Northampton Electromechanical Technology: Automated Systems - Associate in Applied Science (2023-2024 Catalog)

| Developmental Education Courses (if required) | | | | | |
|---|---------|-----------------------------------|--|--|--|
| | ACLS050 | Introduction to Academic Literacy | | | |
| | ENGL027 | Writing Skills Workshop | | | |
| | MATH020 | Pre-Algebra | | | |
| | MATH022 | Elementary Algebra | | | |
| | MATH026 | Intermediate Algebra | | | |

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.

| | | MATH026 | Intermediate Algebra | | | |
|------------|----------|----------|---------------------------------------|---------|---|--|
| | complete | Course # | Course Title | Credits | Pre-requisites / Co-requisites/Notes | |
| Semester 1 | | COLS101 | College Success | 1 | Exempt: COLS150 or 12+ transfer credits & 2.0 GPA | |
| | | ELTC101 | Electrical Fundamentals | 3 | | |
| | | EMEC125 | Process Automation Diagrams – P&ID | 2 | | |
| | | EMEC130 | Introduction to Process Control | 3 | | |
| | | CADM117 | Technical Drawings and Specification | 3 | | |
| | | ENGL101 | English I | 3 | PRE: ENGL Placement Policy | |
| •, | | MATH140 | College Algebra | 3 | PRE: MATH026 w/ C or better or MATH Placement | |
| | | | Total Semester Credits: | 18 | | |
| | | EMEC105 | Introduction to Fluid Power | 3 | | |
| 7 | | EMEC110 | Mechanical Components | 3 | PRE or CO: CADM117** | |
| er | | ELTC135 | Electrical Motors and Controls | 4 | PRE: ELTC101 | |
| est | | EMEC140 | Sensors, Wiring and Troubleshooting | 1 | PRE: ELTC101 | |
| Semester | | ENGL151T | English II (Technical Writing) | 3 | PRE: ENGL101 | |
| ЭS | | | AH, SIT, or SSHB General Ed.Elective | 3 | | |
| | | | Total Semester Credits: | 17 | | |
| Semester 3 | | CMTH102 | Introduction to Communication | 3 | | |
| | | EMEC205 | Electrical Controls of Fluid Power | 3 | PRE: EMEC105 and ELTC101 | |
| | | EMEC220 | Instrumentation I | 3 | PRE: EMEC125 and EMEC130 | |
| | | EMEC240 | Industrial Control Systems I | 4 | PRE: ELTC101; PRE or CO: EMEC140 | |
| Ser | | PHYS101 | Physics I | 4 | PRE: MATH140 with C or better | |
| | | | Total Semester Credits: | 17 | | |
| | | EMEC225 | Instrumentation II | 3 | PRE/CO: EMEC220 | |
| | | EMEC245 | Industrial Control Systems II | 3 | PRE: EMEC240 | |
| r 4 | | EMEC251 | Mechanical Systems | 3 | PRE: EMEC105, EMEC110, and ELTC135** | |
| Semester | | | Construction Industry Outreach Safety | 1 | OSAH102 is recommended. | |
| | | OSAH102* | Education or General Industry Safety | - | | |
| Ser | | | AH, SIT, or SSHB General Ed.Elective | 3 | | |
| | | | Elective | 3 | | |
| | | | Total Semester Credits: | 16 | | |
| | | | | | | |

Program Notes:

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

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

+EMEC251 prerequisite requirements can be waived if necessary. Please consult with an Academic Advisor and/or EMEC Program Manager.

*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

Total Degree Credits 68
General Education Requirements

| General Education Requirements | | | | |
|--------------------------------|--|-------------------|--|--|
| | | Diversity | | |
| | | Writing Intensive | | |