SCIENCE - ASSOCIATE IN SCIENCE

SCID

This degree program is intended for individuals who wish to pursue a career in science or a related field. Such fields include, but are not limited to, astronomy, biochemistry, biology, biophysics, biotechnology, chemistry, environmental geology, environmental science, forensics, forestry, geochemistry, geology, geophysics, home economics, marine biology, meteorology, mortuary science, nutrition (or dietetics), oceanography, optometry, pharmacy, physical education, physics or plant science. This program also is intended for those who wish to pursue medical, dental or veterinary degrees.

Note: A minimum of a bachelor's degree is usually required of individuals planning to work in science or a related area. Therefore, students should take the CCRI Associate in Science degree program with the expectation of transferring to a four-year college or university. The choice of which elective credits to select should be made in consultation with an advisor from one of the science departments in accordance with the transfer requirements of the four-year school. Many courses require prerequisites, corequisites and/or testing. See course descriptions for details (https://catalog.ccri.edu/course-descriptions/).

Students should consult the transfer requirements of their intended school of transfer.

Program Learning Outcomes

Upon completion of this program, a student will be able to:

1. Demonstrate a factual knowledge base relevant to science.
2. Display both written and oral communication skills using scientific terminology.
3. Read, understand, and carry out laboratory protocols while using appropriate laboratory equipment with minimal supervision.
4. Work in collaboration with other students in a scientific environment.
5. Apply mathematical concepts to solving quantitative scientific problems while employing critical thinking and the scientific method.
6. Demonstrate competency in the use of scientific techniques and technology/read, understand, and depict quantitative information in both tabular and graphic form.

Requirements

Admission Requirements

To be admitted to this program, applicants must have a minimum level of math preparation in order to take and successfully complete College Algebra (MATH 1200) or (MATH 1200C) in the first semester.

Code	Title	Hours
General Education Requirements		
COMM 1010	Communication Fundamentals^ HUMN; Non-Written Communication; Social and Professional Responsibilities	3
ENGL 1010	Composition I (or ENGL 1010A) HUMN; Written Communication; Information Literacy	3
General Education Elective (https://catalog.ccri.edu/academic-information/general-education/courses-approved-general-education-credits/)		3
Literature Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#litgened/) HUMN		3
MATH 1240	Statistical Analysis I MSCI; Scientific Reasoning; Quantitative Literacy	4
Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#sscigened/) SSCI		3
Choose ONE of the following: [1]		4
MATH 2111	Pre-Calculus Mathematics MSCI; Scientific Reasoning; Quantitative Literacy	
MATH 2131	Applied Calculus MSCI; Scientific Reasoning; Quantitative Literacy	
MATH 2141	Calculus I MSCI; Scientific Reasoning; Quantitative Literacy	
MATH 2142	Calculus II MSCI; Scientific Reasoning; Quantitative Literacy	
MATH 2243	Calculus III MSCI; Scientific Reasoning; Quantitative Literacy	
Subtotal		23
Major Requirements		
Select two of the following sequences: [2, 3]		16-18
BIOL 1001 & BIOL 1002	Introductory Biology: Organismal and Introductory Biology: Cellular	
or BIOL 1001 & BIOL 1000	Introductory Biology: Organismal and Cell Biology for Technology	
CHEM 1030 & CHEM 1100	General Chemistry I and General Chemistry II	
PHYS 1030 & PHYS 1040	General Physics I and General Physics II	
Additional Science Requirements [4]		8-10
Choose ONE of the following Applications in Science and Math courses:		1
BIOL 2500	Applications in Science and Math^	
CHEM 2500	Applications in Science and Math^	
PHYS 2500	Applications in Science and Math^	
Free Electives [5]		9-14
Subtotal		39-43
Total Hours		**62-66**

1 MATH - Placement test required. If placement test indicates enrollment in Early Foundations of College Mathematics (MATH 0099) or Foundations of College Mathematics (MATH 0100) or Foundations of College Algebra (MATH 0101) is necessary, these courses, although required, are not accepted as degree credit. Students should take a placement test prior to enrolling. Note: It is recommended that students wishing to transfer for a bachelor's degree in the physical sciences take the complete calculus sequence (Calculus I (MATH 2141), Calculus II (MATH 2142) and Calculus III (MATH 2243)).

