# ERTC Fall 2022 Schedule

## In-Person Workshop Schedule

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

<table>
<thead>
<tr>
<th>DATES</th>
<th>TITLE</th>
<th>LOCATION</th>
<th>IEPA CEUs</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 2-5</td>
<td>Cross Connection Control</td>
<td>Joliet</td>
<td>24.0</td>
<td>$575</td>
</tr>
<tr>
<td>Sep 13-16</td>
<td>Cross Connection Control</td>
<td>Rockford</td>
<td>24.0</td>
<td>$575</td>
</tr>
<tr>
<td>Sep 19-23</td>
<td>Wastewater Short School</td>
<td>Rockford</td>
<td>32.0</td>
<td>$575</td>
</tr>
<tr>
<td>Oct 6-7</td>
<td>Class 1 &amp; 2 Wastewater Operations</td>
<td>Champaign</td>
<td>15.0</td>
<td>$300</td>
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<tr>
<td>Oct 18-21</td>
<td>Cross Connection Control</td>
<td>Joliet</td>
<td>24.0</td>
<td>$575</td>
</tr>
<tr>
<td>Oct 31 – Nov 1</td>
<td>Class 3 &amp; 4 Wastewater Operations</td>
<td>Carmi</td>
<td>15.0</td>
<td>$300</td>
</tr>
<tr>
<td>Nov 2-3</td>
<td>Class 1 &amp; 2 Wastewater Operations</td>
<td>Carmi</td>
<td>15.0</td>
<td>$300</td>
</tr>
<tr>
<td>Nov 15-18</td>
<td>Cross Connection Control</td>
<td>Peoria</td>
<td>24.0</td>
<td>$575</td>
</tr>
</tbody>
</table>

## 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.

<table>
<thead>
<tr>
<th>DATES</th>
<th>TITLE</th>
<th>LOCATION</th>
<th>IEPA CEUs</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 29 – Sep 2</td>
<td>Class D &amp; C Water</td>
<td>Virtual</td>
<td>15.0</td>
<td>$300</td>
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<tr>
<td>Sep 7</td>
<td>Class K Certification Review</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
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<tr>
<td>Sep 15</td>
<td>Wastewater Lagoons</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
</tr>
<tr>
<td>Oct 3-7</td>
<td>Class B Water</td>
<td>Virtual</td>
<td>15.0</td>
<td>$300</td>
</tr>
<tr>
<td>Oct 13</td>
<td>Fixed Film Treatment</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
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<tr>
<td>Oct 26</td>
<td>Class 4 Wastewater Math</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
</tr>
<tr>
<td>Nov 2</td>
<td>Class D &amp; C Water Math Review</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
</tr>
<tr>
<td>Nov 9</td>
<td>Class K Certification Review</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
</tr>
<tr>
<td>Nov 17</td>
<td>Activated Sludge Process Control</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
</tr>
<tr>
<td>Nov 28 – Dec 2</td>
<td>Class A Water</td>
<td>Virtual</td>
<td>15.0</td>
<td>$300</td>
</tr>
<tr>
<td>Dec 15</td>
<td>Collection, Prelim and Primary Treat</td>
<td>Virtual</td>
<td>2.0</td>
<td>$40</td>
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Water Evening Course

**Basic Water Supply**
- **Location:** ERTC (SIUE Campus)
- **Schedule:** Wednesdays, 12 weeks
- **Hours:** 36
- **Dates:** Sep 14 – Dec 7
- **Time:** 6-9 p.m.
- **Fee:** $500
- **Instructor:** Mike Buss

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:** ERTC (SIUE campus)
- **Schedule:** Tuesdays, 10 weeks
- **Hours:** 30
- **Dates:** Oct 4 – Dec 13
- **Time:** 6-9 p.m.
- **Fee:** $450
- **Instructor:** Jim Winslade

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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An Alternative to a 4-year Degree

**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 23, 2022. Email ertcinfo@siue.edu for information.
Online Registration Instructions

1. Go to the ERTC website: www.siue.edu/ertc

2. Select the Online Registration Box.

3. Select Environmental Resources Training Center.

4. Select the appropriate Class Category (example below).

   - **Water Evening Courses**
     Water Evening Courses Workshop - Meet from 6:00 am to 9:00 pm.

   - **Wastewater Daytime Courses Workshop**
     Wastewater Daytime Courses Workshop Schedule - Meet from 8:00 am to 4:30 pm.

5. Select the correct Class Offering (example below).

   - **Wastewater Short School Class 1 & 2**
     Rockford
     IEPA #14393 Wastewater Short School Class 1 & 2 Rockford Sept. 27 - Oct. 1 $575.00 View Details

6. Enter registrant information and add to basket. Boxes with red asterisks (*) are required.

7. Select Checkout when completed.

8. Select Continue as Guest at page bottom.

9. Enter Payment Information and select Continue Checkout.

10. Review and select Submit Payment.

11. A receipt will be sent to the email entered during registration.
**Fall 2022 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.

**Class D & C Water** Math Review 2 hrs

General overview to aid in preparing for Class D/C drinking water certification. Topics include general math, unit conversions, solution percentages, perimeter/circumference, area, volume, detention time, well math, pump math, pounds formula, solution formula, chlorination math, and fluoridation math.

**Fall 2022 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.

**Fall 2022 Wastewater Class Descriptions**

**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.

**Collection Systems, Preliminary and Primary Treatment** 2 hrs

General design, operation, and maintenance of collection systems (including lift stations) will be emphasized. General design, operation, and maintenance of preliminary and primary treatment equipment will also be discussed.
Fixed Film Treatment 2 hrs

General design, operation, and maintenance of trickling filters, rotating biological contactors, and moving bed bioreactors. Operation techniques will include operation for BOD removal and nitrification. Laboratory and reporting will be included.

Wastewater Lagoons 2 hrs

General design, operation, and maintenance of wastewater stabilization ponds will be covered including aerated, anaerobic, and facultative ponds. Laboratory and reporting requirements will also be discussed.

Class 1 & 2 Wastewater Operations 15 hrs.

This course will cover the skills needed to operate, facilitate process control, and troubleshoot different types of treatment plant units. Topics include conventional activated sludge, sequencing batch reactors, and oxidation ditches. Applied mathematics with process control calculations are stressed. Physical, chemical, and laboratory analysis methods will be demonstrated. Also included are nitrogen and phosphorous removal techniques.

Class 3 & 4 Wastewater Operations 15 hrs.

Topics include biological treatment principles, process control, normal operation, preventative maintenance of collection systems, preliminary treatment devices, primary treatment devices, stabilization ponds, and disinfection systems. Also includes the operation of trickling filters and RBC units. Federal/State laws, rules, and regulations are also discussed.

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.

Class K Certification Review 2 hrs

General overview to aid in preparing for the Class K certification exam. Topics include general math preparation for the math portion of the exam and explanations of essay topics covered on the essay portion of the exam.

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 1 & 2 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://www2.illinois.gov/epa/topics/forms/water-forms/Pages/wastewater-operator.aspx)

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 preregistration 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.