Globally, water issues are at crisis levels. Nationally, water providers are scrambling to replace aging infrastructure, retiring employees and maintain quality and ecologic integrity. Water stressors like climate change, population growth and increasing pollution are compounded by lack of awareness.

Educational opportunities that provide technicians with the skills and knowledge needed to design, implement and evaluate water conservation programs are uncommon in higher education. Agencies have relied on job training until now!

The Water Conservation Technician program is a career-technical curriculum offered as a two-year Associate of Applied Science degree. It trains individuals to evaluate water use patterns; develop, implement, maintain and market conservation programs; perform public outreach; recommend water efficiency techniques; and perform systems analysis to solve problems.

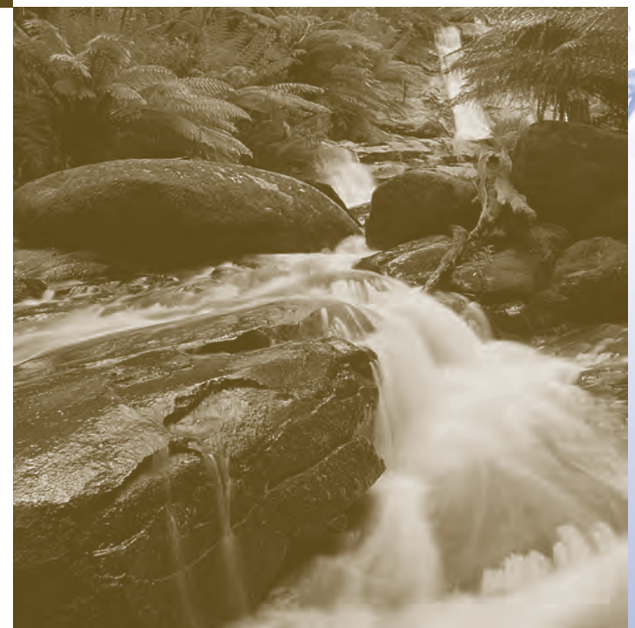
Earn $36,000-51,000 annually while helping to create a positive change within our natural environment.

Sustainability, collaboration and interdisciplinary learning provide the foundation upon which a graduate will build skills to conserve resources and money while maintaining ecologic integrity.

Active involvement in the community along with hands-on projects will reinforce practical skills. Program participation will culminate with the option to apply for a Professional Certification offered by the American Water Works Association in partnership with Lane Community College. Live interactive videoconferencing provides a Distance Learning option for future growth of the program beyond Eugene.

Surveys show that water jobs are increasing at a slow to moderate rate with increased growth expected in the next 5-10 years, especially with the retirement of an aging populace as well as increased population and regulations.

The program is run in parallel with the highly successful Energy Management program and emerging sustainability initiatives.



Requirements and Program Acceptance

A high school diploma (or equivalent) is required for entry into the water program. To graduate with the AAS Degree, students must maintain enrollment in Lane every year. If students do not maintain enrollment year-to-year, they will be subject to the program requirements for the year in which they re-enroll. An outline of required classes is included in this brochure.

Contact Information

Tammie Stark, M.A.
(541) 463-5451
starkt@lanecc.edu

Roger Ebbage
Director, Northwest Energy Education Institute
(541) 463-3977
ebbager@lanecc.edu

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Check us out online at: http://www.nweei.org

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Water Conservation Technician

2 YEAR ASSOCIATE OF APPLIED SCIENCE DEGREE

We provide graduates with tools to design, implement and evaluate water efficiency programs with the potential to earn a competitive salary.

Lane Community College℠

What You Will Learn

- Design, implement, evaluate and market water conservation programs. Perform public outreach to a broad audience.
- Evaluate usage patterns for rural, urban, residential and commercial sites; recommend water efficiency measures as well as alternate water sources, as appropriate.
- Understand water distribution, flow and elimination systems; basic hydraulics; quality issues; mass balance and time of use.
- Understand the multiple stressors to water supply and how they interact to affect supply, demand and other issues.
- Monitor, collect, interpret and analyze data to evaluate effectiveness of programs and adjust program over time. Calculate water and cost savings from programs at multiple scales (including cost/benefit analysis).

Two-Year Class Overview

Below is a list of the of classes required for graduation. Classes are subject to change.

Year 1

Fall Term

CLASS	CREDITS
Introduction to Sustainability	3
GIS Maps and Spatial Information [5]	4
MS Excel and Access for Business [1]	5
English Composition [1]	4
Health Requirement [2]	2
Term Total	**18**

Winter Term

CLASS	CREDITS
Introduction to Water Resources	3
Water Conservation: Residential	4
Intermediate Algebra [1]	5
Technical Report Writing [1,5]	4
Health Requirement [2]	1
Term Total	**17**

Spring Term

CLASS	CREDITS
Water Conservation: Outdoor	4
Water Resource Economics	4
Regional Botany class	4
Human Relations/Social Science [3]	3
Term Total	**15**

1. Must be completed during first year.
2. Physical Education Activity/Health requirement: 3 credits total. Physical Education must be completed over at least two terms.
3. Human Relations/Social Science requirement: 3 credits total.
4. Arts/Letters requirement: 3 credits total.
5. Prerequisites required.
6. Restricted electives to be arranged with program advisor (see AAS degree requirements in Lane's catalog for more information).

Year 2

Fall Term

CLASS	CREDITS
Water Conservation: Industrial and Commercial	4
Water Conservation: Agricultural	4
Regional Water Policy	3
Restricted Elective [6]	3
Hands on/Co-op Education	3
Term Total	**17**

Winter Term

CLASS	CREDITS
Integrated Water Resources Management [5]	4
Fostering Sustainable Behavior	3
Arts/Letters requirement [4]	3
Hands on/Co-op Education	3
Term Total	**13**

Spring Term

CLASS	CREDITS
Water Conservation Program Development	4
Water Mechanical Systems [5]	4
Restricted Elective [6]	3
Hands on/Co-op Education	3
Optional: AWWA Certification Test Preparation ~ 2 credits	-
Term Total	**14**

Note: Required Cooperative Education internships may also be taken during the summer (a maximum of 18 co-op credits).

As water concerns increase, more voluntary and mandatory water conservation programs are being created to lessen demand on current sources and alleviate the need for and cost of added sources.

Western states are experiencing an exponential increase in water-related issues due to over-allocated surface water, decreasing snow pack trends, a doubling population by 2050 and rising pollution. Oregon and Washington already require water conservation plans in order to obtain further water rights, for example.

Locally, water quantity and quality are decreasing. Willamette Valley wells show presence of iron, arsenic, salt and radon. Small Oregon cities, such as Veneta, Coburg, Junction City and Port Orford are facing water stress from increasing population growth, inadequate water supplies or sanitation as well as lack of conservation programs and funding.

"For water to become a shared global concern, it has to be viewed as such by society" *(UN, 2003).*

Water efficiency programs, the most cost-effective "new" source of water, should be a part of every water management plan.