

IMPERIAL COMMUNITY COLLEGE DISTRICT
REVIEW OF CAREER TECHNICAL EDUCATION TRAINING PROGRAMS
2016

WATER TREATMENT SYSTEMS TECHNOLOGY

I. Program Description

The Water Treatment Systems Technology program is designed to provide students with the comprehensive understanding and manipulative skills, technical knowledge, and related trade information required to become State-certified operator in Water Treatment and Water Distribution. This program will allow students to comply with the necessary requirements for certification up to Grade III level. Once the student becomes a state certified operator on any or all disciplines, he or she will qualify to seek employment in the Water Treatment Systems Technology disciplines anywhere in the State.

A. Degree

Associate in Science, Water Treatment Systems Technology

B. Certificate

Certificated of Achievement, Water Treatment Systems Technology

II. Career Opportunities

Water and Liquid Waste Treatment Plant and System Operators

III. Industry Certification/Accreditation

None available.

IV. Industry Recognized Credentials (IRC)

Students are eligible to take State certifications as water and water treatment operators but will require the completion of job training hours prior to certification.

V. Labor Market Demand

The Water Treatment Systems Technology program at Imperial Valley College meets a documented labor market demand. Employment trends for this field are derived from a variety of sources. These are listed below:

A. Employment Trends

Occupation	TOP Code	SOC Code	2012	Average Job Openings per Year
Water and Liquid Waste Treatment Plant and System Operators	0958.00	518031	270	10*

*State Employment Development
Occupational Employment Projections 20012-2022
Imperial County
<http://www.labormarketinfo.edd.ca.gov/CommColleges/>

B. Employment Trends Assessment

VI. Other Regional Programs

There are no other similar training programs in Imperial Valley.

VII. Employment and Completion

(Based on State Core Measures Report, 2012-2013, 2013-2014 & 2014-2015)

Core 2: Completions. Measures completions for Career Technical Education student concentrators. Receipt of a certificate or degree or enrollment in a California four-year public university with or without a degree is considered a completion.

Fiscal Year Planning	Program	Total Completions	IVC Completion Rate	State Avg. Completion Rate
2014-2015	Water Treatment Systems Technology	8/17	47.06%	63.04%
2013-2014	Water Treatment Systems Technology	6/17	35.29%	62.34%
2012-2013	Water Treatment Systems Technology	9/22	40.91%	59.69%

PERKINS IV Program Performance Trend Report
Core Indicator Two – Total Completions – Certifications, Degrees and Transfer
https://misweb.cccco.edu/perkins/Core_Indicator_Reports/Summ_coreIndi_TOPCode.aspx

Core 3: Persistence and Transfer. The percent of Career Technical Education student concentrators (students who have successfully completed a minimum of 12 units of related Career Technical Education coursework) who persist in education at the community college level or transfer to a two or four-year institution.

Fiscal Year Planning	Program	Persistence	IVC Persistence Rate	State Avg. Persistence Rate
2014-2015	Water Treatment Systems Technology	30/41	73.17%	78.62%
2013-2014	Water Treatment Systems Technology	29/43	67.44%	78.40%
2012-2013	Water Treatment Systems Technology	28/41	68.29%	78.47%

PERKINS IV Program Performance Trend Report
Core Indicator Three – Persistence and Transfer

https://misweb.cccco.edu/perkins/Core_Indicator_Reports/Summ_coreIndi_TOPCode.aspx

Core 4: Student Placement. The percent of Career Technical Education students who have earnings the following year (as found in the unemployment insurance base wage file) or are in an apprenticeship program, or the military.

Fiscal Year Planning	Program	Placements	IVC Placement Rate	State Avg. Placement Rate
2014-2015	Water Treatment Systems Technology	15/15	100%	70.98%
2013-2014	Water Treatment Systems Technology	18/18	100%	76.87%
2012-2013	Water Treatment Systems Technology	16/16	100%	80.89%

PERKINS IV Program Performance Trend Report
Core Indicator Four – Employment

https://misweb.cccco.edu/perkins/Core_Indicator_Reports/Summ_coreIndi_TOPCode.aspx

Pursuant to the FCMAT report, CTE programs are also being evaluated for student demand, certificate and program completion, local labor demand, and a facility utilization for CTE programs in the new CTE building.

VIII. Enrollment Trends

Course	Year	Sections	Avg. Class	Fill Rate
WT110	2014-2015	0	0	0%
WT110	2013-2014	1	12	40%
WT110	2012-2013	1	36	120%

Course	Year	Sections	Avg. Class	Fill Rate
WT120	2014-2015	0	0	0.00%
WT120	2013-2014	0	0	0.00%
WT120	2012-2013	1	28	96.67%

Course	Year	Sections	Avg. Class	Fill Rate
WT130	2014-2015	0	0	0%
WT130	2013-2014	1	14	46.67%
WT130	2012-2013	1	21	70%

Course	Year	Sections	Avg. Class	Fill Rate
WT140	2014-2015	0	0	0.00%
WT140	2013-2014	1	7	23.33%
WT140	2012-2013	1	20	66.67%

Course	Year	Sections	Avg. Class	Fill Rate
WT150	2014-2015	0	0	0.00%
WT150	2013-2014	1	8	26.67%
WT150	2012-2013	0	0	0.00%

Course	Year	Sections	Avg. Class	Fill Rate
WT210	2014-2015	0	0	0%
WT210	2013-2014	1	7	23.33%
WT210	2012-2013	1	18	60%

Course	Year	Sections	Avg. Class	Fill Rate
WT220	2014-2015	0	0	0.00%
WT220	2013-2014	0	0	0%
WT220	2012-2013	1	17	56.67%

Course	Year	Sections	Avg. Class	Fill Rate
WT230	2014-2015	0	0	0%
WT230	2013-2014	1	9	30.00%
WT230	2012-2013	1	12	40%

IX. Completions

	2014-2015		2013-2014		2012-2013	
	Degrees	Certificates	Degrees	Certificates	Degrees	Certificates
Water Treatment Systems Technology	1	0	4	0	4	2
Wastewater Technology	0	3	0	11	N/A	1

X. FTES/FTEF Analysis

Year	FTES	FTEF	FTES/FTEF
2014-2015			
2013-2014			
2012-2013	23.96	2	11.98

XI. Facility Utilization Plan

N/A

XII. SWOT Analysis

Strengths Faculty are all working professionals what bring practical experience to the classes.	Weaknesses NO dedicated facility for lab experiments.
Opportunities Program proposing the use of the solar lab as a water treatment lab.	Threats It takes more than course work to become State certified. It also requires on-the job training.

XIII. Program Evaluation

The Water Treatment Systems Technology program encompasses two different disciplines: Water and Water Treatment Technology. The program has been instructed only by part-time faculty as an evening program. There appears to be a strong labor market demand. Fill rates are low in some courses. One of the issues that affected enrollment was the establishment of pre-requisites for some courses. The pre-requisite structure is being analyzed to eliminate some pre-requisites in the lower level classes. According to the faculty, the courses are not progressive and the pre-requisites are not necessary. There is continuous completers in certificates and degrees but the numbers are low.

XIV. Recommendations

It is recommended that the Water Technology program continue at IVC with some remediation in the program structure and scheduling.