



## Administrative Master Syllabus

### Course Information

<b>Course Title</b>	Cloud Computing for Data Analytics
<b>Course Prefix, Num. and Title</b>	DATN 1377 - Cloud Computing for Data Analytics
<b>Division</b>	Technology and Business
<b>Department</b>	Computer Science
<b>Course Type</b>	WECM Course
<b>Course Catalog Description</b>	An introduction to accessing and managing data using cloud technologies. Topics include an introduction to cloud topologies and services, secure backup, and database programming. Upon completion, students should be able to design and develop services that access local and remote data from various data sources and create, manage, and scale successful information from the data.
<b>Pre-Requisites</b>	None
<b>Co-Requisites</b>	None

### Semester Credit Hours

<b>Total Semester Credit Hours (SCH): Lecture Hours:</b>	3:2:2
<b>Lab/Other Hours</b>	
<b>Equated Pay Hours</b>	3
<b>Lab/Other Hours Breakdown: Lab Hours</b>	2
<b>Lab/Other Hours Breakdown: Clinical Hours</b>	0
<b>Lab/Other Hours Breakdown: Practicum Hours</b>	0
<b>Other Hours Breakdown</b>	0

### Approval Signatures

Title	Signature	Date
<b>Department Head:</b>	Muna Saqer, Comp Sci and IT&N Program Director	11/20/2025
<b>Division Chair:</b>	David Kucera, Technology & Business Division	11/20/2025
<b>VPI:</b>		



## **Additional Course Information**

**Topical Outline:** Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

- Recognize cloud technologies
- Access and manage data and cloud
- Define data infrastructure management processes and solutions
- Identify migration of cloud elements
- Understand secure data backup

### **Course Learning Outcomes:**

**Learning Outcomes – Upon successful completion of this course, students will:**

- Understand cloud computing technologies
- Identify the cloud components, services, and deployment models
- Use commercial cloud offerings, their applications, and tools
- Use and understand Database instances
- Implement Cloud Security policies
- Create, manage, and scale successful information from the data
- Manipulate and prepare data for analysis, including data cleaning, exploration, and visualization techniques

**Methods of Assessment:**

- Individual Projects
- Group Projects
- Lab Assignments
- Tests and Quizzes
- Final Exam

**Required text(s), optional text(s) and/or materials to be supplied by the student:**

- Learning Microsoft Azure Cloud Computing and Development Fundamentals, by Jonah Carrio Andersson, Publisher: O'Reilly, ISBN: 9781098113322, or a similar title

**Suggested Course Maximum:**

20

**List any specific or physical requirements beyond a typical classroom required to teach the course.**

- Computer (64-bit CPU) equipped with 16 GB RAM, and one TB or better hard drive for each student and the same for the instructor.
- The instructor's machine needs two network interface cards (one to connect to the WCJC network and one to connect to student PCs).
- Data projector
- Microsoft Windows, the current version (64-bit) operating system software for each PC (students and instructors)
- Microsoft Office suite for each PC (students and instructors)
- Antivirus software for each PC



**Course Requirements/Grading System:** Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

Assignments ..... 20-30%  
Labs ..... 20-30%  
Tests and Final Exam ..... 30-50%

Grade System:  
90-100% ..... =A  
80-89% ..... =B  
70-79% ..... =C  
60-69% ..... =D  
Below 60%.... =F

**Curriculum Checklist:**

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
  - Critical Thinking
  - Communication
  - Empirical & Quantitative Skills
  - Teamwork
  - Social Responsibility
  - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist