

**AIR CONDITIONING, HEATING, AND REFRIGERATION TECHNOLOGY**  
**Diploma Program (D35100)**

**Courses required to meet graduation requirements in this curriculum are offered during day and evening hours. Minimum time for completion: Day – two semesters full-time attendance; Evening – four semesters of part-time attendance. The Diploma is awarded graduates of this curriculum.**

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems. Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems.

**GENERAL EDUCATION COURSES:.....SHC**

English/Communications:

ENG 111 Writing and Inquiry.....	3
OR ENG 102 Applied Communications II.....	3

Natural Sciences/Mathematics:

MAT 110 Math Measurement & Literacy.....	3
OR MAT 121 Algebra/Trigonometry I.....	3

**MAJOR COURSES:**

AHR 110 Intro to Refrigeration.....	5
AHR 111 HVACR Electricity.....	3
AHR 112 Heating Technology.....	4
AHR 113 Comfort Cooling.....	4
AHR 114 Heat Pump Technology.....	4
AHR 130 HVAC Controls.....	3
AHR 151 HVAC Duct Systems I.....	2
AHR 160 Refrigerant Certification.....	1
AHR 180 HVACR Customer Relations.....	1
AHR 210 Residential Building Code.....	2
AHR 211 Residential System Design.....	3
WBL 110 World of Work.....	1

**Total Credit Hours Required.....39**

**DEVELOPMENTAL COURSE REQUIREMENTS\***

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing II.....	3
DMA DMA 010, DMA 020, DMA 030 (MAT 110).....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121).....	6

\*Developmental coursework (including all prerequisites) will be required of students whose placement test scores indicate a need for greater proficiency in the areas of reading, English, mathematics, and computers. Please refer to the Course Descriptions section for prerequisite course information.

**Air Conditioning, Heating and Refrigeration • D35100**  
**Suggested Program Sequence Day**

	Class	Lab	Clin/WkExp	Credit
Fall – 1st year				
AHR 110 Intro to Refrigeration (1st 8 weeks)	2	6	0	5
AHR 111 HVACR Electricity (1st 8 weeks)	2	2	0	3
AHR 112 Heating Technology (2nd 8 weeks)	2	4	0	4
AHR 151 HVAC Duct Systems I	1	3	0	2
AHR 180 HVACR Customer Relations (2nd 8 weeks)	1	0	0	1
AHR 211 Residential Systems Design (2nd 8 weeks)	2	2	0	3
Total	10	17	0	18
Spring – 1st year				
AHR 113 Comfort Cooling (2nd 8 weeks)	2	4	0	4
AHR 210 Residential Building Code (1st 8 weeks)	1	2	0	2
AHR 114 Heat Pump Technology (1st 8 weeks)	2	4	0	4
AHR 130 HVAC Controls (2nd 8 weeks)	2	2	0	3
AHR 160 Refrigerant Certification (2nd 8 weeks)	1	0	0	1
WBL 110 World of Work	1	0	0	1
MAT 110 Math Measurement & Literacy	2	2	0	3
OR MAT 121 Quantitative Literacy	2	2	0	3
Total	11	14	0	18
Summer – 1year				
ENG 111 Writing and Inquiry	3	0	0	3
OR ENG 102 Applied Communications II	3	0	0	3
Total	3	0	0	3
Grand Total	24	31	0	39

**Air Conditioning, Heating and Refrigeration • D35100**  
**Evening Courses Are Offered On Demand**  
**(See Your HVAC Advisor)**

ENG 111 Writing and Inquiry.....	3
OR ENG 102 Applied Communications II.....	3
MAT 110 Math Measurement & Literacy.....	3
OR MAT 121 Algebra/Trigonometry I.....	3
AHR 110 Intro to Refrigeration.....	5
AHR 111 HVACR Electricity.....	3
AHR 112 Heating Technology.....	4
AHR 113 Comfort Cooling.....	4
AHR 114 Heat Pump Technology.....	4
AHR 130 HVAC Controls.....	3
AHR 151 HVAC Duct Systems I.....	2
AHR 160 Refrigerant Certification.....	1
AHR 180 HVACR Customer Relations.....	1
AHR 210 Residential Building Code.....	2
AHR 211 Residential System Design.....	3
WBL 110 World of Work.....	1

**Total Credit Hours Required.....39**

**DEVELOPMENTAL COURSE REQUIREMENTS\***

CTS 080 Computing Fundamentals.....	3
DRE 098 Integrated Reading Writing II.....	3
DMA DMA 010, DMA 020, DMA 030 (MAT 110).....	3
DMA DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060 (MAT 121).....	6

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**Air Conditioning, Heating and Refrigeration Certificate • C35100**

**MAJOR COURSES:**

AHR 110 Intro to Refrigeration.....	5
AHR 111 HVACR Electricity.....	3
AHR 112 Heating Technology.....	4
AHR 160 Refrigerant Certification.....	1

**Total Credit Hours Required.....13**

**DEVELOPMENTAL COURSE REQUIREMENTS\***

CTS 080 Computing Fundamentals.....	3
DRE 097 Integrated Reading Writing II.....	3

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**Air Conditioning, Heating and Refrigeration Certificate • C35100**  
**Suggested Program Sequence Day**

Fall – 1st year				
AHR 110 Intro to Refrigeration	2	6	0	5
AHR 111 HVACR Electricity	2	2	0	3
AHR 112 Heating Technology	2	4	0	4
AHR 160 Refrigerant Certification	1	0	0	1
Total	7	12	0	13
Grand Total	7	12	0	13

**Air Conditioning, Heating and Refrigeration Certificate • C35100**  
**Evening Courses Are Offered On Demand**  
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AHR 110 Intro to Refrigeration.....	5
AHR 111 HVACR Electricity.....	3
AHR 112 Heating Technology.....	4
AHR 160 Refrigerant Certification.....	1

**Total Credit Hours Required.....13**

**DEVELOPMENTAL COURSE REQUIREMENTS\***

CTS 080 Computing Fundamentals.....	3
DRE 097 Integrated Reading Writing II.....	3

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