

# Program Scorecard 2016-2017

## Air Conditioning, Heating & Refrigeration Tech. 10-601-1

Student Demographics	2016-17		2015-16		2014-15	
	Number	Percent	Number	Percent	Number	Percent
Full-Time	27	81.80%	18	72.00%	26	86.70%
Part-Time	6	18.20%	7	28.00%	4	13.30%
Disabilities	1	3.00%	2	8.00%	2	6.70%
Minorities	3	9.10%	3	12.00%	4	13.30%
Financial Aid	25	73.50%	12	46.20%	18	56.30%
Male	31	93.90%	25	100.00%	30	100.00%
Female	1	3.00%	0	0.00%	0	0.00%
Mean Age	25		27		25	
Median Age	22		23		22	
Mode Age	20		20		19	
Bias per WTCS (NTO)	Female		Female		Female	
Total Program Students	33		25		30	
Total Pre-Program Students	1		1		2	

NOTE: Demographics include program students only, with the exception of financial aid

Student Interest	2016-17	2015-16	2014-15	2013-14	2012-13
New Accepted Students	31	12	18	20	27
Capacity	37	29	29	29	29
Percent Capacity	83.80%	41.40%	62.10%	69.00%	93.10%
FTEs	33.4	22.2	24.6	30.8	41.6
Fall/Spring Waitlist	0	0	0	0	2

Graduate Placement	2016-17	2015-16	2014-15	2013-14	2012-13
Graduates	4	10	6	10	13
Employed in Related Field	NA	100.00%	100.00%	100.00%	75.00%
Seeking Employment	NA	0.00%	0.00%	0.00%	25.00%
Continuing Education	NA	0.00%	0.00%	0.00%	0.00%
Survey Response Rate	NA	80.00%	66.70%	80.00%	69.20%

Wages & Openings	2015-16
CVTC Graduate Average Hourly Wage	\$18.24
CVTC Graduate Average Yearly Wage	\$43,117
Regional Entry Level Yearly Wage	\$36,254
Regional Job Openings	47

**CAREER CLUSTER**  
*Construction*

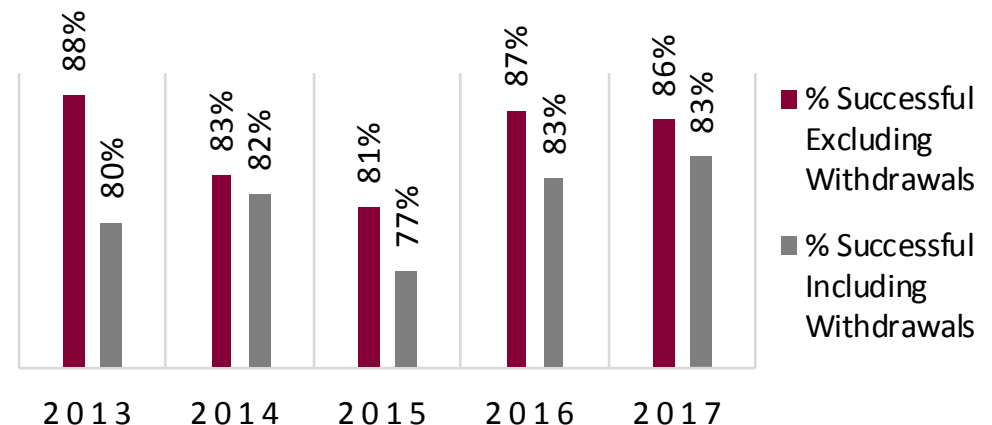
Graduation Rates	Cohort Year					Target	WTCS
	2014-15	2013-14	2012-13	2011-12	2010-11		
Graduation within 3 Years	30.80%	44.40%	40.70%	29.60%	46.70%	70%	27%
Graduation within 4 Years	NA	44.40%	40.70%	33.30%	46.70%	70%	28%

