



Chemistry- Associate in Science (2020-2021 Catalog) with HONORS

Developmental Education Course <i>(if required)</i>			<input type="checkbox"/>	MATH020	Pre-Algebra
<input type="checkbox"/>	ACLS050	Introduction to Academic Literacy	<input type="checkbox"/>	MATH022	Elementary Algebra
<input type="checkbox"/>	ENGL027	Writing Skills Workshop	<input type="checkbox"/>	MATH026	Intermediate Algebra

SEMESTER-BY-SEMESTER PROGRAM MAP FOR FULL-TIME STUDENTS

Courses are listed in preferred order of completion

Plans can be modified to fit student needs by adding more semesters

Choose your courses with your Advisor

B= BETH, M= MROE, S=SBTH, E= ESTN, D= DIST *subject to change (see separate list for Honors)

	complete	Course #	Course Title	Credits	Gen Ed	Fall	Winter	Spring	Summer	Pre-requisites / Co-requisites
Semester 1	<input type="checkbox"/>	COLS101	College Success	1		B, M, D	----	B, M, D	D	
	<input type="checkbox"/>	CMTH102	Intro to Communication (Honors option)	3	Comm.	B, M, D	----	B, M, D	B, M, D	
	<input type="checkbox"/>	CHEM120	General Chemistry I	4	Science	B, M	----	B, M	M	PRE: MATH022 or Placement Policy, 1 year of HS Chemistry or CHEM011. ENGL101 eligibility
	<input type="checkbox"/>	ENGL101	English I (Honors option)	3	Comm.	B, M, D, E	----	B, M, D, E	B, M, D	PRE: ENGL Placement Policy
	<input type="checkbox"/>	MATH180	Calculus I	4	QL	B, M, D	----	B, M, D	B, M, D	PRE: MATH145 or 160 with C or better or Placement
			Total Semester Credits:	15						
Semester 2	<input type="checkbox"/>	CHEM220	General Chemistry II	4	Science	M	----	B, M	M	PRE: CHEM120
	<input type="checkbox"/>	ENGL151L	English II (Honors option)	3	Comm.	B, M, D	----	B, M, D	B, M, D	PRE: ENGL101
	<input type="checkbox"/>	MATH181	Calculus II	4	QL	B, M	----	B, M	B, M	PRE: MATH176 or 180 with C or better or placement
	<input type="checkbox"/>		AH,SIT,or SSHB Gen Ed Elective (Honors option)	3	AH,SIT,SSHB	B, M, D	D	B, M, D	B, M, D	Depends on course selected
			Total Semester Credits:	14						
Semester 3	<input type="checkbox"/>	CHEM201G	Organic Chemistry I (WI)	4	Science	B, M	----	M	----	PRE: CHEM220 and ENGL101
	<input type="checkbox"/>	PHYS215	Physics for Science & Engineering I	5	Science	B, M	----	M	----	PRE: MATH181 with C or better
	<input type="checkbox"/>		AH,SIT,or SSHB Gen Ed Elective (Honors option)	3	AH,SIT,SSHB	B, M, D	D	B, M, D	B, M, D	Depends on course selected
	<input type="checkbox"/>		AH,SIT,or SSHB Gen Ed Elective (Honors option)	3	AH,SIT,SSHB	B, M, D	D	B, M, D	B, M, D	Depends on course selected
			Total Semester Credits:	15						
Semester 4	<input type="checkbox"/>	CHEM251	Organic Chemistry II	4	Science	M	----	B, M	----	PRE: CHEM201G
	<input type="checkbox"/>	PHYS225	Physics for Science & Engineering II	5	Science	B, M	----	B, M	----	PRE: PHYS215
	<input type="checkbox"/>		Elective (Honors option)	4		B, M, D	D	B, M, D	B, M, D	Depends on course selected
	<input type="checkbox"/>		Elective (Honors option)	4		B, M, D	D	B, M, D	B, M, D	Depends on course selected
				Total Semester Credits:	17					
			Total Degree Credits	61						

