

# Air Conditioning, Heating & Refrigeration (Fall 2011)

Updated 6/23/2011

## Suggested Program Checklist

Student Name \_\_\_\_\_

Students must complete all preparatory classes to earn a Degree, Diploma, and/or Certificate. (Co or Prerequisite(s) in parentheses)

Writing Score _____	Numerical Score _____	Elementary Algebra Score _____	Reading Score _____	Computer Score _____
___ Basic Skills (0-29) [20-40] ___ ENG 080 (30-34) [41-65] ___ ENG 090/090A (35-40) [66-85] ___ ENG 111(≥ 41) [ ≥ 86]	___ Basic Skills (0-29) [20-29] ___ MAT 060 (30-37) [30-54] ___ MAT 060 <b>NOT Needed</b> (≥41) [≥ 55]	___ MAT 070 (23-40) [< 55] ___ MAT 140(≥ 41) [≥ 55]	___ Basic Skills (0-29) [20-38] ___ RED 080 (30-34) [39-56] ___ RED 090 (35-40) [57-79] <b>No reading required(≥41) [≥ 80]</b>	___ CTS 080 (0-59) ___ 60 or higher CIS 110 or CIS 111 ___ Web courses (≥70) ___ ≥ 85 may challenge CIS 111
<b>Scores in ( ) are Asset Scores    Scores in [ ] are Accuplacer Scores    Computer Score Based on SAMS Challenge</b>				

A.A.S. Degree			A35100
Complete	Courses		Credit
<b>1st Fall</b>			
	AHR 112	Heating Technology (ENG 085 and CTS 080)	4
	ELC 111	Introduction to Electricity (ENG 085 and CTS 080)	3
	AHR 160	Refrigerant Certification (ENG 085 and CTS 080)	1
	AHR 110	Intro to Refrigeration (ENG 085 and CTS 080)	5
	AHR 255	Indoor Air Quality (ENG 085 and CTS 080)	2
	AHR 180	Customer Relations (ENG 085 and CTS 080)	1
<b>1st Spring</b>			
	AHR 113	Comfort Cooling (ENG 085 and CTS 080)	4
	AHR 114	Heat Pump Technology (AHR 113 or AHR 110)	4
	AHR 211	Residential Systems Design (ENG 085 and CTS 080)	3
	AHR 151	Duct Systems I (ENG 085 and CTS 080)	2
	AHR 210	Residential Building Code (ENG 085 and CTS 080)	2
<b>1st Summer</b>			
	ENG 111	Expository Writing (ENG 095 and CTS 080)	3
	HUM XXX	Humanities Elective (ENG 095 and CTS 080)	3
<b>2nd Fall</b>			
	AHR 240	Hydronic Heating (AHR 112)	2
	MAT 115	Mathematical Modeling (MAT 070)	3
	AHR 245	Chiller Systems (AHR 110)	2
	ALT 220	Photovoltaic System Technology (ENG 085 and CTS 080)	3
	ALT 120	Renewable Energy Technology (ENG 085 and CTS 080)	3
<b>2nd Spring</b>			
	AHR 212	Advanced Comfort Systems (ENG 085 and CTS 080)	4
	AHR 225	Commercial System Design (ENG 085 and CTS 080)	3
	AHR 215	Commercial HVAC Controls (ELC 111)	2
	ALT 250	Thermal Systems (ENG 085 and CTS 080)	3
	SST 120	Energy Use Analysis (ENG 085 and CTS 080)	3
<b>2nd Summer</b>			
	ENG 114	Professional Research and Reporting (ENG 111)	3
	SBE XXX	Social Behavioral Science Elective (RED 090)	3
<b>TOTAL CREDIT HOURS</b>			<b>71</b>

