

CHEMISTRY

Pathway: Applied Sciences Office: C4- Room 405 Email: Science@lattc.edu Phone: (213) 763-7295

| Award Title | Academic Plan | Award Type | GE Units | Required Course Units | Major Elective Units | Major Units |
|-------------|------------------|---------------|-------------|-----------------------------|----------------------------|----------------|
| Chemistry | T031207C | A.S. | 21* | 38 | - | 38 |

At least 60 degree applicable units are required to earn an Associate degree. *GE Units requirements may be fulfilled by completing any General Education Pattern; please consult with a counselor for more details. This program is Financial Aid Eligible.

PROGRAM OVERVIEW

The Associate of Science Degree in Chemistry provides students interested in the physical, health, and biological sciences with a strong academic background in chemistry and the coursework required to transfer to four year institutions or professional schools. This degree certifies a students' ability to analyze and solve problems in the field of chemistry and other fields where expertise in chemistry is required.

Chemistry related fields include the pharmaceutical sciences, food sciences, biotechnology, biomanufacturing, nanotechnology, environmental sciences, engineering and many others. Our students pursue careers in chemistry, pharmacy, medicine, dentistry, physician assistant, laboratory technician and other health or physical science related careers. The degree presents curriculum in two major concentrations; one in Chemistry and the other in Biochemistry. Thus students can select the concentration appropriate to their majors.

PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the **Degree** program, students are able to:

- Apply scientific principles to explain observations.
- Perform precise, quantitative measurements using proper techniques, methods and instrumentation.
- Demonstrate problem-solving, analytical, and critical thinking skills.



CHEMISTRY

Associate in Science Degree

Major Units: 38

Requirements for the Associate in Science degree in Chemistry may be met by completing 38 units of Required Courses with a grade of "C" or better along with General Education units. Information on the General Education unit requirements may be found in the catalog under Graduation Requirements.

REQUIRED COURSES

| CHEMISTRY CONCENTRATION | | | | | |
|-------------------------|---|---|--|--|--|
| CHEM 101 | General Chemistry I | 5 | | | |
| CHEM 102 | General Chemistry II | 5 | | | |
| CHEM 211 | Organic Chemistry for Science Majors I | 5 | | | |
| CHEM 212 | Organic Chemistry for Science Majors II | 5 | | | |
| MATH 265 | Calculus with analytical geometry I | 5 | | | |
| MATH 266 | Calculus with analytical geometry II | 5 | | | |
| PHYSICS 001 | Mechanics of Solids | 4 | | | |
| PHYSICS 002 | Mechanics of Fluids, Heat and Sound | 4 | | | |
| -or- PHYSICS | 003 Electricity and Magnetism (4) | | | | |

BIOCHEMISTRY CONCENTRATION

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|--------------|--|---|
| CHEM 101 | General Chemistry I | 5 |
| CHEM 102 | General Chemistry II | 5 |
| CHEM 211 | Organic Chemistry for Science Majors I | 5 |
| CHEM 221 | Biochemistry for Science Majors | 5 |
| or- CHEM 221 | H Biochemistry for Science Majors - Honors (5) | |
| MATH 265 | Calculus with analytical geometry I | 5 |
| MATH 266 | Calculus with analytical geometry II | 5 |
| PHYSICS 006 | General Physics I | 4 |
| PHYSICS 007 | General Physics II | 4 |

TRANSFER: Students interested in transferring to a four-year college or university should visit the University Transfer Center or meet with a counselor to select appropriate transferable courses.

USEFUL LATTC LINKS:

College Catalog, Class Schedule & more: http://www.lattc.edu/academics Financial Aid Office: http://www.lattc.edu/services/financial-aid Counseling Services & Support: http://www.lattc.edu/services/support Applied Sciences Pathway: http://www.lattc.edu/academics/pathways/ap

To register: http://www.lattc.edu/student-guides/new-student-

guide

For additional information consult a LATTC college counselor.