General Education Requirements		
<input type="checkbox"/>	ENGL151L	Diversity
<input type="checkbox"/>	CHEM201G	Writing Intensive
<input type="checkbox"/>		Writing Intensive

HONORS Requirements (at least 12 credits of Honors courses & 3.5 GPA)		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

Notes:

- Students that are not CHEM 120 ready for their first semester should take CHEM 011 in its place.
- Students that are not MATH 180 ready for their first semester should take MATH 160 in its place. If the student is not MATH 160 ready they should take MATH 140. It is highly recommended that all students start their math sequence in the first semester.
- Completion of CHEM 201G satisfies the program-related Writing Intensive (WI) requirement. The second Writing Intensive (WI) requirement can be fulfilled with any of the electives in the SIT, SSHB, and AH categories. Writing Intensive sections end in "G" (e.g. PSYC103G).
- Computer competencies are included in various program courses, specifically CHEM 120, 220, 210G, and 251. Thus,

AH Gen Elective Honors Courses: CMTH 220, ENGL 203, ENGL 264, ENGL 265, PHIL 201, PHIL 202G, PHIL 204

SIT Elective Honors Courses: HIST 113, HIST 163, POLS 101, SOCA 160

SSHB Elective Honors Courses: HUMA 250G, PSYC 103, PSYC 258, PSYC 265, SOCA 103

Elective Honors Courses: ALL honors courses

Arts & Humanities (AH)
ARTA 100 Art and Visual Thinking
ARTA 101 Art History Survey
CMTH 110 Introduction to the Theatre
CMTH 111 Acting I
CMTH 115 Technical Theatre
CMTH 117 Stagecraft
CMTH 126 The Communication Arts
CMTH 189 Stage Voice and Movement
CMTH 190 Stage Production
CMTH 206 Directing
CMTH 211 Plays: Classical to Contemp. (G-WI)
CMTH 212 Acting II
CMTH 218 Theatre Portfolio
CMTH 220 Introduction to Film
DANC 101 Dance History
DANC 110 Ballet I
DANC 120 Modern Dance I
DANC 130 Jazz I
DANC 210 Ballet II
DANC 220 Modern Dance II
DANC 230 Jazz II
ENGL 201 British Literature I (G-WI)
ENGL 203 Shakespeare (G-WI)
ENGL 205 American Literature I (G-WI)
ENGL 211 Plays: Classical to Contemp. (G-WI)
ENGL 215 Multicultural Adolescent Lit (G-WI)
ENGL 250 Latin American Literature (G-WI)
ENGL 251 British Literature II (G-WI)
ENGL 253 Creative Writing
ENGL 255 American Literature II (G-WI)
ENGL 256 Modern Poetry (G-WI)
ENGL 257 20th Century Lit by Women (G-WI)
ENGL258 Fiction Writing
ENGL 260 Contemporary Literature (G-WI)
ENGL 264 Irish Literature (G-WI)
ENGL 265 African-American Literature (G-WI)
ENGL 267 Poetry Writing
HUMA 121 The American Work Experience (G-WI)
HUMA 140 Intro to Women & Gender Studies (G-WI)
HUMA 150 Nature of the Environment
HUMA210 Creativity and the Origin of Ideas
JOUR 101 Journalism and Society
Modern Language - All MDLA Courses
MUSC 101 Introduction to Music
PHIL 111 On Death and Dying (G-WI)
PHIL 121 World Religions
PHIL 201 Introduction to Philosophy
PHIL 202 Ethics and Moral Problems (G-WI)
PHIL 204 Asian Philosophies
PHIL 211 Ancient Philosophy
PHIL 215 Modern Philosophy
PHIL 225 What is Freedom?

