

MANUFACTURING ENGINEERING TECHNOLOGY - INDUSTRIAL INTERNET OF THINGS (IIOT), ASSOCIATE OF APPLIED SCIENCE

Curriculum Code #6245

Effective May 2022

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

The Industrial Internet of Things program is designed to provide students with the knowledge and skills necessary for the competent performance as IIoT technician. The graduate will be able to to install, test, repair, and maintain IIoT systems. Lorain County Community College has articulation agreements with colleges and universities including programs offered by LCCC's University Partnership.

First Year		Hours
Fall Semester		
SDEV 101	COLLEGE 101 ¹	1
CMNW 145	NETWORK INSTALLATION/DIAGNOSTICS	4
CYBR 110	FUNDAMENTALS OF INTERNET OF THINGS (IIOT)	4
IIOT 120	PROGRAMMING ESSENTIALS	5
Select one of the following:		3
MTHM 158	QUANTITATIVE REASONING	
MTHM 168	STATISTICS	
Hours		17
Spring Semester		
AETC 121	PROGRAMMABLE LOGIC CONTROLLERS	3
ENGL 161	COLLEGE COMPOSITION I	3
IIOT 130	IIOT SENSORS	4
IIOT 140	IIOT PRIVACY, SECURITY, AND CLOUD SERVICES	4
Hours		14
Second Year		
Fall Semester		
AETC 223	PROGRAMMABLE LOGIC CONTROLLERS II	3
CYBR 231	ETHICAL HACKING AND COUNTERMEASURES	4
IIOT 220	PROGRAMMING EMBEDDED SYSTEMS	4
PSSC 153	PHYSICAL SCIENCE	4
Hours		15
Spring Semester		
ENGL 164	COLLEGE COMPOSITION II WITH TECHNICAL TOPICS	3
CMNW 230	DATA COMMUNICATIONS	5

IIOT 247	CAPSTONE PROJECTS AND SPECIAL TOPICS	4
Arts and Humanities Elective		3
Hours		15
Total Hours		61

- 1 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 13 or more credit hours.
- 2 Indicates that this course has a prerequisite or may be taken concurrently.
- 3 Indicates that this course requires a prerequisite.
- 4 This course offers an opportunity for experiential learning
- 5 The industrial internet of things core courses in this program may be earned through a competency-based education option. See your advisor for more information.

Arts and Humanities Electives

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
MUSC 262G	MUSIC AS A WORLD PHENOMENON	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):

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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/>).

1. Communicate IIoT concepts and applicability, in technical and non-technical environments, using written, oral, and graphical communication.
2. Apply knowledge, techniques, and IIoT-relevant programming skills to develop IIOT solutions and implementation plans, based on best practices, regulations, and industry standards, to secure IIoT data.
3. Conduct standard IIoT tests, measurements, and experiments, and analyze and interpret the results.
4. Function effectively as a member of a technical team.