

WASTEWATER SCIENCE, ASSOCIATE IN SCIENCE

The Associate in Science in Wastewater provides students with the technical training they need to pursue a career in the municipal potable water and wastewater industries. Waterworks operators protect public health by ensuring that plant operations comply with state and federally mandated potable water quality and wastewater disposal standards.

Students seeking an Associate Degree in Water Science may choose the Associate in Science in Water to prepare them for a career in potable water treatment, or the Associate in Science in Wastewater to prepare them for a career in wastewater sanitation. Regardless of the option chosen, both paths lead to rewarding careers protecting the health of both the community and the environment at local, state, and federal levels.

| Course ID | Title | Units/ Hours |
|---|---|-----------------|
| Required Core Courses | | |
| WS V10 | Basic Water and Wastewater Systems | 3 |
| WS V12 | Wastewater Treatment | 3 |
| WS V13 | Wastewater Collection | 3 |
| WS V15 | Water Systems Instrumentation and Controls | 3 |
| WS V16 | Water Quality Protection and Cross-Connection Control | 3 |
| WS V17 | Water and Wastewater Hydraulics | 3 |
| WS V18 | Pumps and Motors Maintenance and Operation | 3 |
| WS V20 | Water System Mathematics | 3 |
| WS V21 | Water Chemistry and Bacteriology | 4 |
| WS V25 | Water and Wastewater Management | 3 |
| Required Core Units | | 31 |
| Required Additional Courses | | |
| Select 2 courses from the following: | | |
| WS V22 | Stormwater Pollution Prevention | 3 |
| WS V96 | Work Experience Education in Water Science | 3 |
| Any Course from Agriculture, Business, Biology, Chemistry, Physics, Engineering, or Welding Disciplines | | 3 |
| Required Additional Units | | 6 |
| Required Major Units | | 37 |
| VCCCD General Education Pattern | | |
| Required Major Units | | 37 |
| VCCCD General Education Units | | 24 |
| Double-Counted Units | | (0) |
| Elective Units | | 6 |
| Total Units for the A.S. Degree | | 61 |

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|--|---|--------------------------|
| Year 1 | | |
| Fall Semester | | Units/Hours |
| WS V10 | Basic Water and Wastewater Systems | 3 |
| WS V12 | Wastewater Treatment | 3 |
| WS V25 | Water and Wastewater Management | 3 |
| ENGL C1000 | Academic Reading and Writing (VCCCD GE Area 1A) | 4 |
| Select course VCCCD GE Area 2 | | 3 |
| | | Units/Hours |
| | | 16 |
| Spring Semester | | |
| WS V13 | Wastewater Collection | 3 |
| WS V16 | Water Quality Protection and Cross-Connection Control | 3 |
| WS V18 | Pumps and Motors Maintenance and Operation | 3 |
| Select course VCCCD GE Area 1B | | 3 |
| Select course VCCCD GE Area 3 | | 3 |
| | | Units/Hours |
| | | 15 |
| Year 2 | | |
| Fall Semester | | |
| WS V15 | Water Systems Instrumentation and Controls | 3 |
| WS V20 | Water System Mathematics | 3 |
| WS Elective Course | | 3 |
| Select course VCCCD GE Area 4 | | 3 |
| Select course VCCCD GE Area 5 | | 3 |
| | | Units/Hours |
| | | 15 |
| Spring Semester | | |
| WS V17 | Water and Wastewater Hydraulics | 3 |
| WS V21 | Water Chemistry and Bacteriology | 4 |
| WS Elective Course | | 3 |
| Select course VCCCD GE Area 6 | | 3 |
| Select course VCCCD GE Area 7 | | 3 |
| | | Units/Hours |
| | | 16 |
| | | Total Units/Hours |
| | | 62 |

Upon successful completion of this program, students will be able to:

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|--|---|--------------------|
| Year 1 | | |
| Fall Semester | | Units/Hours |
| WS V10 | Basic Water and Wastewater Systems | 3 |
| WS V12 | Wastewater Treatment | 3 |
| WS V25 | Water and Wastewater Management | 3 |
| ENGL C1000 | Academic Reading and Writing (VCCCD GE Area 1A) | 4 |
| Select course VCCCD GE Area 2 | | 3 |
| | | Units/Hours |
| | | 16 |
| Spring Semester | | |
| WS V13 | Wastewater Collection | 3 |
| WS V16 | Water Quality Protection and Cross-Connection Control | 3 |
| WS V18 | Pumps and Motors Maintenance and Operation | 3 |
| Select course VCCCD GE Area 1B | | 3 |
| Select course VCCCD GE Area 3 | | 3 |
| | | Units/Hours |
| | | 15 |
| Year 2 | | |
| Fall Semester | | |
| WS V15 | Water Systems Instrumentation and Controls | 3 |
| WS V20 | Water System Mathematics | 3 |
| WS Elective Course | | 3 |
| Select course VCCCD GE Area 4 | | 3 |
| Select course VCCCD GE Area 5 | | 3 |
| | | Units/Hours |
| | | 15 |
| Spring Semester | | |
| WS V17 | Water and Wastewater Hydraulics | 3 |
| WS V21 | Water Chemistry and Bacteriology | 4 |
| WS Elective Course | | 3 |
| Select course VCCCD GE Area 6 | | 3 |

2 Wastewater Science, Associate in Science

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|---------------------------------------|-----------|
| Select course VCCCD GE Area 7 | 3 |
| Units/Hours | 16 |
| Total Units/Hours | 62 |