

BIOLOGY/CHEMISTRY

Associate in Science

The Biology/Chemistry program prepares students for further study in the biological and physical sciences. The program provides students with a solid foundation in basic scientific principles, as well as mathematics. Students in this program develop a strong scientific foundation that will enable them to pursue advanced studies in specific biological and chemical disciplines.

Upon successfully completing this program, students should be able to:

- demonstrate competency in laboratory skills related to biology;
- demonstrate competency in laboratory skills related to chemistry;
- communicate effectively in a scientific manner;
- demonstrate an understanding of biological and chemical theory and application.

Transfer of Credits

Biology/Chemistry graduates may transfer credits to a bachelor's degree program at a four-year college or university. Please direct specific questions to an advisor.

First Semester		Credits
<input type="checkbox"/>	BIO 101 General Biology I ^f	4
<input type="checkbox"/>	CHM 101 College Chemistry I ^{f*}	4
<input type="checkbox"/>	ENG 101 English Composition I	3
<input type="checkbox"/>	Humanities/Social Science Elective	3
<input type="checkbox"/>	Open Elective	3
		17

Second Semester		
<input type="checkbox"/>	BIO 102 General Biology II ^g	4
<input type="checkbox"/>	CHM 102 College Chemistry II ^g	4
<input type="checkbox"/>	ENG 102 English Composition II	3
<input type="checkbox"/>	ETH 200 Ethics in the Modern World	3
<input type="checkbox"/>	PSY 101 General Psychology	3
		17

Third Semester		
<input type="checkbox"/>	BIO 213 General Ecology ^f	3
<input type="checkbox"/>	MAT 231 Calculus I	4
<input type="checkbox"/>	PHY 101 Physics I ^h	4
<input type="checkbox"/>	Science Elective (200 level sequence)*	4
		15

Fourth Semester		
<input type="checkbox"/>	ENG 202 Introduction to Speech Communication	3
<input type="checkbox"/>	MAT 232 Calculus II ^g	4
<input type="checkbox"/>	PHY 102 Physics II ^h	4
<input type="checkbox"/>	Science Elective (200 level sequence)*	4
		15

Total Credits: 64

*Students are required to take either BIO 220 and BIO 221 (Anatomy & Physiology I and II) or CHM 201 and CHM 205 (Organic Chemistry I and II).

^f Offered fall semester only | ^g Offered spring semester only

^h Requires college-level prerequisite not included in course sequence. Please see course description.

N.J. General Education Component

Communication:	ENG 101, ENG 102
Math/Science/	
Technological Competency:	MAT 231, BIO 101, CHM 101
Social Science:	PSY 101, Humanities/Social Science Elective
Humanities:	ETH 200
History:	not required
Cultural/Global Awareness:	not required
Unassigned:	ENG 202, MAT 232

AGRICULTURE

Associate in Applied Science | Joint degree in partnership with Cumberland County College

Students learn how to propagate, grow and maintain agricultural and horticultural crops. Graduates may choose from a variety of career-related fields such as greenhouse, nursery, orchard and garden center management, or sales for retail and wholesale companies.

Upon successfully completing this program, students should be able to:

- apply knowledge of the anatomy and physiology of vascular plants by identifying, selecting and managing agricultural crops;
- successfully propagate a variety of plants using specific propagation techniques;
- produce a plan to organize and operate an agriculture enterprise;
- locate, retrieve, and critically evaluate information and information sources relating to agriculture; and
- demonstrate readiness for employment in the field of production agriculture.

Students in the Agriculture program who successfully complete the first-year requirements at SCC with a C or higher in all required courses are guaranteed acceptance into the second year of the program at Cumberland County College at CCC's in-county tuition rate. Students interested in completing the degree at CCC should contact CCC's Admissions Office early in their second semester. Students who successfully complete the second-year requirements at CCC will receive a joint Associate in Applied Science degree in Agriculture from Salem Community College and Cumberland County College.

