



**SOUTHERN ILLINOIS UNIVERSITY  
EDWARDSVILLE**



# FALL 2024 SCHEDULE

## In-Person Workshop Schedule

Daytime workshops meet from 8:00 am to 4:30 pm.

PCE meets from 1:00 pm to 5:00 pm.

| DATES     | TITLE                          | LOCATION     | IEPA/IDPH CEUs | COST  |
|-----------|--------------------------------|--------------|----------------|-------|
| Aug 6-9   | Cross Connection Control (Day) | Joliet       | 24.0           | \$600 |
| Sep 17-20 | Cross Connection Control (Day) | Rockford     | 24.0           | \$600 |
| Sep 23-27 | Wastewater Short School        | Rockford     | 32.0           | \$600 |
| Oct 1-4   | Cross Connection Control (Day) | Edwardsville | 24.0           | \$600 |
| Oct 15-18 | Cross Connection Control (Day) | Joliet       | 24.0           | \$600 |
| Oct 23    | CCCDI Recertification          | Bloomington  | 8.0            | \$200 |
| Oct 24    | Backflow Symposium             | Bloomington  | 6.0            | \$130 |
| Nov 12-15 | Cross Connection Control (Day) | Champaign    | 24.0           | \$600 |
| Dec 13    | Plumber Continuing Education   | Edwardsville | 4.0            | \$60  |
| Dec 20    | CCCDI Recertification          | Edwardsville | 8.0            | \$200 |

## Virtual Workshop Schedule

Virtual Water workshops meet from 1:00 pm to 4:00 pm.

Virtual Wastewater and Math Review workshops meet from 1:00 pm to 3:00 pm.

| DATES          | TITLE                            | LOCATION | IEPA/IDPH CEUs | COST  |
|----------------|----------------------------------|----------|----------------|-------|
| Aug 12-16      | Class D & C Water                | Virtual  | 15.0           | \$300 |
| Aug 15         | Activated Sludge Process Control | Virtual  | 2.0            | \$40  |
| Sep 12         | Class 4 Wastewater Math Review   | Virtual  | 2.0            | \$40  |
| Sep 30 - Oct 4 | Class B Water                    | Virtual  | 15.0           | \$300 |
| Oct 17         | Class K Exam Preparation         | Virtual  | 2.0            | \$40  |
| Nov 11-15      | Class A Water                    | Virtual  | 15.0           | \$300 |
| Nov 14         | Nutrient Removal                 | Virtual  | 2.0            | \$40  |
| Dec 12         | Wastewater Laboratory Procedures | Virtual  | 2.0            | \$40  |

# Water Evening Course

## Basic Water Supply

Location: Virtual via Zoom  
Schedule: Wednesdays, 12 weeks

Hours: 36  
Dates: Aug 14 – Oct 30  
Instructor: Drew Hoelscher

Fee: \$ 500  
Time: 6-9 p.m.

This course is an introduction to water supply covering Class D and C operations. Topics include wells, chlorination, fluoridation, chemical treatment, distribution systems, pumps, sampling, operating reports, water quality, and related math.

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# Wastewater Evening Course

## Basic Wastewater Treatment

Location: Virtual via Zoom  
Schedule: Tuesdays, 10 weeks

Hours: 30  
Dates: Oct 1 – Dec 3  
Instructor: Jim Winslade

Fee: \$ 450  
Time: 6-9 p.m.

Sources and characteristics of wastewater are taught. Topics include biological treatment principles, process control, normal operation, and preventative maintenance for collection systems, preliminary treatment devices, primary treatment devices, stabilization ponds, and disinfection systems. Basic activated sludge and fixed film treatment will be covered. Federal and state laws, rules, and regulations are also discussed.

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# Accepting Applications for 2024-25

## *The ERTC Water Quality Control Operations Program*

The *Water Quality Control Operations Program* is a one-year, full-time, certificate program. The program provides vocational training in drinking water and wastewater treatment technology. The classes are a combination of classroom and hands-on training using the one-of-a-kind 30,000 gallon per day training-scale wastewater and drinking water treatment plants. Upon completion, the students are eligible to take their Illinois and Missouri certification exams to become water and wastewater operators.

Classes begin on August 20, 2024. Email [ertcinfo@siue.edu](mailto:ertcinfo@siue.edu) for information.



# CLASS REGISTRATION INSTRUCTIONS

1. Go to the ERTC website: [siue.edu/ertc](http://siue.edu/ertc)

2. Select the Online Registration Box:

Online Payment & Registration is now available for all courses, renewals and workshops.

3. Select your industry: Cross Connection & Plumbing, Drinking Water, or Wastewater.  
Environmental Resources Training Center



4. Select the appropriate category:

Cross Connection – Become a CCCDI, PCE & Symposium, Renewal & Recertification

Drinking Water - Daytime, Evening, Virtual, or Self Study

Wastewater – Daytime, Evening, Virtual, or Self Study

5. Select your desired course.

6. Complete data fields and select **Register & Checkout**.

a. \*All boxes with asterisks are required.\*

7. Continue shopping or Agree to Terms and then select **Checkout**.

8. Select **CHECKOUT AS GUEST**.

9. Enter Billing Information.

10. Select **ADD CREDIT CARD DETAILS** and enter information.

11. Select I'm not a robot

12. Select **SUBMIT ORDER**.

A receipt will be emailed to the email address used at sign-up.

## **FALL 2024 DRINKING WATER CLASS DESCRIPTIONS**

**Class D/C Water**                      **Distribution Systems/Chemical Feed Applications**                      **15 hrs**

General design, operation, and maintenance procedures for water distribution systems. Topics include pumps and hydraulics, water mains, water services, hydrants, meters, valves, storage, cross connections, regulations, sampling, and related math. General design, operation and maintenance procedures for wells and chemical feed installations. Topics include pumps, chlorination/chloramination, fluoridation, corrosion control treatment, sequestration, sampling and reporting, and all topic related math.

