

CS6288: TOPICS ON ECOMMERCE TECHNOLOGIES

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Topics on eCommerce Technologies

Subject Code

CS - Computer Science

Course Number

6288

Academic Unit

Computer Science (CS)

College/School

College of Computing (CC)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

CS5222 Computer Networks and Internets

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course is aimed at developing in the students' solid understanding in a range of topics on the current technologies to solve problems and meet requirements in eCommerce systems. Students should be able to participate effectively in the development of relevant technologies with respect to particular eCommerce applications.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if DEC-A1 app.)		DEC-A2	DEC-A3
1	Describe the requirements of eCommerce Technologies.		x	x	
2	Analyze suitability of eCommerce technologies.		x	x	x
3	Apply selected eCommerce technologies to design of particular applications.		x	x	x
4	Describe and inquire on trends of eCommerce technologies.		x	x	

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Students will engage with key concepts of eCommerce systems.	1, 2, 3, 4	2 hrs/ week
2	Tutorials	Students will discuss and apply their knowledge to provided exercises related to eCommerce systems that enforce course concepts.	1, 2, 3, 4	1 hr/ week
3	Assignments	Students will individually demonstrate knowledge of course concepts and apply formulated strategies to analyse and describe eCommerce technologies and trends.	1, 2, 3, 4	4 hrs/week for 4 weeks

Additional Information for LTAs

Lectures - CILO No. (1,2,3,4) indirectly

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("- for nil entry)	Allow Use of GenAI?
1	Assignments	1, 2, 3, 4	20	-	Yes
2	Mid-term Quiz	1, 2, 3, 4	10	-	No
3	Project	1, 2, 3, 4	20	-	Yes

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Minimum Examination Passing Requirement (%)

30

Additional Information for ATs

For a student to pass the course, at least 30% of the maximum mark for the examination must be obtained.

Assessment Rubrics (AR)**Assessment Task**

Assignments (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Explain and apply aspects of eCommerce in analysing and discussing related technology and trends.

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Mid-term Quiz (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Ability to describe, analyse and apply concepts related to eCommerce systems.

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Project (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Engage with eCommerce technology by identifying trends and applying selected technologies to design an application.

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Exam (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Ability to describe, analyse and apply concepts related to eCommerce systems.

Excellent

(A+, A, A-) High

Good

(B+, B, B-) Significant

Fair

(C+, C, C-) Moderate

Marginal

(D) Basic

Failure

(F) Not even reaching marginal levels

Assessment Task

Assignments (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Explain and apply aspects of eCommerce in analysing and discussing related technology and trends.

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Moderate

Failure

(F) Not even reaching marginal levels

Assessment Task

Mid-term Quiz (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Ability to describe, analyse and apply concepts related to eCommerce systems.

Excellent

(A+, A, A-) High

Good

(B+, B) Significant

Marginal

(B-, C+, C) Moderate

Failure

(F) Not even reaching marginal levels

Assessment Task

Project (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Engage with eCommerce technology by identifying trends and applying selected technologies to design an application.

Excellent

(A+, A, A-) High

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Exam (for students admitted from Semester A 2022/23 to Summer Term 2024)

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Ability to describe, analyse and apply concepts related to eCommerce systems.

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Part III Other Information

Keyword Syllabus

The syllabus will evolve with time as current topic changes. The following are example keyword syllabus:

Network security, firewalls, proxy servers, access control; Physical security, virus; Encryption technologies, Public key infrastructure, Authentication protocols, Certification authority and applications, Copyright protection, watermarking; Web security, e-mail security, Payment protocols, Auctioning systems, Atomicity requirements, Electronic voting, Digital money, Smart card technology and applications, Intelligent agents; Database connections; Multimedia tools; Data mining; Software component technologies; Emerging Web technologies, Web 2.0, Rich Internet Applications, Service-Oriented architecture, service cloud.

Reading List**Compulsory Readings**

Title	
1	K Laudon, C Traver, e-Commerce: Business, Technology, Society, 4th edition by Prentice Hall 2008

Additional Readings

Title	
1	Current on-line resources