



Professional Education Opportunities at ITRC – 2022

Visit our website at www.itrc.org or call (805) 756-2434 to obtain the latest information.

Pump Training – Planned for 2023

Sponsor: USBR Mid-Pacific Region

PUMPS I, TBD: Basic pumps course covering types; terms; curves; pumps in series and parallel; system curves; TDH computations; efficiency; WHP, BHP, input HP; pump selection; trimming impellers; common pump questions and answers.

PUMPS II, TBD: Class covering advanced topics such as: NPSH, submersible pumps; well screens and well development, shaft losses, shaft sizing; maintenance and troubleshooting; adjustable seed drive (ASD) basics; variable frequency drive (VFD) basics; retrofitting VFDs on existing motors; affinity laws for variable speed operation; estimating savings from VFDs; hands-on ASD applications; power factor correction; inlet and pump design.

Irrigation District School of Irrigation – 2022 at ITRC (8 am - 5 pm)

Sponsor: USBR Mid-Pacific Region

ITRC is providing several training and educational opportunities for staff, engineers, and board members of agricultural irrigation districts, as well as water operators. These classes utilize the excellent indoor and outdoor facilities at Cal Poly.

Water Operator Classes

FLOW MEASUREMENT & CANAL OPERATION

1st session

Feb. 2-4, 2022

2nd session

planned for mid-April 2022

SCADA Planned for 2023 at ITRC (8 am - 5 pm)

Sponsor: USBR Mid-Pacific Region

SCADA Basics – TBD

This one-day class is designed to introduce SCADA for those new to the field, starting with electric and electronic fundamentals. This course is a recommended prerequisite to the Advanced SCADA class, regardless of experience level.

Advanced SCADA for Technicians – TBD

This four-day class provides an overview of typical SCADA technician roles and responsibilities. Topics/labs include: sensor overview, sensor calibration, introduction to Programmable Logic Controller with Structured Text, intro to touchscreen configuration, radio path testing, intro to Human-Machine-Interface (HMI), and troubleshooting.

Flow Measurement & Canal Operation CSU Chico

Planned for mid-July 2022 (9 am - 4 pm)

ITRC provides annual flow measurement and canal operation training for operators in the Chico area in cooperation with CSU Chico. Some of the topics include: flow measurement details such as how to properly use a meter gate, how to get more water through various structures, and an introduction to SCADA.

Designer/Manager School of Irrigation at ITRC (8 am - 5 pm)

The Designer/Manager School is a comprehensive educational program offering a variety of classes designed for both agricultural and landscape irrigation professionals.

Ag Irrigation System Evaluation Short Course June 2022 *Sponsor: DWR*

ISE I: Theory and Laboratory Practice of Evaluations.

This 2½-day course will be held **June 27-29, 2022**. The class combines classroom (50%) and outdoor laboratory (50%) activities. Efficiency definitions and techniques of evaluation are emphasized, ranging from how to take a pressure measurement to what specific measurements are needed for the evaluation of six distinct irrigation methods (furrow, border strip, hand move/side roll sprinkler, linear move sprinkler, undertree sprinkler, and drip/micro). The course is not mathematically oriented, since the calculations are manipulated by the new and revised Cal Poly/DWR expert system Irrigation Evaluation programs.

ISE II: San Joaquin Valley Field Evaluations of Drip/Micro Systems

This 2½-day class, held on **June 29-July 1, 2022**, travels to the San Joaquin Valley and performs the entire evaluations on 2 fields. Emphasis is on performing the field evaluations for drip and microspray irrigation systems on trees/vines. This class allows for more extensive field training to help with the comprehension of the materials from Class 1.

Summer Classes July/August 2022

Monday	Tuesday	Wednesday	Thursday	Friday
25	26	27 Basic Soil, Plant & Water Relationships	28 Irrigation Scheduling, Salinity, & Drainage	29 Irrigation Scheduling, Salinity, & Drainage
1 Basic Pipeline Hydraulics I	2 Basic Pipeline Hydraulics II	3 Pumps I	4 Pumps II	5 Pumps II
8	9 Row Crop Drip Irrigation	10 Drip/Micro Irrigation Design	11 Drip/Micro Irrigation Design	12 Drip/Micro Irrigation Design

Irrigation District Custom Classes

In addition to the classes offered throughout the year, ITRC can provide training specifically tailored to the needs of individual districts or companies. For example, in the past, we have offered modified classes in flow measurement, canal operation, SCADA, and drip irrigation.

For more information, please contact: Dr. Stuart Styles, sstyles@calpoly.edu