



## Professional Education Opportunities at ITRC - 2017

Visit our website at [www.itrc.org](http://www.itrc.org) to obtain the latest information.

### Pump Training – March 28-30, 2017

at ITRC (8 am-5 pm)

Sponsor: *USBR Mid-Pacific Region*

**PUMPS I, March 28:** 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, March 29-30:** 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 sump design.

### Irrigation District School of Irrigation Winter 2017

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 – General & Pipeline  
FLOW MEASUREMENT – Canals  
CANAL OPERATION

#### 1<sup>st</sup> session

Jan. 24, 2017  
Jan. 25, 2017  
Jan. 26, 2017

#### 2<sup>nd</sup> session

Feb. 21, 2017  
Feb. 22, 2017  
Feb. 23, 2017

### Canal Operations – CSU Chico

February 7-8, 2017 (9 am-4 pm)

ITRC provides annual flow measurement and canal operations 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.

### Advanced Canal Operations – CSU Chico

March 14-15, 2017 (9 am-4 pm)

This is a two-day workshop focusing on flow measurement and data collection best practices as it relates to canal operations. Topics include SB7x7, demonstrations of meters and pipelines, and field exercises on how to measure flow rate.

### Ag Irrigation System Evaluation Short Course

June 2017

Sponsor: *DWR*

#### ISE I: Theory and Laboratory Practice of Evaluations.

This 2½-day course will be held **June 19-21, 2017**. 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 21-23, 2017**, 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.

### Designer/Manager School of Irrigation

at ITRC (8 am-5 pm)

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

#### Winter Classes

March 2017

Monday	Tuesday	Wednesday	Thursday	Friday
20	21	22	23 Fertigation	24

#### Summer Classes

July/August 2017

Monday	Tuesday	Wednesday	Thursday	Friday
24	25 Basic Soil, Plant & Water Relationships	26 Irrigation Scheduling, Salinity & Drainage	27 Irrigation Scheduling, Salinity, & Drainage	28
31 Basic Pipeline Hydraulics I	1 Basic Pipeline Hydraulics II	2 Pumps I	3 Pumps II	4 Pumps II
7 Chemigation	8 Row Crop Drip Irrigation	9 Drip/Micro Irrigation Design	10 Drip/Micro Irrigation Design	11 Drip/Micro Irrigation Design

### Irrigation District Custom Classes

In addition to the classes offered throughout the year, the 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:  
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