Robotics and Automation Engineering Technology

Degree Type
Associate of Science

This program is not currently accepting new students.

NHTI's Robotics and Automation Engineering Technology degree program prepares you, as an engineering technologist, for employment in advanced manufacturing. You'll master engineering fundamentals through engineering design, manufacturing processes, computer programming, circuit theory, and digital electronics courses. Emphasis is placed on math and physical science. Course topics include robotics, machine vision, process automations, programmable logic controllers, motion control, and the use of computers for design and manufacture.

Do you have questions? Contact Dennis Tappin at dtappin@ccsnh.edu.

Career Information

Graduates will have the foundation necessary to pursue a bachelor's degree and to take advantage of opportunities for life-long learning and professional development. We also offer an articulation agreement with UNH-Manchester; see advisor for details. Students who complete this program can enter into the following professions (not an inclusive list): manufacturing engineering assistant, electronics technician, and automation technician.

Admission Requirements

Applicants are required to have:

- Three years of college preparatory math (Algebra I, Algebra II, and Geometry) with minimum grades of C
- It is recommended all applicants have satisfactorily completed high school-level Chemistry and Physics.

Curriculum

First Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ELET101C	Circuit Analysis I	3	3	4
ELET115C	Digital Fundamentals	2	3	3
	ENGL 120C/COMM 120C or COMM 125C/ENGL 125C	3	0	3
MATH124C	College Algebra	4	0	4
MCET105C	Engineering Design	4	0	4
	Subtotal Credits	**16**	**6**	**18**

Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
CPET107C	Introduction to Programming with C++	2	3	3
CPET215C	Integrated Circuits and Interfacing	3	3	4
ENGL101C	English Composition	4	0	4
MATH140C	Precalculus	4	0	4
MFET111C	Manufacturing and Materials Processing	3	3	4
	Subtotal Credits	**16**	**9**	**19**

Second Year

Fall Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
MATH205C	Calculus I	4	0	4
	MFET210C or MFET231C			
PHYS133C	Physics I (Algebra-based)	3	2	4
RAET205C	PLC Programming	2	3	3
RAET210C	Robotics and Automation I	2	4	4
	Subtotal Credits	**11**	**9**	**15**

Spring Semester

Item #	Title	Lecture Hours	Lab Hours	Credits
ELET102C	Circuit Analysis II	3	3	4
	Humanities/Fine Arts/Language elective	3	0	3-4
PHYS135C	Physics II (Algebra-based)	3	2	4
	Social Science elective	3	0	3
RAET220C	Robotics and Automation II	2	4	4
	Subtotal Credits	**14-15**	**9**	**18-19**
	Total Credits			**70-71**

Additional Information