Transfer of Credits

Students interested in transferring to a four-year college or university after completion of the Associate in Applied Science degree in Agriculture should contact the Office of Advisement, Transfer and Career Services at Cumberland County College.

First Semester (at Salem Community College)

		Credits
<input type="checkbox"/>	BIO 101 General Biology I*	4
<input type="checkbox"/>	CHM 101 College Chemistry I**	4
<input type="checkbox"/>	ENG 101 English Composition I	3
<input type="checkbox"/>	Cultural and Global Awareness Elective	3
		14

Second Semester (at Salem Community College)

<input type="checkbox"/>	ENG 102 English Composition II	3
<input type="checkbox"/>	MAT 137 College Algebra (or higher-level MAT)	3
<input type="checkbox"/>	Humanities Elective	3
<input type="checkbox"/>	Social Science Elective	3
		12

Summer (at Cumberland County College)

<input type="checkbox"/>	AG 207 Agricultural Pest Control	4
<input type="checkbox"/>	Program Elective*	3/4
		7/8

Third Semester (at Cumberland County College)

<input type="checkbox"/>	AG 105 Introduction to Agricultural Science	3
<input type="checkbox"/>	AG 201 Agricultural Marketing	3
<input type="checkbox"/>	OH 201 Introduction to Soil Science	4
<input type="checkbox"/>	OH 204 Greenhouse Management	4
<input type="checkbox"/>	Program Elective	3
		17

Fourth Semester (at Cumberland County College)

<input type="checkbox"/>	OH 103 Plant Science	4
<input type="checkbox"/>	OH 104 Plant Propagation	3
<input type="checkbox"/>	OH 109 Research/Internship	1
<input type="checkbox"/>	Program Elective*	3
<input type="checkbox"/>	Program Elective*	3
		14

Total Credits: 64/65

*Program Electives at Cumberland County College (credits indicated in parentheses) include: AG 102 Equipment Operations and Management (2), AG 203 Fruit Production (3), AG 206 Vegetable Production (3), OH 106 Plant Materials (3), OH 108 Herbaceous Plants (3), OH 202 Landscape Design I (4), OH 203 Turf Management (3) and OH 208 Nursery Management (3).

* Offered fall semester only

** Requires college-level prerequisite not included in course sequence. Please see course description.

N.J. General Education Component

Communication:	ENG 101, ENG 102
Math/Science/Technological Competency:	MAT 137
Social Science:	Social Science Elective
Humanities:	not required
History:	not required
Cultural/Global Awareness:	not required
Unassigned:	BIO 101, CHM 101

NUCLEAR ENERGY TECHNOLOGY

Associate in Applied Science

The Nuclear Energy Technology program prepares students to move directly into the workforce upon graduation. Students will be qualified for entry-level positions in nuclear power maintenance and technology. Courses provide students with a solid foundation in basic scientific principles as well as mathematics. Students are exposed to the theory, materials and equipment necessary to work in the nuclear technology field. Special emphasis is placed on nuclear safety and procedures.

Upon successfully completing this program, students should be able to:

- communicate effectively in a professional manner,
- demonstrate an understanding of scientific inquiry and application,
- demonstrate an understanding of nuclear power fundamentals,
- work safely and effectively in the field of nuclear maintenance,
- demonstrate an understanding of the basic operation of a nuclear power plant, and
- demonstrate readiness for employment in the nuclear energy field.

Transfer of Credits

Although this program is designed for immediate career preparation, some credits may transfer to an associate or bachelor's degree program. Please direct specific questions to an advisor.

