

# WATER ENGINEERING AND MANAGEMENT - GRADUATE CERTIFICATE

The water engineering and management (WE&M) graduate certificate provides students with the tools they need to produce results and solve increasingly complex problems in the water profession. Young and mid-career professionals can build non-technical competencies with courses on leadership, management, communication, finance and governance. Courses are delivered on campus and live streamed/recorded options over the internet, allowing working professionals and distance students from around the world to earn a graduate certificate while continuing to put the learning into practice in their work.

Current students include young and mid-career professionals working for utilities, consulting firms, government and regulatory agencies, and degree-seeking graduate students at CU Boulder. With faculty of senior water professionals from across the country, including those from utilities, consulting firms and global professional organizations, students gain an opportunity to network and learn through real work case studies.

Upon completion of the three core courses and an additional elective, students are granted a certificate by the WE&M program, from the University of Colorado, Department of Civil Environmental and Architectural Engineering. The certificate courses count towards the Civil Engineering - Master of Science (MS) (<https://catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/civil-engineering/civil-engineering-master-science-ms/>) degree or the Engineering Management - Master of Engineering (ME) (<https://catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/engineering-management/engineering-management-master-engineering-me/>) degree.

## Distance Education Option

Students can take individual courses toward a master's degree or graduate certificate through distance education (online). For more information, connect with the individual graduate program directly.

- Water & Engineering Management Graduate Program (<https://www.colorado.edu/ceae/research/interdisciplinary-programs/water-engineering-management/>)
- Water & Engineering Management Professional Master's Program (<https://www.colorado.edu/ceae/water-engineering-management-professional-masters-program/>)
- Water & Engineering Management Graduate Certificate (<https://www.colorado.edu/ceae/water-engineering-management-certificate/>)

## Requirements

The certificate consists of three required courses plus one elective course, for a total of 12 credit hours.

Code	Title	Credit Hours
<b>Required Courses</b>		
CVEN 5564	Water Profession: Communication and Utility Finance	3
CVEN 5574	Water Utility Management: Current Issues and Future Challenges	3

CVEN 5584	Water Profession: Leadership and Management	3
<b>Electives</b>		
Choose one:		3
CVEN 5147	Civil Engineering Systems (Engineering Economics and System Design)	
CVEN 5834	Special Topics (Water Reuse Planning and Implementation)	
CVEN 5834	Special Topics (Small System Water/Wastewater Treatment)	
PUAD 5631	Seminar in Environmental Politics & Policy <sup>1</sup>	
Other electives with permission of WE&M Program Director		
<b>Total Credit Hours</b>		<b>12</b>

<sup>1</sup> CU Denver course.