

# SAMPSON COMMUNITY COLLEGE

## AIR CONDITIONING, HEATING & REFRIGERATION TECHNOLOGY

### OCCUPATIONAL PROGRAMS

The Air Conditioning, Heating, and Refrigeration Technology program provides the foundational knowledge and skills needed to work with residential and light commercial heating and cooling systems.

The curriculum covers topics such as refrigerant charging, heating and cooling systems, installation and troubleshooting, electrical controls, and safety.

The diploma program focuses on air conditioning, furnaces, heat pumps, tools, and instruments, while the AAS degree program includes residential building codes, residential system sizing, and advanced comfort systems. Diploma graduates should be capable of assisting with the startup, preventive maintenance, service, repair, and installation of residential and light commercial systems.

AAS degree graduates should have a fundamental understanding of residential system design and working with advanced comfort systems.



#### JACOB MILLER

Department Chair,  
Air Conditioning, Heating, &  
Refrigeration Technology

910-900-4143


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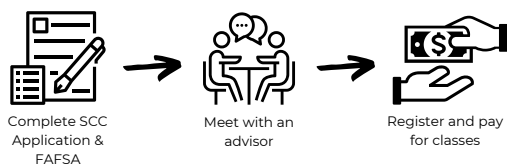
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Program Checklist						
						
<b>Program Title:</b> Air Conditioning, Heating and Refrigeration Technology						
<b>Effective Date:</b> Fall 2024						
<b>Student Name:</b>					<b>Student ID:</b>	
<b>CoDE Transition Courses:</b>			<b>Grade</b>			
ENG-002	Transition English					
MAT-003	Transition Math					
Course Prefix	Course Title	Credit Hours	Degree (A35100)	Diploma (D35100)	Certificate (C35100) (C35100HS)	Grade
<b>Fall Semester I</b>						
ACA-122	College Transfer Success	1	X	X		
AHR-110	Intro to Refrigeration	5	X	X	X	
AHR-111	HVACR Electricity	3	X	X		
AHR-112	Heating Technology	4	X	X	X	
<b>Total Credit Hours</b>			13	13	9	
<b>Spring Semester I</b>						
AHR-113	Comfort Cooling	4	X	X	X	
AHR-114	Heat Pump Technology	4	X	X	X	
AHR-160	Refrigerant Certification	1	X	X		
Communications: Choose one: COM-110, COM-120, COM-231, ENG-110, ENG-111, ENG-112, ENG-114		3	X	X		
<b>Total Credit Hours</b>			12	12	8	
<b>Summer Semester I</b>						
Program Elective		3	X			
AHR-133	HVAC Servicing	4	X	X		
AHR-213	HVAC Building Code	2	X			
Humanities/Fine Arts: Choose One: ART-111, ART-114, ART-115, DRA-111, DRA-115, ENG-231, ENG-232, ENG-241, ENG-242, HUM-115, MUS-110, MUS-112, PHI-240, REL-110, REL-211, REL-212, REL-221		3	X	X		
<b>Total Credit Hours</b>			12	7	0	
<b>Fall Semester II</b>						
AHR-211	Residential System Design	3	X			
Program Elective		3	X			
Program Elective		3	X			
Communications: Choose one: COM-110, COM-120, COM-231, ENG-110, ENG-111, ENG-112, ENG-114		3	X			
Natural Sciences/Math: Choose one: MAT-110, MAT-143, MAT-171		3-4	X			
<b>Total Credit Hours</b>			15-16	0	0	
<b>Spring Semester II</b>						
AHR-212	Advanced Comfort Systems	4	X			
AHR-130	HVAC Controls	3	X	X		
AHR-180	HVACR Customer Relations	1	X			
Program Elective		2	X	AHR or WBL		
Program Elective		1	X			
Program Elective		1	X			
Social/Behavioral Sciences: Choose one: ECO-251, ECO-252, HIS-111, HIS-112, HIS-121, HIS-131, HIS-132, POL-120, PSY-150, SOC-210, SOC-220, SOC-225		3	X			
<b>Total Credit Hours</b>			15	5	0	
<b>Dates Awarded:</b>						
<b>Total Credits:</b>			<b>67-68</b>	<b>37</b>	<b>17</b>	

Program Electives: AHR, ARC, BAT, BPR, BUS, CIS, CMT, CST, ELC, HYD, ISC, SPA-111, SST, WBL, WLD (Maximum of 9 credits per prefix).



Admissions: 910.900.4319 | [admissions@sampsoncc.edu](mailto:admissions@sampsoncc.edu)  
 Financial Aid: 910.900.4320 | [finaid@sampsoncc.edu](mailto:finaid@sampsoncc.edu)  
 Learning Resource Center: 910.900.4309

Sampson Community College | 1801 Sunset Ave, Clinton, NC 28328 | 910.592.8081 | [www.sampsoncc.edu](http://www.sampsoncc.edu)

Sampson Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award the associate degree. Sampson Community College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Sampson Community College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website ([www.sacscoc.org](http://www.sacscoc.org)).

The Board of Trustees and the Administration of Sampson Community College (SCC) are fully committed to the principles and practice of equal employment and educational opportunities. Accordingly, SCC does not practice or condone discrimination in any form, against students, employees, or applicants on the grounds of race, color, national origin, religion, sex, age, disability, or political affiliation. SCC commits itself to positive action to secure equal opportunity regardless of those characteristics.