Retention Rates	Academic Year					Target
	2016-17	2015-16	2014-15	2013-14	2012-13	
Fall-to-Fall Retention	58.30%	66.70%	42.10%	56.70%	74.10%	80%
<b>Core Courses</b>	<b>2016-17</b>	<b>2015-16</b>	<b>2014-15</b>	<b>2013-14</b>	<b>2012-13</b>	
Course Success Rate	83.90%	88.20%	78.90%	82.50%	84.80%	75%
Withdraw Rate	1.90%	0.00%	4.30%	0.00%	4.60%	NA
<b>General Education Courses</b>	<b>2016-17</b>	<b>2015-16</b>	<b>2014-15</b>	<b>2013-14</b>	<b>2012-13</b>	
Course Success Rate	72.60%	67.30%	69.00%	73.40%	71.30%	75%
Withdraw Rate	3.90%	14.30%	8.60%	7.80%	13.80%	NA

Technical Skills Attainment	2016-17	2015-16	2014-15	2013-14	2012-13
Met	5				
Not Met	0				
Not Assessed	1				

Student Surveys	2016-17	2015-16	2014-15	2013-14	CVTC
SSI- Instructional Effectiveness by Program (scale of 1 to 7)	6.27		6		6.2
CCSSE- Active & Collaborative Learning by Cluster (scale of 1 to 4)		2.46		2.41	2.25

### COURSE SUCCESS



**Air Conditioning, Heating, & Refrigeration Technology Course Success  
2016-17 Academic Year**

Delivery Method	Successful	Unsuccessful	Withdrawals	Grand Total	% successful excluding withdrawals	% successful including withdrawals
Faculty Enhanced	1			1	100%	100%
Hybrid	13			13	100%	100%
Online	1			1	100%	100%
Face-to-Face	369	61	15	445	86%	83%
<b>Grand Total</b>	<b>384</b>	<b>61</b>	<b>15</b>	<b>460</b>	<b>86%</b>	<b>83%</b>

Course & Delivery Method	Successful	Unsuccessful	Withdrawals	Grand Total	% successful excluding withdrawals	% successful including withdrawals
<b>Advanced HVAC Controls</b>	<b>4</b>	<b>2</b>		<b>6</b>	<b>67%</b>	<b>67%</b>
Face-to-Face	4	2		6	67%	67%
<b>CAD - HVAC</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>86%</b>	<b>75%</b>
Face-to-Face	6	1	1	8	86%	75%
<b>Drafting-HVAC</b>	<b>5</b>	<b>1</b>		<b>6</b>	<b>83%</b>	<b>83%</b>
Face-to-Face	5	1		6	83%	83%
<b>Economics</b>	<b>4</b>	<b>2</b>		<b>6</b>	<b>67%</b>	<b>67%</b>
Face-to-Face	4	2		6	67%	67%
<b>Electricity Principles</b>	<b>19</b>	<b>6</b>	<b>1</b>	<b>26</b>	<b>76%</b>	<b>73%</b>
Face-to-Face	19	6	1	26	76%	73%
<b>Electricity Theory</b>	<b>22</b>	<b>3</b>	<b>1</b>	<b>26</b>	<b>88%</b>	<b>85%</b>
Face-to-Face	22	3	1	26	88%	85%
<b>English Composition 1</b>	<b>2</b>			<b>2</b>	<b>100%</b>	<b>100%</b>
Faculty Enhanced	1			1	100%	100%
Online	1			1	100%	100%
<b>Geothermal Applications</b>	<b>18</b>	<b>1</b>		<b>19</b>	<b>95%</b>	<b>95%</b>
Face-to-Face	18	1		19	95%	95%
<b>Heating Theory</b>	<b>20</b>	<b>3</b>	<b>1</b>	<b>24</b>	<b>87%</b>	<b>83%</b>

