

WATER SYSTEMS TECHNOLOGY

Department: **Construction, Design, and Manufacturing**
 Department Chair: **Mr. William (Bill) Elarton, Room SQ-122**
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Award Title	Award Type	Grad. Plan	Required Course Units	Major Elective Units	Total Major Units
Wastewater Systems Technology	A.S.	Plan A	21	-	21
Water System Technology: Supply Water Technology	A.S.	Plan A	22	-	22
Supply Water Technology	C		22	-	22

At least 60 degree applicable units (total major units and Plan A units) are required to earn an Associate degree.

For additional related degrees and certificates, refer to Plumbing.

PROGRAM OVERVIEW

Projected retirements of existing operators and expansion of the industry will fuel the demand for occupations in Supply Water Distribution. The net result of these shifts will be increased openings for personnel in all areas: plant operations, distribution/ collection field maintenance, administration, customer service, line supervision, meter readers, engineers, and plant maintenance. The Water Systems Technology program at LATTC offers students a choice of two concentrations within water systems industry:

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- **WASTEWATER OPTION** offers courses focusing on preliminary, primary, secondary, and tertiary treatment systems as well as disinfection methods, solids treatment, and solids and effluent disposal practices.
- **SUPPLY WATER OPTION** offers courses focused on the operation and design of water systems, wells, pumps and meters; water treatment for potable water; and technical phases of automatic controls, including power and code considerations.

PROGRAM LEARNING OUTCOMES (PLOs)

- Upon completion of the Degree/Certificate program, students are able to:
- Have the basic knowledge of the sources of wastewater, its collection and available treatment technology.
 - Knowledge of and understanding of factors affecting treatment of wastewater.
 - Basic knowledge of the Regulations governing wastewater treatment and organizations involved.
 - Basic knowledge of the wastewater treatment processes and process control strategies.
 - Knowledge of wastewater math as it applies to process control.

WASTEWATER SYSTEMS TECHNOLOGY

Associate in Science Degree

Major Units: 21

Requirements for the Associate in Science degree in Wastewater Systems Technology may be met by completing 21 units of Required Courses with a "C" or better, along with general education courses meeting Plan A graduation requirements. Information on the Plan B requirements may be found in the catalog under Graduation/Transfer Requirements.

In the State of California, there are five operator grade levels of profession in operating and maintaining publicly owned wastewater treatment facilities. Each grade level requires passing an examination administered by the State of California, after meeting qualifying experience and educational requirements. An Associates degree and 6 years of performance of an Operator Duty while holding a certificate, qualifies a person to be promoted to grade five level.

REQUIRED COURSES

		UNITS	Completed	Semester/Yr
WASTE 12	Wastewater Operations I	3	<input type="checkbox"/>	_____
WASTE 13	Wastewater Operations II	3	<input type="checkbox"/>	_____
WASTE 14	Wastewater Operations III	3	<input type="checkbox"/>	_____
WASTE 15	Wastewater operations IV (Basic Laboratory Analyses)	4	<input type="checkbox"/>	_____
WASTE 16	Wastewater Operations V (Mechanics, Fluids, Electricity)	3	<input type="checkbox"/>	_____
WASTE 17	Wastewater Operations VI (Public Health, Environment & Management)	3	<input type="checkbox"/>	_____
WASTE 18	Water & Wastewater Mathematics	3	<input type="checkbox"/>	_____

WATER SYSTEM TECHNOLOGY: SUPPLY WATER TECHNOLOGY

Associate in Science Degree Major Units: 22

Requirements for the Associate in Science degree in Water Systems Technology: Supply Water Technology may be met by completing 22 units of Required Courses along with general education courses meeting Plan A graduation requirements. Information on the Plan A requirements may be found in the catalog under Graduation/Transfer Requirements.

By fulfilling the program requirements, students are prepared for certification by the American Water Works Association (AWWA) as well as the State Department of Health. Students will also have the background to advance in the Supply Water Industry.

REQUIRED COURSES

		UNITS	Completed	Semester/Yr
WATER 1	Modern Waterworks I	3	<input type="checkbox"/>	_____
WATER 2	Modern Waterworks II	3	<input type="checkbox"/>	_____
WATER 3 †	Water Systems Controls	3	<input type="checkbox"/>	_____
WATER 4	Water Purification I (Potable)	3	<input type="checkbox"/>	_____
WATER 5	Water Purification II (Potable)	3	<input type="checkbox"/>	_____
PLUMBNG 26	Plumbing Layout and Estimating I	3	<input type="checkbox"/>	_____
PLUMBNG 31	Backflow Prevention Devices	3	<input type="checkbox"/>	_____
PLUMBNG 185	Directed Study-Plumbing	1	<input type="checkbox"/>	_____

MAJOR ELECTIVES

		UNITS	Completed	Semester/Yr
BUS 32	Business Communications	3	<input type="checkbox"/>	_____
BUS 33	Technical Report Writing	3	<input type="checkbox"/>	_____
MATH 115	Introduction to Elementary Algebra I	5	<input type="checkbox"/>	_____
SUPV 002 †	Basic Psychology for Supervisors	3	<input type="checkbox"/>	_____
SUPV 012 †	Written Communication for Supervisors	3	<input type="checkbox"/>	_____
WASTE 15	Wastewater Operations IV (Basic Laboratory Analyses)	4	<input type="checkbox"/>	_____
WASTE 18	Water & Wastewater Mathematics	3	<input type="checkbox"/>	_____

SUPPLY WATER TECHNOLOGY

Certificate of Achievement Major Units: 22

A Certificate of Achievement in Supply Water Technology may be earned by completing 20 units of Required Courses and 2 units of Major Electives listed under for the Associates degree in Water System Technology with a "C" or better in each course.

† Course currently unavailable

USEFUL LINKS

LATTC Catalog

<http://college.lattc.edu/catalog/>

LATTC Financial Aid Office

<http://college.lattc.edu/financialaid/>

LATTC Counseling Department

<http://college.lattc.edu/counseling/>

Graduation Plan A

<http://college.lattc.edu/catalog>

Graduation Plan B

<http://college.lattc.edu/catalog>

Construction, Maintenance & Utilities Department

<http://college.lattc.edu/cdm>

You can enroll in these classes by logging on to the Student Information System at <https://college.lattc.edu/register>

For additional information consult a LATTC college counselor.