Curriculum Outline
2017-2018

Manufacturing Career Cluster

Certificate - Level II - HVAC (Heating, Ventilation, Air Conditioning) CIP 15.0501

FIRST YEAR

First Semester				**Lec**	**Lab**	**Ext**	**Cont**	**Credit**
ENGL	*1301*	*Composition I*		3	1	0	64	3
HART	1256	EPA Recovery Certification Preparation		1	3	0	64	2
HART	1301	Basic Electricity for HVAC		2	3	0	80	3
HART	1307	Refrigeration Principles		2	3	0	80	3
HART	1403	Air Conditioning Control Principles		2	4	0	96	4
			Total Hours	10	14	0	384	15

Second Semester				**Lec**	**Lab**	**Ext**	**Cont**	**Credit**
HART	1441	Residential Air Conditioning		2	4	0	96	4
HART	1445	Gas and Electric Heating		2	4	0	96	4
HART	2449	Heat Pumps		2	4	0	96	4
GEN ED		*Mathematics General Education Course* [1]		3	1	0	64	3
			Total Hours	9	13	0	352	15

SECOND YEAR				**Lec**	**Lab**	**Ext**	**Cont**	**Credit**
HART	2436	Air Conditioning Troubelshooting		2	4	0	96	4
HART	2438	Air Conditioning Installation and Startup		2	4	0	96	4
HART	2442	Commercial Refrigeration		2	4	0	96	4
SPCH	*1321*	*Business and Professional Communication* [2]		3	0	0	48	3
			Total Hours	9	12	0	336	15

GRAND TOTAL HOURS ***1072*** ***45***

1 Select one of the following: MATH 1314, MATH 1316, MATH 1324, MATH 1325, MATH 1332, MATH 1342, MATH 1350, MATH 1351, MATH 1414, MATH 2305, MATH 2318, MATH 2320, MATH 2412, MATH 2413, MATH 2414 or MATH 2415

2 May substitute SPCH 1311 or SPCH 1315

Verification of Workplace Competencies: Obtaining Industry Certification (NATE)