

TRAIN OH

Training & Recruitment Accelerated Innovation Network

Associate Degree in MEMS & Microelectronics TRAIN OH - Earn and Learn Program!

About MEMS & Microelectronics

Micro Electrical Mechanical Systems (MEMS) and sensor technology is a growing field. Now is the time to enter into the field of microelectronics manufacturing.

What is MEMS?

Microelectronics – microchips, microcircuits – very small electronic components that are driving the development of smaller, faster, cheaper devices that are changing how we work, how we communicate, and how we are entertained.

Microelectronics are used in innovative products everywhere, including the next generation of mobile consumer devices, biomedical, wearables, and Internet of Things (IoT) devices enabling more advanced hospitals, safer driving, and smarter factories, cities, and homes.

TRAIN OH is a new program at Lorain County Community College that is developing highly trained and educated talent for the microelectronic manufacturing industry. As the link between industry and education, LCCC combines a hands-on college degree with a paid internship to build the necessary skills sets for students to enter Ohio's microelectronics job market.

What are the benefits of becoming a TRAIN OH industry partner?

TRAIN OH companies form a partnership with Lorain County Community College to ensure a continuous talent pipeline. Industry partners also have the opportunity to hire students into full-time positions at the completion of the program.

Associate Degree in MEMS & Microelectronics Earn and Learn Train OH!

PROGRAM OVERVIEW:

Students have the opportunity to earn a short-term or one-year technical certificate that all credits lead to an associate degree. The TRAIN OH Earn and Learn program has a paid internship built into the program where students attend class two days a week and work 3 days a week with one of LCCC's industry partners. This program allows students to work in the field of microelectronics and apply the knowledge learned in the classroom.

Curriculum Guide:

Semester	Credit Course #	Credit Course Title	Credit Hours
Fall Semester 1	ELCT 111	Electrical Circuits I	3
	ENGL 161	College Composition I	3
	SDEV 101	College 101	1
	TECN 122	Technical Problem Solving	3
	MEMS 122	Intro to Microelectrical Mechanical Systems	4
Spring Semester 2	CADD 111	Intro to Computer Aided Design	2
	ELCT 121	Digital Electronics	4
	MTHM 121	Technical Math 1	4
	MEMS 132	MEMS Packaging	3
Summer Semester 3	CADD 216	Intro to 3D Modeling	1
	AETC 192	Intro to Personal Fabrication	1
	MEMS 287	Work-Based Learning 1	1
	ELCT 115	Fabrication Process of Electronics	2
	MTHM 168	Statistics	3
Fall Semester 4	ELCT 233	Electronic Devices I	4
	CHMY 171	General Chemistry I	5
	MEMS 288	Work-Based Learning II	1
	MEMS 211	Micro-Fabrication Processing	3
Spring Semester 5	ENGL 164	College Composition II with Technical Topics	3
		Arts and Humanities Elective	3
		Social Science Elective	3
	MEMS 289	Work-Based Learning II	1
	MEMS 221	Micro-Systems Capstone Project	3

Total Semester Credit Hours

61

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

This workforce solution was funded by a grant awarded by the U.S Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

This work is licensed under the Creative Commons Attribution 4.0 International License. It is attributed to Ohio TechNet. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.