

Water Resource Management Associate in Applied Science-Transfer 91 credits

Cascadia College's Water Resource Management Associate of Applied Science-Transfer (AAS-T) degree is a **91**-credit degree completed over two academic years. The program integrates technology and natural sciences with an emphasis on water quality as it relates to soil and water systems, geographic information systems (GIS), water policy, regulations and permitting practices. The program will prepare students for work as water resource specialists, soil technicians, and environmental permit specialists within city, county and federal agencies, private sector employers and non-profits.

The program includes outdoor learning and applied research within the campus wetlands in addition to lab science, class seminars, and work-based learning.

Upon successful completion of this degree a student will be able to:

- Perform water and soil quality testing and collect samples.
- Conduct field and technical research using industry data collection standards.
- Compile, analyze, and present geospatial data while emphasizing the value of visual communication (GIS).
- Install, retrieve, and remove data collection devices and equipment.
- Interpret and apply local, state, and federal policies, codes, laws, and regulations, knowledge of environmental permitting process.
- Use data to make hydrologic interpretations about the susceptibility to runoff, flooding, and water contamination, understand Best Management Practices for mitigation.
- Write technical reports and give presentations.
- Demonstrate interpersonal communication skills and professional behavior

### **GENERAL EDUCATION CORE COURSES**

15 CREDITS

### **Communication:**

Course ID	Course Name	Lec	Lab	Other	Credits
ENGL& 101	English Composition I	55			5
ENGL& 235	Technical Writing	55			5

### Quantitative or Symbolic Reasoning:

Course ID	Course Name	Lec	Lab	Other	Credits
MATH&141	Precalculus I	55			5

#### **HUMANITIES / SOCIAL SCIENCES REQUIREMENTS**

15 CREDITS

Course ID	Course Name	Lec	Lab	Other	Credits
CMST210, or	Public Speaking, or,				Е
CMST 220	Interdisciplinary Communication	55			5
PHIL&243	Environmental Ethics and Sustainability	55			5

2023-2024

SLC Approval: 5/24/8/2023 SBCTC Approval: 9/6/2023 03.0205:/ WWMWRAAS

POLS& 206 State and Local Govt	55	5
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## **NATURAL SCIENCES REQUIREMENTS**

### **26 CREDITS**

Course ID	Course Name	Lec	Lab	Other	Credits
CHEM&161	General Chemistry (LAB)	44	44		6
GEOL&101	Intro Physical Geology (LAB)	44	22		5
ENVS&101	Intro Environmental Science (LAB)	44	22		5
ENVS 220	Wetland Ecology	33	44		5
MATH&146	Intro to Statistics	55			5

# **PROGRAM REQUIREMENTS**

## 35 CREDITS

Course ID	Course Name	Lec	Lab	Other	Credits
GIS 101	Intro to Geographic Info Systems	55			5
GIS 102	Geographic Info Systems II	55			5
IT 158	Beginning Databases	11			1
WATER 110	Intro to Water Science, Resources, and Issues	55			5
WATER 210	Water Policy and Regulations	55			5
WATER 220	Water Quality Analysis	44	22		5
WATER 250	Soils and Hydrology	44	44		6
WATER 290	Career Pathways: Water Resources Mgmt	11			1
WATER197/297	Work-Based Learning I&II	22-55			2-5