



Lehigh Carbon COMMUNITY COLLEGE

NEW

A.A.S. Program Nanofabrication Technology

Prepares students for employment as technicians in jobs not limited to but including the fields of chemical technology, electronics technology, biotechnology, biopharmaceutical labs, microtechnology and material science labs. Students will study electronics at LCCC for three semesters and complete the last semester at the Nanofabrication Facility at Penn State University. Industries involved with nanofabrication include microelectronics, optoelectronics, biopharmaceuticals, and materials.

First Semester		Credits
BGT 110	Fundamentals of Technology	3
ELE 120	D.C. Circuits	4
ELE 130	Digital Fundamentals	4
ENG 105	College English I	3
MAT 130	Industrial Math	3
		17
Second Semester		Credits
ELE 165	A.C. Circuits	4
BIO 112	Introduction to Biotechnology	3
ENG 107	Technical Reporting	3
CHE 108	Essentials of Chemistry	4
Elective	Social Science/Humanities	3
		17
Third Semester		Credits
ELE 210	Electronic Circuits	4
Elective	Technical	3
SMT 110	Introduction to Nanoscience	3
PHY 110	Elements of Physics	4
Elective	Social Science/Humanities	3
		17
Fourth Semester		Credits
Courses Taken At Penn State Nanofabrication Facility		Credits
SMT 211	Materials, Safety and Equipment, Overview for Nanofabrication	3
SMT 212	Basic Nanofabrication	3
SMT 213	Thin Film in Nanofabrication	3
SMT 214	Lithography for Nanofabrication	3
SMT 215	Materials Modification in Nanofabrication	3
SMT 216	Characterization, Packaging, and Testing of Nanofabricated Structures	3
		18
Total		69