2 Select two pairs of sequential courses from the top three in the Major Requirements list above (BIOL, CHEM or PHYS) for a total of 16 to 18 credits. If you select General Chemistry I (CHEM 1030), contact the Chemistry Department for information regarding a chemistry placement exam (https://www.ccri.edu/chemistry/placement_exam/) (to be taken prior to enrolling).

3 Biotechnology Transition Option - Biotechnology credits can be used toward the completion of the Science track leading to an Associate in Science (A.S.) degree. The four-credit Cell Biology for

Technology (BIOL 1000) is one of the suggested science courses. Eight of the Biotechnology certificate program credits (Orientation to Biotechnology (BIOL 1300), Introduction to Biotechnology Laboratory Skills (BIOL 1310) and General Microbiology (BIOL 2480)) would count as science credits and the remaining six credits could be used as elective credits. See the Biotechnology certificate program for more information (https://catalog.ccri.edu/programs-study/biology/cert/biotechnology-certificate/).

[4] Select **8 to 10** credits from astronomy (ASTR) (https://catalog.ccri.edu/course-descriptions/astr/), biology (BIOL) (https://catalog.ccri.edu/course-descriptions/biol/), chemistry (CHEM) (https://catalog.ccri.edu/course-descriptions/chem/), geology (GEOL) (https://catalog.ccri.edu/course-descriptions/geol/), oceanography (OCEN) (https://catalog.ccri.edu/course-descriptions/ocen/) or physics (PHYS) (https://catalog.ccri.edu/course-descriptions/phys/).

[5] **Take 9 to 14 credits.** All students are encouraged to consult the requirements of the intended transfer school to find out which electives will best suit their transfer needs.

^ Work-based learning course

Recommended Course Sequence

Course	Title	Hours
Year 1		
Semester 1		
ENGL 1010	Composition I (or ENGL 1010A)	3
Choose ONE of the following:		4
MATH 2111	Pre-Calculus Mathematics	
MATH 2131	Applied Calculus	
MATH 2141	Calculus I	
MATH 2142	Calculus II	
MATH 2243	Calculus III	
Select ONE of the following sequences:		8-9
BIOL 1001	Introductory Biology: Organismal (and BIOL 1002 Introductory Biology: Cellular or BIOL 1000 Cell Biology for Technology)	
CHEM 1030	General Chemistry I (and CHEM 1100 General Chemistry II)	
PHYS 1030	General Physics I (and PHYS 1040 General Physics II)	
	Hours	**15-16**
Semester 2		
MATH 1240	Statistical Analysis I	4
Literature Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#litgened/)		3
Choose ONE of the following sequences:		8-9
BIOL 1001	Introductory Biology: Organismal (and BIOL 1002 Introductory Biology: Cellular or BIOL 1000 Cell Biology for Technology)	
CHEM 1030	General Chemistry I (and CHEM 1100 General Chemistry II)	
PHYS 1030	General Physics I (and PHYS 1040 General Physics II)	
	Hours	**15-16**
Year 2		
Semester 1		
COMM 1010	Communication Fundamentals^	3
Science Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#scigened/)		4-5
Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#sscigened/)		3
Electives		6
	Hours	**16-17**
Semester 2		
Science Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#scigened/)		4-5
Choose ONE of the following:		1
BIOL 2500	Applications in Science and Math^	
CHEM 2500	Applications in Science and Math^	
PHYS 2500	Applications in Science and Math^	
Choose ONE of the following:		3-4
Humanities Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#humngened/)		
Mathematics Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#mathgened/)		
Science Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#scigened/)		
Social Science Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#sscigened/)		
Electives		8
	Hours	**16-18**
	Total Hours	**62-67**

Transfer

Please meet with an Academic Advisor/Student Success Coach (https://ccri.edu/advising/) if you are interested in earning a bachelor's degree. Your Academic Advisor will help you select the courses that best prepare you for transfer to a four-year college or university.

Check out the Joint Admissions Agreement (https://ccri.edu/jaa/) if you are interested in transferring to Rhode Island College or the University of Rhode Island. The JAA program offers seamless transfer to RIC or URI with additional benefits. Transfer information, events, and articulations are available on the Transfer Center website (https://ccri.edu/oes/transfer_center/).