First Semester

		Credits
<input type="checkbox"/>	CSC 115 Computer Applications*	3
<input type="checkbox"/>	ENG 101 English Composition I	3
<input type="checkbox"/>	NET 111 Mathematics for Energy Technicians [†]	3
<input type="checkbox"/>	NET 115 Mechanical Sciences [†]	4
<input type="checkbox"/>	Social Science or Humanities Elective+	3
		16

Second Semester

<input type="checkbox"/>	ENG 122 Business and Occupational Writing*	3
<input type="checkbox"/>	MAT 137 College Algebra*	3
<input type="checkbox"/>	NET 130 Applied Physics and Chemistry*	4
<input type="checkbox"/>	NET 131 Nuclear Industry Fundamental Concepts*	3
<input type="checkbox"/>	NET 133 Electrical Science*	4
		17

Third Semester

<input type="checkbox"/>	NET 211 Heat Transfer and Fluid Flow [†]	3
<input type="checkbox"/>	NET 213 Instrumentation and Control I [†]	3
<input type="checkbox"/>	NET 251 Maintenance: Electrical Systems [†]	3
<input type="checkbox"/>	NET 261 Nuclear Plant Systems and Components - PWR [†]	3
<input type="checkbox"/>	PHY 101 Physics I**	4
		16

Fourth Semester

<input type="checkbox"/>	ENG 202 Introduction to Speech Communication*	3
<input type="checkbox"/>	NET 221 Nuclear Science*	3
<input type="checkbox"/>	NET 223 Reactor Plant Protection and Safety*	4
<input type="checkbox"/>	NET 225 Instrumentation and Control II*	4
<input type="checkbox"/>	NET 263 Nuclear Plant Systems and Components - BWR*	3
		17

Total Credits: 66

Admission to this program may be limited.

*Students should select from the following courses: ECO 201, ECO 202, ETH 200, GEO 101, POL 101, POL 102, PSY 101, PSY 111 or SOC 101.

**Students with previous computer science experience may substitute another computer science course for CSC 115.

[†] Offered fall semester only | * Offered spring semester only

N.J. General Education Component

Communication:	ENG 101, ENG 122
Math/Science/Technological Competency:	MAT 137
Social Science:	Social Science Elective or
Humanities:	Humanities Elective
History:	not required
Cultural/Global Awareness:	not required
Unassigned:	CSC 115, ENG 202, PHY 101

LIBERAL ARTS

Associate in Arts

The Liberal Arts program explores a variety of subjects in the humanities, social sciences and natural sciences in preparation for transfer to a traditional baccalaureate degree program. Taking courses in most of the major academic disciplines and using various methods of inquiry, students have opportunities to increase self-awareness, interpersonal skills, creativity and civic awareness. Students are encouraged to develop frames of reference necessary for critical thinking and problem solving.

Upon successfully completing this program, students should be able to:

- analyze major themes in liberal studies including social sciences, natural sciences and humanities;
- apply principles from the natural and social sciences and from the humanities to analyze their society and culture; and
- demonstrate an appreciation of cultural diversity.

Transfer of Credits

Liberal Arts graduates may transfer credits to a bachelor's degree program at a four-year college or university. Please direct specific questions to an advisor.

First Semester		Credits
<input type="checkbox"/>	ENG 101 English Composition I	3
<input type="checkbox"/>	HIS 101 Western Civilization I	3
<input type="checkbox"/>	SOC 101 Introduction to Sociology	3
<input type="checkbox"/>	Mathematics Elective+	3/4
<input type="checkbox"/>	Open Elective	3
		15/16

Second Semester		Credits
<input type="checkbox"/>	ENG 102 English Composition II	3
<input type="checkbox"/>	HIS 102 Western Civilization II	3
<input type="checkbox"/>	Computer Science Elective	3
<input type="checkbox"/>	Mathematics Elective+	3/4
<input type="checkbox"/>	Social Science Elective	3
		15/16

Third Semester		Credits
<input type="checkbox"/>	Humanities Elective	3
<input type="checkbox"/>	Humanities Elective	3
<input type="checkbox"/>	Open Elective	3
<input type="checkbox"/>	Science Elective	4
<input type="checkbox"/>	Social Science Elective	3
		16

Fourth Semester		Credits
<input type="checkbox"/>	ENG 202 Introduction to Speech Communication	3
<input type="checkbox"/>	Humanities Elective	3
<input type="checkbox"/>	Open Elective	3
<input type="checkbox"/>	Science Elective	4
<input type="checkbox"/>	Social Science Elective	3
		16

Total Credits: 62-64

+Students must successfully complete two of the following college-level mathematics courses: MAT 134, MAT 137, MAT 145, MAT 153, MAT 201, MAT 231, MAT 232 or MAT 233.

