisite math courses as follows: MATH 1314, MATH 1316, MATH 2412  
<sup>iv</sup> This is not an official degree plan. For official degree requirements, please [click here](#).  
<sup>v</sup> 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.  
<sup>vi</sup> There are several options to fulfill this requirement. See your academic advisor for a specific list.  
<sup>vii</sup> 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.  
<sup>viii</sup> Elective courses should be selected according to the intended university to which you will transfer. See your academic advisor for assistance with course selection.

THIS PATHWAY WAS LAST UPDATED APRIL 15, 2019