

**IMPERIAL VALLEY COLLEGE DISTRICT  
REVIEW OF CAREER TECHNICAL EDUCATION TRAINING PROGRAMS  
2013**

**BUILDING CONSTRUCTION TECHNOLOGY**

**I. Program Description**

The Building Construction Technology program along with the specializations in Carpentry, Concrete Masonry, and Project management are designed to provide instruction in manipulative skills, technical knowledge, and related trade information which will prepare the student for employment in the Building Construction Industry.

**A. Degree**

Associate in Science, Building Construction Technology

**B. Certificate**

Certificated of Achievement, Building Construction Technology

**II. Career Opportunities**

First-Line Sup/Mgrs of Construction Trades and Extraction Workers

Tile and Marble Setters

Maintenance and Repair Workers, General

Carpenters

Cement masons concrete finishers

**III. Industry Certification/Accreditation** (to be completed by faculty)

The main accrediting entity is the state licensing board ([www.clsb.gov.ca](http://www.clsb.gov.ca)) which controls the licensing of the different construction trades.

**IV. Industry Recognized Credentials (IRC)** (to be completed by faculty)

CLSB license B.P.I credentials and OSHA certification.

**V. Labor Market Demand**

The Building Construction 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 (Employment Development Department):**

| Occupation                                                        | TOP Code                      | SOC Code | 2008 | Average Job Openings per Year |
|-------------------------------------------------------------------|-------------------------------|----------|------|-------------------------------|
| First-Line Sup/Mgrs of Construction Trades and Extraction Workers | 0952.60<br>0957.00<br>0952.10 | 471011   | 160  | 4                             |
| Tile and Marble Setters                                           | 0952.60                       | 472044   | 40   | 1                             |
| Maintenance and Repair Workers, General                           | 0957.00                       | 499071   | 630  | 16                            |
| Carpenters                                                        | 0952.10                       | 472031   | 120  | 2                             |
| Total                                                             |                               |          |      | 23*                           |

\*Same data as 2012. No updates from State Employment Development

Occupational Employment Projections 2008-2018

Imperial County

<http://www.labormarketinfo.edd.ca.gov/CommColleges/>

**B. Employment Trends (Faculty Assessment):**

The building construction industry is experiencing a gradual increment in job openings as evidenced in the industry employment projections and by our county data for building permit acquisitions for new building permits. There is a 9.5% annual average employment for maintenance and repair workers. In mining and construction there is a 23.5% percent change which amounts to a total of 400 job openings in a ten year period. Construction trades workers have a 4.8% change. Cement masons and concrete finishers have a 6.3% percent change. Construction laborers have a 8.5% percent change. The number of permits in 2011 was 256 for a total of \$37,427,739. The number of permits in 2012 was 287 for a total of \$44,061,586. The permit data for 2013 has not been released but there seems to be an upward trend in permit acquisitions since 2009. In addition the median sales price in Southern California was \$382,000, up 21.3% percent from \$315,000 the same period last year. Continuing construction of model homes and commercial buildings will only increase the demand for maintenance and repair/construction workers to serve the needs of new buildings.

#### VI. Other Regional Programs

There are no other similar training programs in Imperial Valley.

#### VII. Employment and Completion

(Based on State Core Measures Report, 2011-2012, 2012-2013 & 2013-2014)

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 |
|----------------------|----------------------------------------------|-------------------|---------------------|----------------------------|
| 2013-2014            | Construction Crafts Technology               | 29/29             | 100%                | 71.34%                     |
|                      | Civil and Construction Management Technology | 1/5               | 20%                 | 40.79                      |
|                      | Carpentry                                    | 0                 | 0                   | 29.12%                     |
|                      | Masonry, Tile, Cement, Lath and Plaster      |                   |                     |                            |
| 2012-2013            | Construction Crafts Technology               | 0                 | 0                   | 58.83%                     |
|                      | Civil and Construction Management Technology | 1/2               | 50%                 | 35.06%                     |
|                      | Carpentry                                    | 2/6               | 33.33%              | 41.08%                     |
|                      | Masonry, Tile, Cement, Lath and Plaster      | 0/1               | 0                   | 78.57%                     |
| 2011-2012            | Construction Crafts Technology               |                   |                     |                            |
|                      | Civil and Construction Management Technology | 0/1               | 0                   | 30.44%                     |
|                      | Carpentry                                    | 3/4               | 75%                 | 37.91%                     |
|                      | Masonry, Tile, Cement, Lath and Plaster      | 2/2               | 100%                | 100%                       |