N.J. General Education Component

Communication:	ENG 101, ENG 102, ENG 202
Math/Science/Technological Competency:	2 Mathematics Electives, 2 Science Electives
Social Science:	2 Social Science Electives
Humanities:	3 Humanities Electives
History:	HIS 101, HIS 102
Cultural/Global Awareness:	SOC 101

This program can be completed online.

HEALTH SCIENCE

Associate in Science

The Health Science program explores the diverse field of health science and introduces liberal arts studies. Students are exposed to the various disciplines of health science and are challenged to develop their critical-thinking and problem-solving skills. Students gain the scientific skills required and learn the theory and methodology required to continue in the field. The program also allows students with previous training in a specific health science discipline to continue their education and earn an Associate in Science degree.

Upon successfully completing this program, students should be able to:

- demonstrate an advanced understanding of scientific inquiry and application as it applies to health science,
- demonstrate an understanding of the theories and methodology of health sciences,
- apply and put into practice the theories and methodology of health sciences, and
- evaluate the ethical dimensions of health science.

Transfer of Credits

Students who complete the requirements for the Associate in Science in Health Science may transfer credits to a bachelor's degree program at a four-year college or university. Please direct specific questions to an advisor.

Students enrolled in any of the Health Science concentrations may elect to transfer to another college under one of five partnership programs in Allied Health. Admission to the transfer partner institution is competitive and may be limited. For more information about transfer, contact the transfer partner institution.

First Semester		Credits
<input type="checkbox"/>	BIO 220 Human Anatomy & Physiology I [†]	4
<input type="checkbox"/>	CSC 115 Computer Applications*	3
<input type="checkbox"/>	ENG 101 English Composition I	3
<input type="checkbox"/>	PSY 101 General Psychology	3
<input type="checkbox"/>	SOC 101 Introduction to Sociology	3
		16

Second Semester		Credits
<input type="checkbox"/>	BIO 221 Human Anatomy & Physiology II	4
<input type="checkbox"/>	ENG 102 English Composition II	3
<input type="checkbox"/>	HSC 200 Standard First Aid and CPR	2
<input type="checkbox"/>	PSY 111 Human Growth and Development	3
<input type="checkbox"/>	Mathematics Elective [‡]	3/4
		15/16

Third Semester		Credits
<input type="checkbox"/>	ENG 202 Introduction to Speech Communication	3
<input type="checkbox"/>	HIS 101 Western Civilization I	3
<input type="checkbox"/>	HSC 211 Medical Terminology	3
<input type="checkbox"/>	Humanities Elective	3
<input type="checkbox"/>	Science Elective	3/4
		15/16

Fourth Semester		Credits
<input type="checkbox"/>	ETH 200 Ethics in the Modern World	3
<input type="checkbox"/>	HIS 102 Western Civilization II	3
<input type="checkbox"/>	HSC 168 Nutrition	3
<input type="checkbox"/>	Humanities Elective	3
<input type="checkbox"/>	Science Elective	3/4
		15/16

Total Credits: 61-64

[†]Students must successfully complete one of the following college-level mathematics courses: MAT 134, MAT 137, MAT 153, MAT 201, MAT 231, MAT 232 or MAT 233.

*Students with previous computer science experience may substitute another computer science course for CSC 115.

[‡]Requires college-level prerequisite not included in course sequence. Please see course description.

N.J. General Education Component

Communication:	ENG 101, ENG 102
Math/Science/Technological Competency:	Mathematics Elective, BIO 220, BIO 221
Social Science:	PSY 101, PSY 111
Humanities:	ETH 200
History:	not required
Cultural/Global Awareness:	not required
Unassigned:	CSC 115, ENG 202