

Heating, Ventilation, Air Conditioning & Refrigeration (HVAC/R)-Certificate (2023-2024 Catalog)

	Developmental Education Courses (if required)						
		ACLS050	Introduction to Academic Literacy				
ļ		ENGL027	Writing Skills Workshop				

Placement in English and/or Mathematics 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	Pre-requisites / Co-requisites/Notes
		COLS101	College Success	1	Exempt: COLS150 or 12+ transfer credits & 2.0 GPA
		CISC101	Introduction to Information Technology	3	
		ELTC101	Electrical Fundamentals	3	
er 1		EMEC114	Mechanical Skills for the Trades	2	
est		HVAC101	Fundamentls of HVAC/R I	4	PRE or CO: ELTC101
Semester		OSAH101 or OSAH102	Construction Industry Outeach Safety Education or General Industry Outreach Safety Education	1	OSAH101 is recommended
		MATH103	Technical Mathematics	3	
			Total Semester Credits:	17	
		CMGT104	Construction Print Reading	3	
		ELTC107	Electrical Wiring I	3	PRE: ELTC101
r 2		ENGL101	English I	3	PRE: ENGL Placement Policy
ste		HVAC102	Fundamentals of HVAC/R II	3	PRE: ELTC101, HVAC101
Semester		HVAC124	Heating, Gas, Oil, Solar, Thermal, Air & Hydronic Systems	4	PRE: ELTC101
		HVAC140	Heat Pump Systems	2	PRE: ELTC101, HVAC101
			Total Semester Credits:	18	
		ELTC135	Electrical Motors and controls	4	PRE: ELTC101
r 3/4		HVAC204	Refrigeration System Design and Troubleshooting	3	PRE: HVAC102
Semester		HVAC250	Air Distribution Systems: Design, Installation, and Testing	3	PRE: ELTC101, HVAC101
Ser			Technical Electives	3-4	
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			Total Semester Credits:	16-18	
•			Total Degree Credits	51-53	

Program Notes:

+HVAC101: In conjunction with this course, the seminar/testing session: EPA Refrigerant Usage Certification is offered.

Technical Electives:

+Any CADM, EMEC, ELEC, ELTC, ENGG, CHEM, CISC, or WELD course.

Ineligible electives: CADM100, CADM117, or EMEC115

*It is the student's responsibility to be knowledgeable of 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 previous semesters will be successfully completed.