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](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 |
|----------------------|----------------------------------------------|-------------|----------------------|-----------------------------|
| 2013-2014            | Construction Crafts Technology               | 17/28       | 60.71%               | 77.72%                      |
|                      | Civil and Construction Management Technology | 8/13        | 61.54%               | 74.23%                      |

|           |                                              |      |        |        |
|-----------|----------------------------------------------|------|--------|--------|
|           | Carpentry                                    | 1/3  | 33.33% | 70.63  |
|           | Masonry, Tile, Cement, Lath and Plaster      |      |        |        |
| 2012-2013 | Construction Crafts Technology               | 1/1  | 100%   | 80.23% |
|           | Civil and Construction Management Technology | 8/10 | 80%    | 74.24% |
|           | Carpentry                                    | 2/6  | 33.33% | 75.14% |
|           | Masonry, Tile, Cement, Lath and Plaster      | 1/2  | 50%    | 72%    |
| 2011-2012 | Construction Crafts Technology               |      |        |        |
|           | Civil and Construction Management Technology | 3/4  | 75%    | 69.42% |
|           | Carpentry                                    | 7/9  | 77.78% | 74.43% |
|           | Masonry, Tile, Cement, Lath and Plaster      | 4/5  | 80%    | 68.18% |

PERKINS IV Program Performance Trend Report  
Core Indicator Three – Persistence and Transfer  
[https://misweb.cccco.edu/perkins/Core\\_Indicator\\_Reports/Summ\\_coreIndi\\_TOPCode.aspx](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 |
|----------------------|----------------------------------------------|------------|--------------------|---------------------------|
| 2013-2014            | Construction Crafts Technology               | 29/29      | 100%               | 69.20%                    |
|                      | Civil and Construction Management Technology | 5/5        | 100%               | 79.42%                    |
|                      | Carpentry                                    | 2/2        | 100%               | 85.67%                    |
|                      | Masonry, Tile, Cement, Lath and Plaster      |            |                    |                           |
| 2012-2013            | Construction Crafts Technology               | 0          | 0                  | 69.28%                    |
|                      | Civil and Construction Management Technology | 2/2        | 100%               | 79.05%                    |
|                      | Carpentry                                    | 6/6        | 100%               | 81.12                     |
|                      | Masonry, Tile, Cement, Lath and Plaster      | 1/1        | 100%               | 100%                      |
| 2011-2012            | Construction Crafts Technology               |            |                    |                           |
|                      | Civil and Construction Management Technology | 1/1        | 100%               | 84.26%                    |
|                      | Carpentry                                    | 5/5        | 100%               | 86.01%                    |
|                      | Masonry, Tile, Cement, Lath and Plaster      | 3/3        | 100%               | 100%                      |

PERKINS IV Program Performance Trend Report  
Core Indicator Four – Employment  
[https://misweb.cccco.edu/perkins/Core\\_Indicator\\_Reports/Summ\\_coreIndi\\_TOPCode.aspx](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 | CAP | Fill Rate |
|---------|-----------|----------|------------|-----|-----------|
| BLDC101 | 2012-2013 | 3        | 20         | 22  | 92.31%    |
| BLDC101 | 2011-2012 | 3        | 17.6       | 19  | 91.38%    |
| BLDC101 | 2010-2011 | 2        | 16.5       | 18  | 91.67%    |

| Course  | Year      | Sections | Avg. Class | CAP | Fill Rate |
|---------|-----------|----------|------------|-----|-----------|
| BLDC110 | 2012-2013 |          |            |     |           |
| BLDC110 | 2011-2012 | 3        | 14.6       | 19  | 78.57%    |
| BLDC110 | 2010-2011 | 1        | 8          | 18  | 44.44%    |

| Course  | Year      | Sections | Avg. Class | CAP | Fill Rate |
|---------|-----------|----------|------------|-----|-----------|
| BLDC130 | 2012-2013 | 1        | 19         | 20  | 95%       |
| BLDC130 | 2011-2012 | 1        | 13         | 16  | 81.25%    |
| BLDC130 | 2010-2011 | 1        | 26         | 18  | 144.44%   |

| Course  | Year      | Sections | Avg. Class | CAP | Fill Rate |
|---------|-----------|----------|------------|-----|-----------|
| BLDC135 | 2012-2013 | 1        | 13         | 20  | 65%       |
| BLDC135 | 2011-2012 | 1        | 15         | 18  | 83.33%    |
| BLDC135 | 2010-2011 | 1        | 16         | 16  | 100%      |