Societies & Institutions Over Time (SIT)
CMTH 221 History of Broadcasting
GEOG 101 World Geography
GEOG 151 Geography of the U.S. and Canada (G-WI)
GLBL 130 Intro to Global Studies
GLBL 160 Field Experience & Acad Research in GS
GLBL 230 Global Studies Capstone
HIST 103 Ancient and Medieval History
HIST 113 American History I (G-WI)
HIST 121 The Black Experience (G-WI)
HIST 123 African Civilization
HIST 140 Modern Chinese History
HIST 153 Found of Mod Euro History, 1300-1815 (G-WI)
HIST 163 American History II
HIST 165 The American Experience of Warfare (G-WI)
HIST 166 Civil War and Reconstruction (G-WI)
HIST 168 History of the Middle East (G-WI)
HIST 173 Mod European History, 1815 to Present (G-WI)
HIST 210 History of Mod Science, 1859 to Present
HIST 211 History of Pennsylvania
INTS 201 Implementing Sustainable Energy System...
INTS 202 The Architecture of the City: Classic to Contemp.
POLS 101 Introduction to Political Science
POLS 105 American Constitutional Law (G-WI)
POLS 110 American National Government (G-WI)
POLS 150 Peace Studies & Conflict Resolution (Study Abroad)
POLS 170 Politics of Modern Turkey (Study Abroad)
POLS 202 International Relations
POLS 205 Women and Politics (G-WI)
POLS 251 State and Local Government (G-WI)
SOCA 102 Cultural Anthropology (G-WI)
SOCA 105 American Ethnicity
SOCA 160 Issues in Contemp.Genocide & Mass Violence

Science (SCI)
BIOS 104 Field Ecology
BIOS 105 Contemporary Biology (G-WI)
BIOS 107 Biology I
BIOS 110 In Your Genes: Intro to Mod Genetics
BIOS 115 Essentials of Biology
BIOS 126 Environmental Science
BIOS 150 Biology II
BIOS 160 Human Biology
BIOS 202 Microbiology for Allied Health
BIOS 204 Human Anatomy and Physiology I
BIOS 206 General Ecology
CHEM 105 Chemistry in Contemporary Society
CHEM 120 General Chemistry I
CHEM 135 Chemistry of Life
GEOG 150 Astronomy
GEOG 210 Weather and Climate
GEOL 201 Physical Geology
PHYS 101 Physics I
PHYS151 Physics II
PHYS 152 Physical Science II
PHYS 215 Physics for Science and Engineering I
PHYS 225 Physics for Science and Engineering II

Electives for A.A. & A.S. Degrees
Accounting – only ACCT 100, 101, 151, 201, 202, 251
Architecture – only ARCH 100
Art – only ARTA 101, 111, 161, 162, 291, 292, 293
Biological Science – all BIOS except 281, 282, 283
Business – only BUSA 101, 115, 152, 201, 202, 205, 232, 272
Chemistry – only CHEM 105, 120, 135, 220, 225, 251, 260, 291, 292, 293, 294
College Success: COLS101, 120
Communications – all CMTH except 180, 182, 185, 240, 252
Computer/Information Science – only CISC 101, 104, 115, 125, 225, 230, 270
Counseling – only COUN 100, 291, 292, 293
Dance – all DANC
Economics – ECON201, 251G
Education – all EDUC except 105
Engineering – only ENGG 100, 191, 192, 193, 194, 201, 251, 252
English – all ENGL
Geography – all GEOG
Global Studies - GLBL130, 160, 230
Health – only HEAL 150
History – all HIST
Hospitality – only HOSP 101
Humanities – all HUMA
Interdisciplinary Studies – INTS 101, 202, 250
Journalism – only JOUR 103
Mathematics – only MATH 120, 140, 145, 150, 160, 165, 175, 176, 180, 181, 191-194, 202, 210, 211
Modern Language – all MDLA
Music – all MUSC
Nutrition- NUTR105
Philosophy – all PHIL
Physical Education – any PHED courses up to a max of two credits
Physics – all PHYS
Political Science – all POLS
Publishing - 101, 102
Psychology – all PSYC except 221
Sociology/Anthropology – all SOCA
Special Education – SPED 160

For the General Education Electives, students must select one course from the list of approved courses in each of the following categories:

- Arts and Humanities (AH);
- Social Science: Societies and Institutions over Time (SIT) and Social Science: Scientific Study of Human Behavior (SSHB).

