IMPERIAL COMMUNITY COLLEGE DISTRICT

REVIEW OF CAREER TECHNICAL EDUCATION TRAINING PROGRAMS
2016

FIRE TECHNOLOGY

I. **Program Description**
    The Fire Technology Certificate is designed to expand skills/knowledge in the areas of building and life safety, fire prevention, and fire protection services and for the transition from Firefighter to Fire Officer.

    A. **Degree**
        Associate in Science, Fire Technology

    B. **Certificate**
        Certificated of Achievement, Fire Technology

II. **Career Opportunities**
    Firefighter
    Fire Investigator
    Fire Officer

III. **Industry Certification/Accreditation**
    California State Fire Marshal/State Board of Fire Services accredited the FIRE programs.

IV. **Industry Recognized Credentials (IRC)**
    California State Fire Marshal/State Board of Fire Services has specific certificates.

V. **Labor Market Demand**
    The Fire Technology program at Imperial Valley College meets a documented labor market demand. Employment trends available are listed below. However this data does not take into account the career/position advancements that come with the completion of a degree in Fire Technology and the OSFM certificates from specific and successfully completed courses.

    A. **Employment Trends**

Occupation	TOP Code	SOC Code	2012	Average Job Openings per Year
Fire Fighters	2133.00	332011	190	6*

*State Employment Development
Occupational Employment Projections 20012-2022
Imperial County

B. Employment Trends Assessment

Although only 6 openings are listed in the LMI data, more than 6 students are placed or advance in their career every year based on successful completion of courses leading to OSFM certificates. Advancement to Fire Officer status is moving toward the completion of a degree along with years of services and certificates.

VI. Other Regional Programs

There are no other similar training programs in Imperial Valley. IVROP does offer a lower level introductory-type of course

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	Fire Technology	12/13	92.31%	80.11%
2013-2014	Fire Technology	7/9	77.78%	77.87%
2012-2013	Fire Technology	8/9	88.89%	76.14%

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 Resistance Rate	State Avg. Completion Rate
2014-2015	Fire Technology	18/20	90%	87.43%
2013-2014	Fire Technology	19/22	86.36%	87.61%
2012-2013	Fire Technology	26/27	96.30%	87.69%

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. Completion Rate
2014-2015	Fire Technology	5/5	100%	74.97%
2013-2014	Fire Technology	5/5	100%	85.80%
2012-2013	Fire Technology	4/4	100%	85.05%

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
FIRE100	2014-2015	1	13	65.00%
FIRE100	2013-2014	1	13	65%
FIRE100	2012-2013	2	16.5	82.50%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE101	2014-2015	1	21	105%
FIRE101	2013-2014	1	18	90%
FIRE101	2012-2013	1	22	110%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE102	2014-2015	1	17	85.00%
FIRE102	2013-2014	1	10	50%
FIRE102	2012-2013	1	15	75.00%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE103	2014-2015	1	13	65.00%
FIRE103	2013-2014	1	18	90%
FIRE103	2012-2013	2	13.5	67.50%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE104	2014-2015	1	15	75.00%
FIRE104	2013-2014	1	16	80%
FIRE104	2012-2013	2	13.5	67.50%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE108	2014-2015	1	16	80%
FIRE108	2013-2014	1	14	70%
FIRE108	2012-2013	1	15	75%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE109	2014-2015	1	20	100%
FIRE109	2013-2014	1	23	115%
FIRE109	2012-2013	1	17	68%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE117	2014-2015	1	22	88.00%
FIRE117	2013-2014	1	24	80%
FIRE117	2012-2013	1	22	73.33%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE121	2014-2015	1	20	100.00%
FIRE121	2013-2014	1	16	80.00%
FIRE121	2012-2013	1	22	91.67%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE122	2014-2015	1	22	88%
FIRE122	2013-2014	1	22	110%
FIRE122	2012-2013	1	20	100%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE220	2014-2015	0	0	0%
FIRE220	2013-2014	1	21	105.00%
FIRE220	2012-2013	0	0	0.00%

Course	Year	Sections	Avg. Class	Fill Rate
FIRE222	2014-2015	1	14	70%
FIRE222	2013-2014	0	0	0.00%
FIRE222	2012-2013	0	0	0.00%

IX. Completions

	2014-2015		2013-2014		2012-2013	
	Degrees	Certificates	Degrees	Certificates	Degrees	Certificates
Firefighter I	N/A	5	N/A	4	N/A	7

X. FTES/FTEF Analysis

Year	FTES	FTEF	FTES/FTEF
2014-2015	19.84	3.5	5.67
2013-2014	21.75	3.75	5.80
2012-2013	25.78	3.84	6.71

XI. Facility Utilization Plan

The new CTE buildings on the IVC campus have helped to bring the Fire courses on campus, but there are issues with classroom scheduling overlaps due to limited classroom space. This will only worsen when a POST Level 1 is on campus

There are concerns with non-public safety and non-CTE events being held in 3200 with prior planning and arrangements with the public safety faculty to ensure equipment and supplies are secured safely.

XII. SWOT Analysis

Strengths	Weaknesses
The support of the Fire Depts. throughout the county is the #1 strength. Another strength is the accreditation of the program as a Regional Provider.	The limited number of online 'core' and fire officer courses is a weakness. Coinciding with this is the limited experience of the fire population with online courses
Opportunities	**Threats**
While we have finally secured funding for a part-time program coordinator, there remains a need for full-time faculty to offer the program as more than an evening and weekend program.	One threat is the perception that the lower number of enrollments equates to the lack of need. The demands of the industry prohibits full participation of all fire-fighters and those desiring advancement.

XIII. Program Evaluation

The Fire Technology program has strong performance numbers across most targets including Perkins, fill rates, and placements. It has an efficiency factor of around 6 which is lower than the expected 15. Most CTE programs have low efficiency factors due to restrictions required by safety and space.

XIV. Recommendations

It is recommended that the Fire Technology program continue at Imperial Valley College without mitigation