CHEMICAL TECHNOLOGY
Associate in Applied Science • Certificate of Proficiency

The Chemical Technology program at St. Louis Community College prepares students for a position as a chemical laboratory technician in a wide variety of disciplines such as materials science, biotechnology, chemical manufacturing and research, pharmaceuticals and environmental science. Depending on their educational goals, students may elect to pursue the 67-credit-hour Associate in Applied Science degree or a 34-credit-hour Certificate of Proficiency.

Most chemical technicians work in laboratory settings for companies that manufacture consumer products such as pharmaceuticals, foods, fertilizers, detergents, etc. Others work for public or private firms involved in water treatment, environmental analysis, biotechnology or medical research. Some chemical technicians work in sales. Chemical technicians operate many kinds of laboratory equipment, including state-of-the-art instruments such as gas chromatographs, nuclear magnetic resonance, spectrometers, etc. Technicians conduct a variety of laboratory procedures. They may set up apparatus, run chemical reactions, and perform tests for quality, performance or composition.

ABOUT THE PROGRAM

The Chemical Technology program is designed for persons seeking to work as chemical laboratory technicians with chemists, engineers and environmentalists. Students learn the basics of wet chemical methods and acquire skills in analyzing and interpreting the results of basic chemical instrumentation.

The AAS degree program includes a general education component as well as a strong base of knowledge in chemical technology. The Certificate of Proficiency offers an abbreviated course of study that includes classes only within the area of concentration.

The STLCC program is offered only at the Florissant Valley campus and is one of the first programs initiated by the American Chemical Society (ACS). This program has been in existence for over 40 years and is approved by the ACS.

For graduates wishing to pursue a four-year degree, STLCC has an articulation agreement with Southeast Missouri State University for a Bachelor of Science degree in Industrial Technology as well as with the Chemistry departments at Lindenwood University, Maryville University, Southern Illinois University-Edwardsville, Saint Louis University and the University of Missouri-St. Louis.

OPPORTUNITIES IN THIS FIELD

Graduates are qualified for positions as industrial chemical technicians in chemical processing plants and environmental, agricultural, research and manufacturing facilities. Although the chemical industry employs the largest number of chemical technicians, many work in related industries such as environmental, material science, polymers, electronics, biotechnology, consumer products, nano technology, pharmaceuticals and petrochemicals.

JOB OUTLOOK

The employment outlook for chemical technicians has been, and continues to be, favorable. Florissant Valley’s Chemical Technology program has maintained better than a 95 percent placement record six months after graduation. There are nearly 400 graduates from the Florissant Valley Chemical Technology program working for more than 100 companies. According to the 2010-2011 Occupational Outlook Handbook, employment in this field is expected to remain unchanged over the next several years.

SALARY INFORMATION

Individual salaries vary by the geographic location, the technician’s education and experience, and the type and size of the employer. In 2007, the St. Louis average starting salary for a chemical technician was $38,000. Nationally, the mean hourly wage for a chemical technician in May 2008 was $20.25 per hour.

TUITION

Currently, district residents pay $83 per credit hour. Additional fees apply to some programs and courses. For more information, please call the Admissions/Registration office at the campus of your choice.
GETTING STARTED AT STLCC

1) Apply for Admission
   Online, by mail/fax or in person at any campus

2) Apply for Financial Aid
   Apply for grants, scholarships, loans or work-study.

3) Complete Assessment
   You may need to complete an Accuplacer assessment to place you in the proper level courses.

4) Get Advisement
   Meet with an advisor or career counselor.

5) Register for Classes
   Online, in person or via mail/fax

6) Pay for Classes
   Payment plan option available

7) Activate Your Student E-mail
   Every credit student gets a my.stlcc.edu e-mail account.

8) Prepare for Class
   Purchase books, attend New Student Orientation, get your STLCC OneCard student ID

Visit www.stlcc.edu/Get_Started for details and important links.

CURRICULUM

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>AAS Credit Hours</th>
<th>CP Credit Hours</th>
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### I. Career General Education
- ENG:100 Career English (or) 3
- ENG:101 College Composition I 3
- ENG:102 College Composition II (or) 3
- ENG:103 Report Writing 3
- MTH:140 Intermediate Algebra 3
- XXX:xxx Missouri State Requirement 3
- XXX:xxx Social Science Elective 3

Total Credits 15

### II. Physical Education Activity
- Physical Education Activity 2

### III. Area of Concentration
- CHM:101 Fundamentals of Chemistry 5
- CHM:121 Chemical Technology I 5
- CHM:122 Chemical Technology II 5
- CHM:221 Chemical Technology III 5
- CHM:222 Chemical Technology IV 5
- CHM:231 Chemical Technology V 5
- CHM:232 Chemical Technology VI 5
- CHM:213 Chemical Technology Seminar 2
- CHM:214 Advanced Chemical Technology 2

Total Credits 39

### IV. Electives
- XXX:xxx Math or Science 4
- PHY:111 College Physics I (or) 4
- BIO:203 General Microbiology I 4
- GE:101 Technical Computer Applications 3

Total Credits 11

Total Credits for Program: 67 34

www.stlcc.edu/Programs/Chemical_Technology