

# Scientific Technology (Chemistry Concentration)

## Bachelor of Applied Science

The Bachelor of Applied Science in Scientific Technology is designed to provide applicants, who have earned an Associate of Applied Science degree, the opportunity to continue their education in a field of science and to pursue a position in an industrial laboratory setting.

### Area A: Essential Skills

ENGL 1101 English Composition I	3
ENGL 1102 English Composition II	3
MATH 1111 College Algebra	3

### Area B: Institutional Options

COMM 1110 Fundamentals of Speech	3
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### One of the following electives: 1

COMM 1120 Argumentation and Advocacy  
 ENGL 1105 Intro to Greek Mythology  
 ENGL 1110 Creative Writing  
 GEOL 1000 Natural Hazards  
 HIST 1050 Appalachian Hist-Special Topic  
 HIST 1051 Sports Hist & Amer Character  
 HUMN 1000 Mystery Fiction in Pop Culture  
 HUMN 1100 Political and Social Rhetoric  
 HUMN 1300 Christian Fiction/Pop Culture  
 PHED 1030 Health & Wellness Concepts  
 SOCI 1000 Race and Ethnicity in America

### Area C: Humanities/Fine Arts

#### Must choose a minimum of one, but not more than two of the following electives: 6

ENGL 1201 Intro to Film as Literature  
 ENGL 2111 World Literature I  
 ENGL 2112 World Literature II  
 ENGL 2120 British Literature I  
 ENGL 2121 British Literature II  
 ENGL 2130 American Literature I  
 ENGL 2131 American Literature II

**If only one English Elective chosen, add one of the following:**

ARTS 1100 Art Appreciation  
HUMN 1201 Expressions of Culture I  
HUMN 1202 Expressions of Culture II  
MUSC 1100 Music Appreciation  
MUSC 1110 World Music  
MUSC 1120 American Music  
THEA 1100 Theatre Appreciation

### Area D: Science/Mathematics/Technology

MATH 1113 Precalculus Mathematics 3

**Select one of the following sequences: 8**

BIOL 1107K  
& BIOL 1108K  
Principles of Biology I  
and Principles of Biology II  
CHEM 1211K  
& CHEM 1212K  
Principles of Chemistry I  
and Principles of Chemistry II  
GEOL 1121K  
& GEOL 1122K  
Principles of Geology  
and Historical Geology  
PHYS 1111K  
& PHYS 1112K  
Introductory Physics I  
and Introductory Physics II

### Area E: Social Sciences

HIST 2111 United States History to 1877 or  
HIST 2112 United States Hist since 1877  
POLS 1101 American Government  
Select two of the following:6  
ANTH 1103 Intro to Cultural Anthropology  
ECON 2105 Principles of Macroeconomics  
ECON 2106 Principles of Microeconomics  
GEOG 1100 Introduction to Geography  
GEOG 1101 Intro to Human Geography  
GEOG 1111 Intro to Physical Geography  
HIST 1111 World Civilization to 1650 CE  
HIST 1112 World Civilization since 1650  
HIST 2111 United States History to 1877  
HIST 2112 United States Hist since 1877  
PHIL 1103 Intro to World Religions

PHIL 2010 Intro to Philosophical Issues  
 PHIL 2020 Logic and Critical Thinking  
 POLS 2101 Intro to Political Science  
 POLS 2201 State and Local Government  
 POLS 2301 Comparative Politics  
 POLS 2401 International Relations  
 PSYC 1101 Introduction to Psychology  
 PSYC 2101 Psychology of Adjustment  
 PSYC 2103 Human Development  
 SOCI 1101 Introduction to Sociology  
 SOCI 1160 Social Problems

## Associate of Applied Science or Applied Technology Credits

Technology or Academic Credits (39)

CHEM 1211K and CHEM 1212K required in this area or in Area D

### Academic Core

Additional Credits (39)

CHEM 3211K	Organic Chemistry I	4
CHEM 3212K	Organic Chemistry II	4
CHEM 3311K	Quantitative Analysis	4
CHEM 3312K	Instrumental Methods of Analysis	4
Electives	Choose 23 hours from the following, at least 5 hours must be upper level chemistry courses	
BIOL 3550	Conservation Biology	3
BIOL 4275	Bioremediation/Phytoremediation	3
BIOL 4600	Ecotoxicology	3
BUSA 3100	Survey of Business Law/Ethics	3
BUSA 3200	Survey of Economics	3
BUSA 3300	Survey of Accounting	3
CHEM 3500	Biochemistry	3
CHEM 3700K	Environmental Chemistry	4
CHEM 4103	Textile Chemistry	3
CHEM 4110K	Advanced Inorganic Chemistry	4
CHEM 4430	Advanced Organic Chemistry	3
CHEM 4800	Chemistry Internship	1
CHEM 4900	Special Topics in Chemistry	3

A minimum of 39 hours of upper level course work is required of which at least 21 hours must be upper level chemistry courses. Thirty of these upper level hours must be completed at DSC.

\*BIOL 1107 & 1108 are prerequisites for the biology courses in the academic core