

# WASTEWATER COLLECTION AND TREATMENT, WATER QUALITY MANAGEMENT (TECHNICAL CERTIFICATE)

Award: Technical Certificate

Program of Study: Water Quality Management

Specialization: Wastewater Collection and Treatment

Program Code: 1136

## About This Program . . .

Technical Certificate- Wastewater Collection & Treatment program prepares students for entry-level employment as technicians in the water processing industry. Water quality technicians work in teams to operate drinking water treatment systems and wastewater treatment systems.

The program provides an understanding of the regulatory expectations, the science involved in meeting regulatory expectations, the equipment used to process water and the systems management skills necessary to be a successful employee in the water processing industry. The program consists of three Technical Certifications and an Associates of Applied Science degree. The Wastewater Collection & Treatment technical certificate focuses on wastewater collection and treatment for bacterial, and harmful pollutants.

For more information on what you can do with this major, visit WCCC's Programs of Study (<https://www.coloradomesa.edu/wccc/programs/>) page.

All CMU/WCCC technical certificate graduates are expected to demonstrate proficiency in communication fluency, quantitative fluency, specialized knowledge/applied learning, and critical thinking. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Apply business communication using listening, verbal and written, and electronic forms that are needed for entry level employment. (Communication)
2. Apply mathematical and applied physics concepts for industry to meet employment requirements (Quantitative Fluency)
3. Research, evaluate, synthesize and apply information/data relevant to business, sciences, and technical careers. (Critical Thinking)
4. Demonstrate knowledge of terminology, symbols, business practices, and principles and application of associated technical skills. (Specialized Knowledge)
5. Perform the necessary applied skill sets to fulfill the needs of entry level employment. (Applied Learning)
6. Demonstrate ethical, civic, and work place responsibility as part of professional behavior. (Specialized Knowledge)

## Requirements

Each section below contains details about the requirements for this program. Select a header to expand the information/requirements for that particular section of the program's requirements.

**To print or save an overview of this program's information, including the program description, learning outcomes, requirements, suggested course sequencing (if applicable), and advising and graduation information,**

scroll to the bottom of the left-hand navigation menu and select 'Print Options.' This will give you the options to either 'Send Page to Printer' or 'Download PDF of This Page.' The 'Download PDF of This Page' option prepares a much more concise presentation of all program information. The PDF is also printable and may be preferable due to its brevity.

## Institutional Certificate Requirements

The following institutional requirements apply to all CMU or WCCC Technical Certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Consists of 100-200 level courses.
- At least fifty percent of the credit hours must be taken at CMU/WCCC.
- 2.00 cumulative GPA or higher in all CMU/WCCC coursework.
- A grade lower than "C" will not be counted toward meeting the requirements.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed twenty-five percent of the semester credit hours required for a technical certificate.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

## Program Specific Certificate Requirements

(16 semester hours, must earn a grade of "C" or better in each course.)

Code	Title	Semester Credit Hours
<b>Core Courses</b>		
WQMS 105	Specific Calculations for Water Quality Management	4
WQMS 106	Mechanical/Physical Treatment	3
WQMS 118	Wastewater Collection Systems	3
WQMS 126	Safety and Security Systems	3
WQMS 127	Water Quality Utility Management	3
Total Semester Credit Hours		16

## Advising and Graduation

### Advising Process and DegreeWorks

Documentation on the pages related to this program is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical

to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

## Graduation Process

Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one-semester certificates, complete in the first week of class):

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at <http://www.coloradomesa.edu/registrar/graduation.html>.

If a student's petition for graduation is denied, it will be her/his responsibility to consult the Registrar's Office regarding next steps.