



Red Rocks Community College's Associate of Applied Science (AAS) degree in Water Quality Management Technology (WQM) is a two-year full-time program.



Funded in part by the National Science Foundation and TAA-Department of Labor

The Associate of Applied Science degree in Water Quality Management Technology requires 62 credit hours. WQM also has eight stackable, discipline-specific certificates based on course combinations and enrollment. Students can take certificate courses in lieu of or in addition to seeking a degree. The WQM program works closely with the Environmental Protection Agency and the Colorado Department of Public Health and Environment. The program also follows the national Association of Boards of Certification knowledge criteria to ensure that students obtain the skills and knowledge needed for all careers within the industry.

Academic courses include hands-on training in water, wastewater, and industrial treatment and water distribution and wastewater collection systems. WQM is a technical science program that includes math, chemistry and microbiology. Grants from the National Science Foundation and the TAA-Department of Labor funded the development, redesign and adaptation of many WQM courses for hybrid and distance learning. Check the semester schedule for online course offerings.

Past related work experience can be applied towards your degree in some cases. If you are interested in learning more about CPLs (Credit for Prior Learning), visit <http://www.rccc.edu/assessment/credit-for-prior-learning> or contact the department at 303-914-6121. You are held to the graduation requirements of the academic catalog you begin under. Changes to the curriculum while enrolled will not affect your degree requirements. Satisfactory completion, grade of C or higher, is mandatory for all core WQM and certificate coursework.

#### Required Core AAS Courses Specific to the WQM Program (34 credits)\*

WQM 100 Introduction to Water Quality  
WQM 105 Specific Calculations  
WQM 119 Quality Basic Water Analysis  
WQM 120 Equipment Maintenance  
WQM 126 Safety and Security Systems  
WQM 200 Hydraulics  
WQM 206 Design Interpretations  
WQM 216 Biological and Bacteriological Analysis  
WQM 217 Disinfection Techniques

**Total 34 Credits**

#### AAS Required General Education Courses for the WQM Program (16 credits)

ENG 121 – English Comprehension,  
ENG 131 – Technical Writing, **OR**  
COM 125 – Interpersonal Communication **3 credits**  
MAT 107 – Career Math **OR**  
MA T 121 – College Algebra—or higher to transfer  
(*Recommended*) **3 credits**  
BUS 121 – Basic Workplace Skills **1 credit**  
GIS 101 – Introduction to Geographic Information  
Systems **3 credits**  
Natural & Physical Science course **3 credit minimum**  
Any other Arts & Humanities OR Social & Behavioral  
Science course **3 credits\***

\*Two courses must be from different groups  
**Total 16 credits (Minimum)**

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Approved Elective Courses Specific to the WQM Program (12 credits)  
(Applied Science courses can be substituted for WQM electives with Department  
Chair approval.)

WQM 109 Distribution Systems*	
WQM 118 Wastewater Collection Systems*	
WQM 121 Environmental Sampling and Volume Measurement	
WQM 122 Instrumentation and Electrical Control	
WQM 123 Reuse Systems	
WQM 124 C and D Review for Water Treatment *	
WQM 125 C and D Review for Wastewater Treatment *	
WQM 130 Water Chemistry	
WQM 131 Solids Waste Management	
WQM 150 Troubleshooting	
WQM 169 International Development	
WQM 207 Activated Sludge Systems	
WQM 212 Drinking Water Regulations	
WQM 224 A and B Review for Water Treatment *	
WQM 225 A and B Review for Wastewater Treatment *	
WQM 230 Industrial Treatment and Monitoring	
WQM 280 Internships	
WQM 285 Independent Study	<b>Total 12 Credits</b>

\*Certificate courses strongly recommended for State of Colorado Water/Wastewater Operator License prep. Students are encouraged to pursue as many discipline licenses as possible.

**TOTAL Credits for the degree: 62**



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Red Rocks Community College is committed to diversity in its people and programs. The College is an equal opportunity educational institution which prohibits all forms of discrimination and harassment including those that violate federal and state law, or the State Board for Community Colleges

and Occupational Education Board Policies 3-120 and/or 4-120. The College does not discriminate on the basis of race, creed, color, sex/gender, sexual orientation, gender identity or expression, religion, age, national origin or ancestry, pregnancy status, veteran's status, genetic information, physical and/or mental disability or any other category protected by applicable law in its employment practices or education programs. Red Rocks Community College will take appropriate steps to ensure that the lack of English language skills will not be a barrier to admission and/or participation in vocational education programs.

The College has designated Dr. Bill Dial, Executive Director of Human Resources as its Affirmative Action Officer/Title IX Administrator/Equal Opportunity Administrator with the responsibility to coordinate its civil rights compliance activities and grievance procedures. For information, contact: Dr. Bill Dial, Executive Director of Human Resources, Title IX Administrator, Title VII/Equal Opportunity Administrator, ADA/Section 504 Administrator, PO Box 17, 13300 West Sixth Avenue, Lakewood, CO 80228-1255. Telephone: 303.914.6298. Email: [bill.dial@rrcc.edu](mailto:bill.dial@rrcc.edu)