DATA ANALYTICS - TOOLS AND TECHNIQUES, ASSOCIATE OF APPLIED BUSINESS

Curriculum Code #6650

Effective May 2019

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

This program prepares students to apply the tools and techniques used in data analytics and assist a Data Scientists. The courses are in partnership with the IBM Academy and leverage IBM and open source applications. Each student will have access to the IBM Cloud for hands-on lab activities. The process of data analysis is taught in the context of data from manufacturing (IoT), marketing, finance and other sources. Lorain County Community College has articulation agreements with colleges and universities including programs offered by the Lorain County Community College's University Partnership.

First Year		
Fall Semester		**Hours**
CISS 121	MICROCOMPUTER APPLICATIONS I	3
DATA 130	ETHICAL AND LEGAL FRAMEWORK OF BIG DATA [1]	3
ENGL 161	COLLEGE COMPOSITION I	3
MTHM 168	STATISTICS	3
SDEV 101	COLLEGE 101 [2]	1
	Hours	13
Spring Semester		
CISS 143	DATABASE DESIGN AND IMPLEMENTATION [1]	3
CISS 212	SPREADSHEET APPLICATIONS	3
PHLY 171	INTRODUCTION TO LOGIC	3
PSYH 151	INTRODUCTION TO PSYCHOLOGY	3
DATA 220	LINUX ADMINISTRATION FOR BIG DATA [1]	3
	Hours	15
Second Year		
Fall Semester		
CYBR 220	PYTHON SCRIPTING AND PROGRAM CONCEPTS	3
DATA 200	DATA MANAGEMENT IN BIG DATA [1]	3
PHLY 174	CRITICAL THINKING	3
Science Elective [3]		4
SOCY 151G	INTRODUCTION TO SOCIOLOGY	3
	Hours	16
Spring Semester		
CMMC 151	ORAL COMMUNICATION	3
DATA 210	BIG DATA MANAGEMENT TECHNOLOGIES [1]	3
DATA 230	PREDICTIVE AND VISUAL ANALYTICS [1]	3
DATA 240	DATA ANALYTICS WITH WATSON STUDIO [1]	4
DATA 247	BIG DATA PROJECTS [1]	3
	Hours	16
	Total Hours	60

1. Indicates that this course requires a prerequisite or may be taken concurrently.
2. 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.
3. Science elective (must be with a laboratory if student is intending to transfer to a University Partnership program).

Students will need to obtain IBM Cloud accounts.

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. Understand the benefits and privacy issues with using Big Data.

2. Utilize the industry common tools to mine large data sets for relationships and other insights.

3. Utilize visualization techniques to discover useful information within large data sets and communicate them to an appropriate audience.

4. Understand the purpose of machine learning and related artificial intelligence algorithms in analyzing large data sets.