NORTHAMPTON

Instrumentation Process Control Technician – Certificate (2024-2025 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.

	complete	Course #	Course Title	Credits	Prerequisites / Corequisites / 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	
		MATH140	College Algebra	3	PRE: MATH026 w/C or MATH Placement
			Total Semester Credits:	12	
Semester 2		ENGL101	English I	3	PRE: ENGL Placement Policy
		EMEC140	Sensors, Wiring and Troubleshooting	1	PRE: ELTC101
		EMEC240	Industrial Control Systems I	4	PRE: ELTC101; PRE/CO: EMEC140
		EMEC220	Instrumentation I	3	PRE: EMEC125, EMEC130
			Total Semester Credits:	11	
Semester 3		EMEC225	Instrumentation II	3	PRE/CO: EMEC220
		EMEC245	Industrial Control Systems II	3	PRE: EMEC240
		PHYS101	Physics I	4	PRE: MATH140 with C or better
			Total Semester Credits:	10	
	Total Degree Credits			33	

*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.