" HEATING, VENTILATION, AIR CONDITIONING, & REFRIGERATION (HVAC/R) – Associate in Applied Science (2024-2025 Catalog)



Developmental Education Courses (if required)					
	ACLS050	Introduction to Academic Literacy			
	ENGL027	Writing Skills Workshop			
	MATH020	Pre-Algebra			
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Placement in English and Math must first be determined by <u>official</u> transcripts and/or placement testing. Developmental education courses are only taken if needed based on a student's placement; these courses would be in addition to the courses outlined below. Developmental education courses may extend the timeline to degree completion.

Transferring credits into NCC: Official transcripts are required; awarded credit will appear in Workday's Academic Progress.

	complete	Course #	Course Title	Credits	Prerequisites / Corequisites	Program Notes:	
Semester 1		COLS101	College Success		Exempt: COLS150 or 12+ transfer credits & 2.0 GPA	HVAC101 : In conjunction with this course the seminar/testing session: EPA Refrigerant Usage Certification is offered.	
		CISC101	Introduction to Information Technology				
		ELTC101	Electrical Fundamentals				
		EMEC114	Mechanical Skills for the Trades Fundamentals of HVAC/R I Technical Mathematics			Technical Electives: Any CADM, EMEC, ELEC, ELTC, ENGG, CHEM, CISC or WELD course. Recommended is HVAC265 – Building Automation Systems (BAS)	
		HVAC101			PRE or CO: ELTC101		
		MATH103			PRE: MATH020 w/C or MATH Placement		
		OSAH101* or OSAH102	Construction Industry Outreach Safety Education or General Industry Safety Education	1	*OSAH101 is recommended	Ineligible electives: CADM100, CADM117, or EMEC115 Students must take two General Education Electives (SIT,	
			Total Semester Credits:			SSHB or AH) and one of these must be in a Writing	
		CMGT104	Construction Print Reading	3		Intensive (WI) section. <i>GEOG121G is recommended</i> .	
2		ELTC107	Electrical Wiring I		PRE: ELTC101	Writing Intensive course codes end in G. Examples:	
		ENGL101	English I	3	PRE: ENGL placement policy	PSYC103G (PSYC103 is not writing intensive). Please pay attention to the option you select. For example, if you are looking for an SSHB writing intensive course, look for one that ends in G via the SSHB course tag.	
est		HVAC102	Fundamentals of HVAC/R II	3	PRE: ELTC101, HVAC101		
Semester		HVAC124	Heating: Gas, Oil, Solar, Thermal, Air & Hydronic Systems	4	PRE: ELTC101		
S		HVAC140	Heat Pump Systems	2	PRE: ELTC101, HVAC101		
			Total Semester Credits:			How to search for general education electives:	
Semester 3		COMM101	Introduction to Communication			In Workday, use the corresponding Course Tag filter to	
		ELTC135	Electrical Motors and Controls	4	PRE: ELTC101	see the available options.	
		ENGL151T	English II (Technical Writing)		PRE: ENGL101	Arts and Humanities = AH	
		PHYS152	Physical Science II	3		Scientific Study of Human Behavior = SSHB Societies and Institutions Over Time = SIT	
			Technical Elective	3			
			Total Semester Credits:	16			
Semester 4		HVAC204	Refrig. System Design & Troubleshoot		PRE: HVAC102	*It is the student's responsibility to be knowledgeable of	
		HVAC250	HVAC Air Distribution Systems: Design, Install, Testing	3	PRE: ELTC101, HVAC101	NCC graduation requirements and, if applicable, to verify transfer requirements with the 4-year institution. Courses listed on the program map are based upon the assumption that prerequisites and courses taken in	
			AH,SIT, or SSHB Elective	3			
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			Elective Total Semester Credits:			previous semesters will be successfully completed.	
		Total Degree Credits		66			
			General Education Requirements				
			Diversity (D)				
			Writing Intensive (G)				