# Ontario Agricultural College Associate Diploma in Environmental Management

## **ABOUT THE PROGRAM**

The Associate Diploma in Environmental Management (DENM) program applies technical and practical skills training. Students tailor their learning to an area of interest: conservation and natural resources; water and wastewater treatment; or municipal/industrial/agricultural. Offered at the Ridgetown Campus, the program is designed to address the critical shortage of trained and qualified sewage and/or water plant operators, and to train and certify personnel to assist growers in addressing nutrient management and source water protection regulations that affect many farms and rural residents across Ontario. You'll be prepared for a variety of career opportunities in conservation and natural resources, water and wastewater treatment, or the municipal/industrial/agricultural sector.

#### WHY CO-OP?

As a co-op student, you will gain firsthand work experience, build professional networks, and develop interpersonal skills that are essential for pursuing a career in environmental management. You will also get paid while earning your diploma. Guelph's co-op program is unique due to the exceptional level of support provided, including a co-op preparatory course, a personal connection with Co-op Coordinators to assist you during the employment process, and access to senior student mentors.

# **COURSE SEQUENCING**

In the DENM co-op program, you will participate in one co-op work term in addition to four academic semesters throughout your two years at the University of Guelph.

YEAR	FALL	WINTER	SUMMER
ONE	Academic	Academic	Work
TWO	Academic	Academic	

### **SAMPLE JOBS**

## **Waste Management Student**

The student will assist with container station operations and direct customers to the appropriate waste management bins; inspect loads for acceptable and unacceptable materials; clean and maintain the Waste Management Site; answer customer inquiries and assist when required; ensure compliance with site regulations and policies, such as material diversion and safety; perform Waste Management Site maintenance functions (e.g. collecting litter/snow removal); assist with Scalehouse operations, by maintaining a computerized landfill information system including accurate collection, screening and input of customer, sorting and filing tickets, and handling cash, credit card and debit card transactions; operate light equipment, pick-up truck and all-terrain vehicle.

# **Watershed Monitoring Technician**

The student will be responsible for watershed monitoring data collection and agricultural stewardship program assistance. Tasks include: calibrate tipping bucket rain gauges; measure stream flows for baseflow studies and develop rating curves for gauging stations; measure groundwater levels at

provincial groundwater monitoring wells; collect surface water quality samples and prepare them for lab analysis; liaise with the agricultural community to facilitate collection of farm field soil samples and verify farmland erosion potential mapping; keep accurate and organized records of site visits and data collected; perform data entry, quality control and analysis using Excel spreadsheets; maintain monitoring sites by clearing vegetation, painting and installing signage; assist in other program areas when needed.

# **Seasonal Irrigation Technician**

The student will assist with irrigation through daily block-weight measurement, sprinkler checks and mixing fertilizer; use computer systems to monitor and adjust crop environmental conditions and irrigation; accurately carry out measurement of seedling growth and enter data into spreadsheets; assist in the Integrated Pest Management program monitoring pests and diseases; assist in the application of pesticides; assist with other nursery maintenance such as weeding and trimming that may be required from time to time; maintain and complete repairs on irrigation systems.

#### **SAMPLE EMPLOYERS\***

- Arbutus Grove Nursery
- Bayer CropScience Canada
- Black Creek Research
- Ganaraska Region Conservation Authority
- Government of Ontario
- Halton Region
- Lake Simcoe Region Conservation Authority
- Ministry of Agriculture, Food and Rural Affairs
- Region of Waterloo

\*Sample co-op employer list only. Employers will vary depending on recruitment needs. During a job search, students are encouraged to be actively engaged and are also supported in establishing and maintaining their own personal contacts.

#### **SALARY INFORMATION**

Students receive compensation from their employer for co-op work terms. The rate of pay will vary depending on a number of factors including the industry, the student's program of study, and the student's previous work experiences. For your reference, a **Co-operative Education Salary Guide** is available on our website, which provides hourly rates (averages and ranges) for associate diploma programs.

## **SKILLS & KNOWLEDGE ACQUIRED**

Environmental Management co-op students exhibit strengths in the following key areas, developed through the combination of educational, extra-curricular and work experiences:

- Environmental Monitoring
- Water Resource Management
- Business Practices and Sales Management
- Nutrient Management
- Water and Wastewater Treatment and Operations