| Course  | Year      | Sections | Avg. Class | CAP | Fill Rate |
|---------|-----------|----------|------------|-----|-----------|
| BLDC140 | 2012-2013 |          |            |     |           |
| BLDC140 | 2011-2012 | 1        | 18         | 16  | 122.50%   |
| BLDC140 | 2010-2011 | 1        | 7          | 16  | 43.75%    |

| Course  | Year      | Sections | Avg. Class | CAP | Fill Rate |
|---------|-----------|----------|------------|-----|-----------|
| BLDC170 | 2012-2013 | 1        | 19         | 25  | 76%       |
| BLDC170 | 2011-2012 | 1        | 18         | 20  | 90%       |
| BLDC170 | 2010-2011 | 1        | 10         | 18  | 55.56%    |

| Course  | Year      | Sections | Avg. Class | CAP | Fill Rate |
|---------|-----------|----------|------------|-----|-----------|
| BLDC180 | 2012-2013 | 1        | 13         | 20  | 65%       |
| BLDC180 | 2011-2012 |          |            |     |           |
| BLDC180 | 2010-2011 | 1        | 14         | 18  | 77.78%    |

#### IX. Completions

|                                  | 2012-2013 |              | 2011-2012 |              | 2010-2011 |              |
|----------------------------------|-----------|--------------|-----------|--------------|-----------|--------------|
|                                  | Degrees   | Certificates | Degrees   | Certificates | Degrees   | Certificates |
| Building Construction Technology | 0         | 0            | 0         | 0            | 0         | 0            |
| BCT – Carpentry                  | N/A       | 0            | N/A       | 2            | N/A       | 1            |
| BCT – Concrete Masonry           | N/A       | 0            | N/A       | 1            | N/A       | 1            |
| BCT – Project Management         | N/A       | 0            | N/A       | 0            | N/A       | 0            |

#### X. FTES/FTEF Analysis

| Year      | FTES  | FTEF | FTES/FTEF |
|-----------|-------|------|-----------|
| 2012-2013 | 22.78 | 3.13 | 7.28      |
| 2011-2012 | 22.01 | 3.99 | 5.52      |
| 2010-2011 | 23.02 | 3.13 | 7.35      |

#### XI. Facility Utilization Plan (to be completed by faculty)

The facility utilization plan will be impacted by the needs of the advisory committee which dictates the type of training and classed that should be taught to meet their current needs. The

new facility will serve to provide students with a safe and adequate lab space for instructions which has been lacking since the program was started. The new facility will also play an important role in the new curriculum that is being developed. The facility will facilitate the development of new classes and certificates that will be properly accommodated via day and evening courses. The department is in the process of modifying the entire structure of the building program to facilitate the acquisition of certificates for students, thus increasing the number of completers. In addition the building construction program is planning a partnership with fire science technology and electrical wiring technology to link all programs together via required courses from all disciplines.

**XII. SWOT Analysis** (to be completed by faculty)

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Strengths</b> One of the strengths is the strong link that the program has with the local construction industry. The advisory committee is very supportive of the construction program and the certificate programs that are offered. The modification of the curriculum will only increase the support of the advisory committee as they are guiding the process. Another strength is the articulation agreement with the high schools to facilitate the transition of students from high school to college.</p> | <p><b>Weaknesses</b> One of the major weaknesses is the lack of retention of students due to the length of the entire program and the lack of adjunct instructors or inadequate budget to pay adjunct instructors to teach other classes. This makes it easier for students to become discouraged due to the length of time it will take them to complete the program as there are only three classes offered per semester and no summer sessions offered. In addition many students learn the basic skills necessary to become employed and do not return to complete their certificates.</p> |
| <p><b>Opportunities</b> The main opportunity is the use of the new facility as it will attract new students to the program along with the updated curriculum which will facilitate the certificate attainment for students and increase the completion and success rates of the program.</p>                                                                                                                                                                                                                            | <p><b>Threats</b> The main threat is the lack of funding to employ adjunct instructors to reduce the completion rate of students as more classes are offered.</p>                                                                                                                                                                                                                                                                                                                                                                                                                              |

**XIII. Program Evaluation** (to be completed by EWD office)

**XIV. Recommendations** (to be completed by EWD office)