

DIGITAL FABRICATION TECHNOLOGIES: DIGITAL FABRICATION MAJOR, ASSOCIATE OF APPLIED SCIENCE

Curriculum Code #6167

Effective May 2019

Division of Engineering, Business and Information Technologies (<http://catalog.lorainccc.edu/previous-catalogs/2019-2020/academic-programs/engineering-business-information-technologies>)

The Digital Fabrication Major is structured to provide students with the knowledge and skills necessary to work as an entry-level technician. The curriculum provides hands-on experience with both subtractive and additive digital fabrication tools for tasks such as prototyping, proof-of-concept exploration, and rapid tooling. Students will apply 2D, 3D, and electronics design to create integrated electro-mechanical systems. Typical job titles: Additive Manufacturing Technician, Design and Prototype Engineering Technician, Mechatronics Technician, and Digital Fabrication Specialist. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year

Fall Semester		Hours
CADD 111	INTRODUCTION TO COMPUTER AIDED DRAFTING ²	2
CAMM 111	INTRO TO COMPUTER NUMERICAL CONTROL ²	2
DFAB 111	INTRODUCTION TO PERSONAL FABRICATION	1
ELCT 111	ELECTRICAL CIRCUITS I	3
SDEV 101	COLLEGE 101 ³	1
TECN 111	TECHNICAL PROBLEM SOLVING	3
TECN 131	MANUFACTURING PROCESSES I ²	3
Hours		15

Spring Semester

CADD 213	INTRODUCTION TO SOLIDWORKS ¹	3
DFAB 121	DIGITAL FABRICATION I ¹	3
ELCT 115	FABRICATION PROCESS FOR ELECTRONICS	2
ELCT 121	DIGITAL ELECTRONICS ¹	4
MTHM 121	TECHNICAL MATHEMATICS I	4
Hours		16

Second Year

Fall Semester		Hours
DFAB 211	ADDITIVE MANUFACTURING AND 3D SCANNING ¹	3
DFAB 221	DIGITAL FABRICATION OF ELECTROMECHANICAL SYSTEMS ¹	3

ELCT 221	MICROCONTROLLERS ¹	4
ENGL 161	COLLEGE COMPOSITION I	3
PHYC 150	GENERAL PHYSICS I ¹	4
Hours		17
Spring Semester		Hours
CAMM 235	CAD-CAM GRAPHICS	3
DFAB 231	DIGITAL FABRICATION CAPSTONE	4
ENGL 164	COLLEGE COMPOSITION II WITH TECHNICAL TOPICS	3
PSYH 151 or SOCY 151G	INTRODUCTION TO PSYCHOLOGY or INTRODUCTION TO SOCIOLOGY	3
Arts and Humanities Elective		3
Hours		16
Total Hours		64

¹ Indicates that this course requires a prerequisite.

² Indicates that this course requires a prerequisite or may be taken concurrently.

³ A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of thirteen or more credit hours.

Arts and Humanities Elective

Code	Title	Hours
ARTS 243G	ART HISTORY I	3
ARTS 244G	ART HISTORY II	3
ARTS 245G	WORLD ART	3
ARTS 246	HISTORY OF PHOTOGRAPHY	3
ARTS 254	HISTORY OF AMERICAN ARCHITECTURE	3
ENGL 251	AMERICAN LITERATURE I	3
ENGL 252	AMERICAN LITERATURE II	3
ENGL 253G	INTRODUCTION TO WORLD LITERATURE	3
ENGL 254G	INTRODUCTION TO HISPANIC LITERATURE	3
ENGL 255G	INTRODUCTION TO FICTION	3
ENGL 257G	INTRODUCTION TO POETRY	3
ENGL 259G	INTRODUCTION TO DRAMA	3
ENGL 261G	MASTERPIECES OF BRITISH LITERATURE I	3
ENGL 262G	MASTERPIECES OF BRITISH LITERATURE II	3
ENGL 266G	AFRICAN AMERICAN LITERATURE	3
ENGL 269G	INTRODUCTION TO SHAKESPEARE	3
HUMS 151G	INTRODUCTION TO HUMANITIES	3
HUMS 261G	INTRODUCTION TO GREAT BOOKS: ANCIENT WORLD TO THE RENAISSANCE	3
HUMS 262G	INTRODUCTION TO GREAT BOOKS: EARLY MODERN TO THE 20TH CENTURY	3
HUMS 271G	INTRODUCTION TO MYTHOLOGY	3
HUMS 274	FILM APPRECIATION	3
PHLY 165	BIOETHICS	3
PHLY 262G	INTRODUCTION TO EASTERN PHILOSOPHY	3
RELG 181G	INTRODUCTION TO WORLD RELIGIONS	3
RELG 261	RELIGION IN AMERICA	3

RELG 262G	INTRODUCTION TO EASTERN PHILOSOPHY	3
THTR 151G	INTRODUCTION TO THEATER	3

Program Contact(s):

Scott Zitek
440-366-7024
rzitek@lorainccc.edu

For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (<https://www.lorainccc.edu/admissions-and-enrollment/advising-and-counseling>).

More program information can be found on our website.
(<https://www.lorainccc.edu/engineering/associate-applied-science-digital-fabrication-major>)