Diploma			D35100
Complete	Courses		Credit
<b>1st Fall</b>			
	AHR 112	Heating Technology (ENG 085 and CTS 080)	4
	ELC 111	Introduction to Electricity (ENG 085 and CTS 080)	3
	AHR 160	Refrigerant Certification (ENG 085 and CTS 080)	1
	AHR 110	Intro to Refrigeration (ENG 085 and CTS 080)	5
	AHR 255	Indoor Air Quality (ENG 085 and CTS 080)	2
	AHR 180	Customer Relations (ENG 085 and CTS 080)	1
<b>1st Spring</b>			
	AHR 113	Comfort Cooling (ENG 085 and CTS 080)	4
	AHR 114	Heat Pump Technology (AHR 110 or AHR 113)	4
	AHR 211	Residential Systems Design (ENG 085 and CTS 080)	3
	AHR 151	Duct Systems I (ENG 085 and CTS 080)	2
	AHR 210	Residential Building Code (ENG 085 and CTS 080)	2
<b>1st Summer</b>			
	MAT 101	Applied Mathematics I (MAT 060)	3
	ENG 102	Applied Communications II (ENG 085 and CTS 080)	3
<b>TOTAL CREDIT HOURS</b>			<b>36</b>

Certificate: Residential Heating & Cooling			C35100A
Complete	Courses		Credit
	AHR 112	Heating Technology (ENG 085 and CTS 080)	4
	AHR 113	Comfort Cooling (ENG 085 and CTS 080)	4
	ELC 111	Introduction to Electricity (ENG 085 and CTS 080)	3
	AHR 160	Refrigerant Certification (ENG 085 and CTS 080)	1
<b>TOTAL CREDIT HOURS</b>			<b>12</b>

over 

<b>Certificate: Heat Pumps</b>		<b>C35100H</b>	
<b>Complete</b>	<b>Course</b>	<b>Credit</b>	
AHR 114	Heat Pump Technology (ENG 085 and CTS 080)	4	
AHR 113	Comfort Cooling (ENG 085 and CTS 080)	4	
ELC 111	Introduction to Electricity (ENG 085 and CTS 080)	3	
AHR 160	Refrigerant Certification (ENG 085 and CTS 080)	1	
<b>TOTAL CREDIT HOURS</b>			<b>12</b>

<b>Certificate: Residential System Design</b>		<b>C35100S</b>	
<b>Complete</b>	<b>Course (ENG 085 and CTS 080)</b>	<b>Credit</b>	
AHR 112	Heating Technology (ENG 085 and CTS 080)	4	
AHR 113	Comfort Cooling (ENG 085 and CTS 080)	4	
AHR 210	Residential Building Code (ENG 085 and CTS 080)	2	
AHR 211	Residential System Design (ENG 085 and CTS 080)	3	
<b>TOTAL CREDIT HOURS</b>			<b>13</b>

<b>Certificate: Commercial Heating &amp; Cooling</b>		<b>C35100C</b>	
<b>Complete</b>	<b>Course</b>	<b>Credit</b>	
AHR 240	Hydronic Heating (AHR 112) (ENG 085 and CTS 080)	2	
AHR 245	Chiller Systems (AHR 110) (ENG 085 and CTS 080)	2	
AHR 225	Commercial System Design (ENG 085 and CTS 080)	3	
AHR 215	Commercial HVAC Controls (ENG 085 and CTS 080)	2	
AHR 212	Advanced Comfort Systems (ENG 085 and CTS 080)	4	
<b>TOTAL CREDIT HOURS</b>			<b>13</b>

<b>Certificate: Alternative Energies</b>		<b>C35100E</b>	
<b>Complete</b>	<b>Course</b>	<b>Credit</b>	
ALT 120	Renewable Energy Technology (ENG 085 and CTS 080)	3	
ALT 220	Photovoltaic System Technology (ENG 085 and CTS 080)	3	
ALT 250	Thermal Systems (ENG 085 and CTS 080)	3	
SST120	Energy Use Analysis (ENG 085 and CTS 080)	3	
<b>TOTAL CREDIT HOURS</b>			<b>12</b>