

# APPLIED LABORATORY SCIENCE TECHNOLOGY (ALST) (AS DEGREE S0307)

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## Natural Sciences Division

### Degree S0307

This program provides theoretical and technical training to prepare students for employment as entry-level chemical technicians in fields such as chemical quality control, chemical process control, analytical chemistry, water quality, and research and development. The program includes a broad-based overview of workforce options and emphasizes development of analytical skills, instrument proficiency, critical thinking, and troubleshooting of experimental designs and outcomes.

This degree requires the completion of General Education coursework plus the following:

### Required Courses

Course Prefix	Course Name	Units
BUSM 10	Principles of Continuous Quality Improvement	3
CHEM 20	Introductory Organic and Biochemistry	5
CHEM 50	General Chemistry I	5
or CHEM 50H	General Chemistry I - Honors	
CHEM 51	General Chemistry II	5
Choose six or seven units from the following:		6-7
MICR 22	Microbiology	
PHIL 12	Introduction to Ethics	
or PHIL 12H	Introduction to Ethics - Honors	
SPCH 26	Interpersonal Communication	
or SPCH 26H	Interpersonal Communication - Honors	
Total Units		24-25

Guided Pathways of Study Suggested Course Sequence (<https://www.mtsac.edu/guided-pathways/pathway-results.html?pthwyvar=S0307&desc=Applied+Laboratory+Science+Technology%2C+%28ALST%29%2C+AS+S0307>)

### Program Learning Outcomes

*Upon successful completion of this program, a student will be able to:*

- use critical thinking to analyze and solve problems.
- troubleshoot experimental designs and outcomes.
- perform entry-level chemical technician duties such as chemical quality control, chemical process control, water quality, and R&D.

Review Student Learning Outcomes (SLOs) (<http://www.mtsac.edu/instruction/outcomes/sloinfo.html>) for this program.