Face-to-Face	20	3	1	24	87%	83%
<b>HVAC Load Calc &amp; Psychrometric</b>	<b>13</b>	<b>3</b>	<b>2</b>	<b>18</b>	<b>81%</b>	<b>72%</b>
Face-to-Face	13	3	2	18	81%	72%
<b>HVAC Systems Design</b>	<b>5</b>	<b>1</b>		<b>6</b>	<b>83%</b>	<b>83%</b>
Face-to-Face	5	1		6	83%	83%
<b>HVAC/R Service &amp; Applications</b>	<b>11</b>	<b>1</b>	<b>1</b>	<b>13</b>	<b>92%</b>	<b>85%</b>
Face-to-Face	11	1	1	13	92%	85%
<b>HVACR Industry Skills</b>	<b>17</b>	<b>2</b>		<b>19</b>	<b>89%</b>	<b>89%</b>
Face-to-Face	17	2		19	89%	89%
<b>Hydronic System Design</b>	<b>2</b>			<b>2</b>	<b>100%</b>	<b>100%</b>
Face-to-Face	2			2	100%	100%
<b>Mathematical Reasoning</b>	<b>7</b>	<b>2</b>	<b>2</b>	<b>11</b>	<b>78%</b>	<b>64%</b>
Face-to-Face	7	2	2	11	78%	64%
<b>Oral/Interpersonal Comm</b>	<b>14</b>	<b>4</b>		<b>18</b>	<b>78%</b>	<b>78%</b>
Face-to-Face	12	4		16	75%	75%
Hybrid	2			2	100%	100%
<b>Plan &amp; Print Reading-HVAC</b>	<b>1</b>	<b>1</b>		<b>2</b>	<b>50%</b>	<b>50%</b>
Face-to-Face	1	1		2	50%	50%
<b>Prin of Oil, Elec &amp; Hydron Htg</b>	<b>18</b>	<b>3</b>	<b>1</b>	<b>22</b>	<b>86%</b>	<b>82%</b>
Face-to-Face	18	3	1	22	86%	82%
<b>Principles of Air Conditioning</b>	<b>17</b>	<b>4</b>		<b>21</b>	<b>81%</b>	<b>81%</b>
Face-to-Face	17	4		21	81%	81%
<b>Principles of Air Handling</b>	<b>6</b>	<b>2</b>		<b>8</b>	<b>75%</b>	<b>75%</b>
Face-to-Face	6	2		8	75%	75%
<b>Prncples of Gas Heat &amp; Airfl</b>	<b>15</b>	<b>4</b>		<b>19</b>	<b>79%</b>	<b>79%</b>
Face-to-Face	15	4		19	79%	79%
<b>Refrigeration Principles</b>	<b>17</b>	<b>4</b>		<b>21</b>	<b>81%</b>	<b>81%</b>
Face-to-Face	17	4		21	81%	81%
<b>Refrigeration Theory</b>	<b>21</b>	<b>2</b>	<b>1</b>	<b>24</b>	<b>91%</b>	<b>88%</b>
Face-to-Face	21	2	1	24	91%	88%
<b>Safety - HVAC</b>	<b>24</b>	<b>1</b>	<b>1</b>	<b>26</b>	<b>96%</b>	<b>92%</b>
Face-to-Face	20	1	1	22	95%	91%
Hybrid	4			4	100%	100%
<b>Schematic Wiring-HVACR</b>	<b>13</b>		<b>1</b>	<b>14</b>	<b>100%</b>	<b>93%</b>

Face-to-Face	13		1	14	100%	93%
<b>Schematic Wiring-Trblshtng</b>	<b>11</b>	<b>1</b>		<b>12</b>	<b>92%</b>	<b>92%</b>
Face-to-Face	11	1		12	92%	92%
<b>Sheet Metal Layout</b>	<b>13</b>	<b>4</b>	<b>1</b>	<b>18</b>	<b>76%</b>	<b>72%</b>
Face-to-Face	13	4	1	18	76%	72%
<b>Solar/Wind Applications</b>	<b>18</b>			<b>18</b>	<b>100%</b>	<b>100%</b>
Face-to-Face	18			18	100%	100%
<b>Sustainability for HVAC</b>	<b>25</b>	<b>2</b>		<b>27</b>	<b>93%</b>	<b>93%</b>
Face-to-Face	18	2		20	90%	90%
Hybrid	7			7	100%	100%
<b>Technical Problems-HVAC</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>18</b>	<b>94%</b>	<b>89%</b>
Face-to-Face	16	1	1	18	94%	89%
<b>Grand Total</b>	<b>384</b>	<b>61</b>	<b>15</b>	<b>460</b>	<b>86%</b>	<b>83%</b>