

Diversity (D)

Writing Intensive (G)

## HEATING, VENTILATION, AIR CONDITIONING, & REFRIGERATION (HVAC/R) - Associate in Applied Science (2023-2024 Catalog)

| Develop | mental Educa | ation Courses (if required)       |
|---------|--------------|-----------------------------------|
|         | ACLS050      | Introduction to Academic Literacy |
|         | ENGL027      | Writing Skills Workshop           |

Placement in English 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                    |
|----------|----------|-----------------------|--|---------|---|
|          |          | COLS101               | College Success  | 1       | Exempt: COLS150 or 12+ transfer credits & 2.0 GPA |
|          |          | CISC101               | Introduction to Information Technology   | 3       |   |
| 1        |          | ELTC101               | Electrical Fundamentals  | 3       |   |
| Semester |          | EMEC114               | Mechanical Skills for the Trades   | 2       |   |
| nes      |          | HVAC101               | Fundamentls of HVAC/R I  | 4       | PRE or CO: ELTC101                                |
| Sen      |          | MATH103               | Technical Mathematics  | 3       |   |
|          |          | OSAH101 or<br>OSAH102 | Construction Industry Outreach Safety Education or General Industry Safety Education | 1       | OSAH101 is recommended                            |
|          |          |                       | Total Semester Credits:  | 17      |   |
|          |          | CMGT104               | Construction Print Reading   | 3       |   |
| 2        |          | ELTC107               | Electrical Wiring I  | 3       | PRE: ELTC101                                      |
|          |          | ENGL101               | English I  | 3       | PRE: ENGL placement policy                        |
| Semester |          | HVAC102               | Fundamentals of HVAC/R II  | 3       | PRE: ELTC101, HVAC101                             |
| em       |          | HVAC124               | Heating: Gas, Oil, Solar, Thermal, Air & Hydronic Systems                            | 4       | PRE: ELTC101                                      |
| Š        |          | HVAC140               | Heat Pump Systems  | 2       | PRE: ELTC101, HVAC101                             |
|          |          |                       | Total Semester Credits:  | 18      |   |
|          |          | CMTH102               | Introduction to Communication  | 3       |   |
| r 3      |          | ELTC135               | Electrical Motors and Controls   | 4       | PRE: ELTC101                                      |
| ste      |          | ENGL151T              | English II (Technical Writing)   | 3       | PRE: ENGL101                                      |
| Semester |          | PHYS152               | Physical Science II  | 3       |   |
| Sei      |          |                       | Technical Elective   | 3       | Depends on course selected                        |
|          |          |                       | Total Semester Credits:  | 16      |   |
|          |          | HVAC204               | Refrig. System Design & Troubleshoot   | 3       | PRE: HVAC102                                      |
| r 4      |          | HVAC250               | HVAC Air Distribution Systems: Design, Install, Testing                              | 3       | PRE: ELTC101, HVAC101                             |
| ste      |          |                       | AH,SIT, or SSHB Elective   | 3       | Depends on course selected                        |
| Semester |          |                       | AH,SIT, or SSHB Elective   | 3       | Depends on course selected                        |
| Se       |          |                       | Elective   | 3       | Depends on course selected                        |
|          |          |                       | Total Semester Credits:  | 15      |   |
|          |          |                       | Total Degree Credits  General Education Requirements                                 | 66      |   |

## **Program Notes:**

\*HVAC101: In conjuction 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

Students must take two General Education Electives (SIT, SSHB or AH) and one of these must be in a Writing Intensive (WI) section. *GEOG121G is recommended*.

Writing Intensive course codes end in G. Examples: 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.

## How to search for general education electives:

In Workday, use the corresponding **Course Tag** filter to see the available options.

Arts and Humanities = AH Scientific Study of Human Behavior = SSHB Socitieties and Institutions Over Time = SIT

\*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.