In addition, one course must be Writing Intensive. General Education courses offered as writing intensive are noted with a G-WI

Scientific Study of Human Behavior (SSHB)
ECON 201 Macroeconomics
GEOG 121 Environmental Sustainability (G-WI)
GEOG 140 Investigating Climate Change)
GEOG 271 Intro to Geographic Info Systems
HUMA 250 Research Methods in Social Sciences (G-WI)
INTS 250 Study Abroad
PSYC 103 Introduction to Psychology (G-WI)
PSYC 205 Research Methods
PSYC 230 Introduction to Health Psychology
PSYC 235 Dev Child Psychopathology
PSYC 245 Cognitive Psychology
PSYC 255 Abnormal Psychology
PSYC 258 Developmental Psychology (G-WI)
PSYC 265 Psychology of Sex and Gender
SOCA 103 Principles of Sociology (G-WI)
SOCA 125 Sociology of Families (G-WI)
SOCA 210 Sociology of Gender

Writing Intensive Gen Ed Courses (WI)
BIOS105G Contemporary Biology
CMTH 211G Plays: Classical to Cont
ENGL 201G British Literature I
ENGL 203G Shakespeare
ENGL 205G American Literature I
ENGL 211G Plays: Classical to Contemporary
ENGL 215G Multicultural Adolescent Literature
ENGL 250G Latin American Literature
ENGL 251G British Literature II
ENGL 255G American Literature II
ENGL 256G Modern Poetry
ENGL 257G 20th Century Lit by Women
ENGL 260G Contemporary Literature
ENGL 264G Irish Literature
ENGL 265G African-American Literature
GEOG 121G Environmental Sustainability
GEOG 151G Geography of the US & Canada
HIST 113G American History I
HIST 121G The Black Experience
HIST 153G Found of Mod Euro Hist (1300-1815)
HIST 166G Civil War and Reconstruction
HIST 168G History of the Middle East
HIST 173G Mod Euro History, 1815 to Present
HUMA 121G The American Work Experience
HUMA 140G Intro to Women & Gender Studies
HUMA250G Research Methods in the Social Sciences
PHIL 111G On Death and Dying
PHIL 202G Ethics and Moral Problems
POLS 105G American Constitutional Law
POLS 110G American National Government
POLS 205G Women and Politics
POLS 251G State and Local Government
PSYC 103G Introduction to Psychology
PSYC 258G Developmental Psychology
SOCA 102G Cultural Anthropology
SOCA 103G Principles of Sociology
SOCA 125G Sociology of Families

Program Narrative:

If you are interested in pursuing a bachelor's degree in chemistry or a career in the areas of medicine or scientific research, Northampton's Chemistry program is an affordable way to start. With a curriculum that parallels the first two years of most four-year programs, NCC can save you thousands of dollars on your undergraduate degree. By working closely with an advisor, you can choose the right electives, and stay on track with the requirements of the transfer college of your choice. Another option some graduates have chosen is to enter the job market upon completion of their two-year Chemistry degree. NCC's program prepares you for the range of fields that are based in chemistry, including environmental sciences, manufacturing, biotechnology and more.

Program Requirements:

While there are no special admissions requirements for the Chemistry program, certain courses in the program require a background in English, algebra, and chemistry. If you are lacking background in these areas, you should acquire it during the summer preceding your first semester. Northampton's admissions and counseling staff can answer any questions or concerns you may have regarding your enrollment into this program.

Program Learning Outcomes: Graduates will be able to:

- Demonstrate the ability to solve problems and explain chemical processes.
- Apply scientific principles and skills in conducting experiments, and in the use of instrumentation and analysis of results.
- Present research in acceptable written and oral format using scientific literature and computer aided analysis
- Demonstrate the ability to work successfully in independent and collaborative settings.
- Demonstrate best practice of safety and laboratory techniques and procedures.

Transfer Information:

NCC students have transferred to: Cedar Crest College, East Stroudsburg University, Kutztown University, Lafayette College, Lehigh University, Lock Haven University, Penn State University, University of Hawaii.

Career Information:

The A.S. in CHEMISTRY prepares you for these other areas of study: Medical School, Biotechnology, and a multitude of chemistry related industries.