
CBD-3384 Cloud Computing for Big Data Capstone Project

Computer Studies

Course Number: CBD-3384	Co-Requisites: N/A	Pre-Requisites: CBD-2214 and CBD-2204 and CBD-2234
Prepared by:	William Pourmajidi, Professor, Outline Creator	
Approved by:	Chris Slade, Dean of Information Technology	
Approval Date:	Thursday, April 28, 2022	
Approved for Academic Year:	2022-2023	
Credit Weight:	4.00	

Course Description

Employers expect candidates to have experience with teamwork in project environments. In this course students (1) work on concrete goals in a small team; (2) develop a cloud based data solution application based on pre-set requirements; and (3) manage deadlines, milestones and deliverables with a client. Students build a complete, deliverable product and present it to the client in a professional manner. The overall product is judged in a competition setting and students are given the chance to win awards. The design must be supported by documented market research, a marketing plan and a business plan.

Course Learning Outcomes/Course Objectives

- 1. Propose a cloud solution with data analysis for a real or fictional company based on supplied case studies or request for proposals.**
 - 1.1 Analyze company needs by integrating considerations from the client and using cloud computing and data mining best practices.
- 2. Analyze and design a cloud solution with data analysis for the company.**
 - 2.1 Design a cloud solution using data from company analysis and data analysis that will be proposed to the company directors.
- 3. Design a cloud solution with data analysis training program for the company that includes security education, awareness and training programs.**
 - 3.1 Design a cloud solution with data analysis education program for the company that includes security education, awareness and training programs.
- 4. Integrate team members into an effective team that collaborates to complete assigned tasks from the project.**

- 4.1 Organize research with team members The capstone team will work closely with each other and faculty advisors. The team will develop a methodology to accomplish the proposal.

5. Recommend your final project in a presentation.

- 5.1 Present the proposal.

Relationship to Vocational Learning Outcomes

This course provides the opportunity for you to achieve the following Program Vocational Learning Outcomes (VLO) which will be taught and evaluated at an taught (T), assessed (A) or culminating performance (CP) level:

CCBT - Cloud Computing for Big Data

- | | |
|-------|--|
| VLO 1 | Assess cloud computing technologies (such as grid computing, utility computing, cluster and distributed computing) to identify strengths and limitations based on client needs. (T, A) |
| VLO 2 | Select services for implementation to cloud environments according to characteristics, function and deployment models. (T, A) |
| VLO 3 | Assess networking infrastructure technologies and software to determine access and connectivity to consolidated components of storage. (T, A) |
| VLO 4 | Evaluate and select programming applications to facilitate data manipulation within and between organizational information systems. (T, A) |
| VLO 5 | Assess, gather and collate big data information for interpretation. (T, A) |
| VLO 6 | Use mobile and big data solutions technology to collaborate and control the outcomes of a project. (T, A) |
| VLO 7 | Assess, evaluate and apply cloud computing security and privacy tools to protect organizational assets. (T, A) |

Learning Resources

Required:

None

Student Evaluation

Written Report 30%
Research Report 30%
Presentation 40%

Prior Learning Assessment and Recognition

Students who wish to apply for prior learning assessment and recognition (PLAR) need to demonstrate competency at a post-secondary level in all of the course learning requirements outlined above. Evidence of learning achievement for PLAR candidates includes:

- Not Applicable: Post Graduate Course

Course Related Information

A faculty advisor meets regularly with the group to ensure the process is properly managed and a plan is followed. This course is the culmination of the program. Successful completion of this course requires the application of skills learned throughout the program.

College Related Information

Note: It is the student's responsibility to retain course outlines for possible future use to support applications for transfer of credit to other educational institutions.

Academic Integrity

Lambton College is committed to high ethical standards in all academic activities within the College, including research, reporting and learning assessment (e.g. tests, lab reports, essays).

The cornerstone of academic integrity and professional reputation is principled conduct. All scholastic and academic activity must be free of all forms of academic dishonesty, including copying, plagiarism and cheating.

Lambton College will not tolerate any academic dishonesty, a position reflected in Lambton College policies. Students should be familiar with the Students Rights and Responsibilities Policy, located at lambtoncollege.ca. The policy states details concerning academic dishonesty and the penalties for dishonesty and unethical conduct.

Questions regarding this policy, or requests for additional clarification, should be directed to the Lambton College Student Success Department.

Students with Disabilities

If you are a student with a disability please identify your needs to the professor and/or the Accessibility Centre so that support services can be arranged for you. You can do this by making an appointment at the Accessibility Centre or by arranging a personal interview with the professor to discuss your needs.

Student Rights and Responsibility Policy

Acceptable behaviour in class is established by the instructor and is expected of all students. Any form of misbehaviour, harassment or violence will not be tolerated. Action will be taken as outlined in Lambton College policy.

Date of Withdrawal without Academic Penalty

Please consult the Academic Regulations and Registrar's published dates.

Waiver of Responsibility

Every attempt has been made to ensure the accuracy of this information as of the date of publication. The content may be modified, without notice, as deemed appropriate by the College.

Students should note policies may differ depending on the location of course offering. Please refer to campus location specific policies:

LAMBTON COLLEGE POLICIES - applicable to all Lambton College students:

- Student Rights & Responsibilities & Discipline policy (2000-5-1)
- Test & Exam Writing Protocol (2000-1-6)
- Evaluation of Students (2000-1-3)
- Policy Link - <https://www.lambtoncollege.ca/custom/Pages/Policies/Policies.aspx>

CESTAR COLLEGE:

- https://www.lambtoncollege.ca/Programs/International/Lambton_in_Toronto/Student_Policies-17179868204/

QUEENS COLLEGE:

- https://www.lambtoncollege.ca/Programs/International/Lambton_in_Mississauga/Student_Policies-17179868190/