**Class B Water**                      **Groundwater Treatment/Filtration/Ion Exchange Softening**                      **15 hrs**

General design, operation, and maintenance of groundwater treatment plants. Topics include iron and manganese control/removal, filtration, and topic related math. General design, operation and maintenance procedures for ion exchange softening and related math. Class D/C material is also covered as a review.

**Class A Water**                      **Surface Water Treatment/Lime Softening/Membrane Filtration**                      **15 hrs**

Surface water treatment topics include taste and odor control, clarification, jar testing, membrane filtration, and related math and chemistry. Surface water and lime softening with related math. Class D/C/B material is also covered as a review.

## **FALL 2024 CCCDI/PLUMBERS CLASS DESCRIPTIONS**

**Cross Connection Control**      **CCCDI Certification Training**                      **24 hrs**

Includes demonstration of inspection and testing procedures for reduced pressure zone (RPZ) and double check valve backflow preventers. Each participant is provided opportunities to perform inspection and testing procedures. To successfully complete the workshop, participants must pass the written exam and properly perform hands-on inspection and testing procedures on RPZ and double check valve backflow preventers.

There is only **one** chance to pass each section of the exam (written and hands-on). Failure of either section will require the individual to retake the entire course again later at **FULL COST**. Licensed plumbers will be eligible for IEPA approval to inspect and test RPZ and double check valve backflow preventers upon successful course completion. Certified water operators are eligible for a limited IEPA approval.

**CCCDI Recertification**                      **8 hrs**

Cross Connection Control Device Inspectors are required to complete 8 hours of continuing education as part of IEPA code. This class will also earn 8 CEUs toward renewal of an IDPH plumbing license. Includes a review of IEPA and IDPH backflow regulations, as well as a refresher on backflow prevention devices with hands-on practice. Currently open to POD 1 & POD 2 CCCDIs.

**Backflow Symposium**                      **6 hrs**

An annual symposium including a legislative update, special considerations for backflow installations, backflow and fire systems, managing pressure fluctuations and backflow protection, PFAS in water systems, EPA updates to the LCR, and ADA compliant restrooms. Breakfast and lunch will be provided.

**Plumbers Continuing Education**                      **4 hrs**

An IDPH plumbing code update and review will be conducted with a focus on its relevance to our current Title 35 Cross Connection Control Program requirements for municipalities. Additional topics will include water and wastewater relevance to the Cross Connection Control Program.

# **FALL 2024 WASTEWATER CLASS DESCRIPTIONS**

## **Class K Exam Preparation**

**2 hrs**

The format of the Class K certification exam will be discussed. Topics to include wastewater mathematics and essay questions.

## **Wastewater Laboratory Procedures**

**2 hrs**

Review of proper laboratory procedures for the purposes of process control at a wastewater treatment plant and reporting on an NPDES Discharge Monitoring Report. Examples of procedures covered include pH, BOD, dissolved oxygen, total suspended solids, etc.

## **Class 4 Wastewater Math Review**

**2 hrs**

General overview to aid in preparing for Class 4 wastewater certification. Topics include general math, unit conversions, percent removal, perimeter/circumference, area, volume, detention time, velocity, pounds formula, population equivalents, hydraulic loading of ponds, and organic loading of ponds.

## **Nutrient Removal**

**2 hrs**

The processes used for biological nutrient removal and chemical nutrient removal will be discussed. Topics will include processes such as Bardenpho Process, Sequencing Batch Reactors, Countercurrent Aeration, and anammox. Control of chemical addition for phosphorus will also be covered.

## **Activated Sludge Process Control**

**2 hrs**

General design, operation, and maintenance of activated sludge treatment systems. System differences, process control, laboratory testing, maintenance of equipment, and reporting requirements will be discussed.

## **Wastewater Operator Short School**

**32 hrs**

A training session to develop skills specific to process control and operation of Class 4/3/2/1 plants. All aspects of plant operations, process control tests and their interpretation, process control math, safety reports and records for each specific class are covered. On Friday morning, the IEPA wastewater certification exam is given to eligible students.

The Class 4 section focuses on stabilization ponds, collection systems, and chlorination systems.

The Class 3 section focuses on trickling filters and RBC units.

The Class 2/1 section focuses on activated sludge treatment plants with aerobic and anaerobic sludge digesters.

### **Note to Students Attending Wastewater Short School**

To take the certification exam on Friday, students must complete the IEPA Examination Request for Wastewater Certification and return it to IEPA at least 30 days prior to testing.

Link to IEPA Examination Request for Wastewater Certification

<https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/forms/water-forms/documents/2020-12-exam-request-for-ww-op-cert.pdf>

Questions? Contact the IEPA Wastewater Operator Certification Program at 217-782-9720.

**CANCELLATION POLICY:** ERTC reserves the right to cancel a course with less than ten students. If we cancel a course, you will be notified, and your pre-registration fee will be refunded. If we postpone a course, you will be notified of the rescheduled date. If you cannot attend a rescheduled date, you will receive a full refund.

**REFUND POLICY:** You must cancel a course registration no later than one day before the first scheduled class meeting. If you do not cancel and do not attend, you will receive no refund.

**CROSS CONNECTION CONTROL COURSES:** There will be no refund for any registration not cancelled at least five working days before the first day of the workshop. If you cancel twice for the same type of workshop, you will forfeit your registration fees and be required to wait at least six months before any registration will be accepted.