INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)
Dundigal, Hyderabad -500 043

COMPUTER SCIENCE AND ENGINEERING

COURSE DESCRIPTOR

Course Title	E-COMMERCE				
Course Code	AIT514				
Programme	B. Tech				
Semester	VIII	CSE | IT			
Course Type	Core				
Regulation	IARE - R16				
Course Structure	**Theory**			**Practical**	
	Lectures	**Tutorials**	**Credits**	**Laboratory**	**Credits**
	3	-	3	-	-
Chief Coordinator	Ms. M GeethaYadav, Assistant Professor,CSE				
Course Faculty	Ms. M GeethaYadav, Assistant Professor ,CSE Ms. A Jyothi Sravani, Assistant Professor,CSE				

I. COURSEOVERVIEW:

This course provides an introduction to the technology and history of the Internet and its uses as an electronic commerce medium from informational websites to full online retail systems. Included in this introductory survey will be analysis and evaluation of retail and business-to-business Internet based systems. Typical topics include e-commerce business and revenue models, ecommerce strategies and marketing concepts, specific applications such as web 2.0,E-learning and E-government; as well as technology security and payments. Entire supply chains are being re-engineered.

II. COURSE PRE-REQUISITES:

Level	Course Code	Semester	Prerequisites	Credits
UG	AHS015	V	Business Economics and financial analysis	3

III. MARKS DISTRIBUTION:

Subject	SEE Examination	CIA Examination	Total Marks
E-Commerce	70 Marks	30 Marks	100

IV. DELIVERY / INSTRUCTIONALMETHODOLOGIES:

✘	Chalk & Talk	✔	Quiz	✔	Assignments	✘	MOOCs
✔	LCD / PPT	✔	Seminars	✘	Mini Project	✔	Videos
✘	Open Ended Experiments						

V. EVALUATION METHODOLOGY:

The course will be evaluated for a total of 100 marks, with 30 marks for Continuous Internal Assessment (CIA) and 70 marks for Semester End Examination (SEE). Out of 30 marks allotted for CIA during the semester, marks are awarded by taking average of two CIA examinations or the marks scored in the make-up examination.

Semester End Examination (SEE): The SEE is conducted for 70 marks of 3 hours duration. The syllabus for the theory courses is divided into five units and each unit carries equal weightage in terms of marks distribution. The question paper pattern is as follows. Two full questions with "either" or "choice" will be drawn from each unit. Each question carries 14 marks. There could be a maximum of two sub divisions in a question.

The emphasis on the questions is broadly based on the following criteria:

50 %	To test the objectiveness of the concept.
50 %	To test the analytical skill of the concept OR to test the application skill of the concept.

Continuous Internal Assessment (CIA):

CIA is conducted for a total of 30 marks (Table 1), with 25 marks for Continuous Internal Examination (CIE), 05 marks for Quiz/ Alternative Assessment Tool (AAT).

Table 1: Assessment pattern for CIA

Component	**Theory**		**Total Marks**
Type of Assessment	CIE Exam	Quiz / AAT	
CIA Marks	25	05	30

Continuous Internal Examination (CIE):

Two CIE exams shall be conducted at the end of the 8th and 16th week of the semester respectively. The CIE exam is conducted for 25 marks of 2 hours duration consisting of two parts. Part–A shall have five compulsory questions of one mark each. In part–B, four out of five questions have to be answered where, each question carries 5 marks. Marks are awarded by taking average of marks scored in two CIE exams.

Quiz-Online Examination:

Two Quiz exams shall be online examination consisting of 25 multiple choice questions and are be answered by choosing the correct answer from a given set of choices (commonly four). Marks shall be awarded considering the average of two quizzes for every course.

VI. HOW PROGRAM OUTCOMES AREASSESSED:

Program Outcomes (POs)		Strength	Proficiency assessed by
PO 1	**Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	3	Presentation on real-world problems
PO 2	**Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences	3	Assignment
PO 3	**Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.	2	Assignment
PO 4	**Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.	3	Seminar

3 = High; 2 = Medium; 1 = Low

VII. HOW PROGRAM SPECIFIC OUTCOMES AREASSESSED:

Program Specific Outcomes (PSOs)		Strength	Proficiency assessed by
PSO 1	**Professional Skills:** The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity.	2	Seminar
PSO 2	**Problem-Solving Skills:** The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver quality product for business success..	2	Assignment
PSO 3	**Successful Career and Entrepreneurship:** The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, and a zest for higher studies.	1	Assignment

3 = High; 2 = Medium; 1 = Low

VIII. COURSE OBJECTIVES:

The course should enable the students to:	
I	Describe e-commerce framework.
II	Explain electronic system for payment.
III	Describe the use of e-commerce advertising and marketing.
IV	Understand business documents and digital library.
V	Understand the usage of multimedia systems for e-commerce

IX. COURSE OUTCOMES:

COS	COURSE OUTCOMES	CLOS	COURSE LEARNING OUTCOMES
CO1	Understand the basic concepts of E-commerce	CLO 1	Understand about the frame Work and Media Coverage
		CLO 2	Describe about the anatomy of e-commerce applications
		CLO 3	Demonstrate about the E-commerce consumer applications
		CLO 4	Explain about E-commerce organization applications
CO2	Demonstrate an retailing in E-commerce by using the effectiveness of market research	CLO 5	Explain about the Types of electronic payment systems
		CLO 6	Describe about the digital token credit based electronic payment system
		CLO 7	Demonstrate about credit card payment system
		CLO 8	Explain about the design of electronic payment system card
CO3	Describe Internet trading relationships including Business to Consumer, Business-to-Business and Intra-organizational	CLO 9	Discuss about the Inter organizational commerce
		CLO 10	Demonstrate about the Intra organizational commerce
		CLO 11	Describes about supply chain management
		CLO 12	Explain about the Corporate digital library
		CLO 13	Understand about the advertising and marketing
CO4	Describe about Consumer Search and Resource Discovery	CLO 14	Understand the search and resource discovery paradigms
		CLO 15	Describe information search and retrieval
		CLO 16	Demonstrate about the commerce and catalogues
		CLO17	Explain about information filtering
CO5	Describe the key features of Internet, Intranets and Extranets and explain how they relate to each other.	CLO 18	Understand about the key multimedia concepts
		CLO 19	Demonstrate about the digital video and electronic commerce,
		CLO 20	Explain the desktop video processing and desktop video conferencing

X. COURSE LEARNING OUTCOMES:

CLO Code	CLO's	At the end of the course, the student will have the ability to:	PO's Mapped	Strength of Mapping
AIT514.01	CLO 1	Understand about the frame Work and Media Coverage	PO 1	3
AIT514.02	CLO 2	Describe about the anatomy of e-commerce applications	PO 1,PO4	2
AIT514.03	CLO 3	Demonstrate about the E-commerce consumer applications	PO 1,PO 2	3
AIT514.04	CLO 4	Explain about E-commerce organization applications	PO1,PO2	2
AIT514.05	CLO 5	Explain about the Types of electronic payment systems	PO 2,PO3	2
AIT514.06	CLO 6	Describe about the digital token credit based electronic payment system	PO 1,PO 4	3

AIT514.07	CLO 7	Demonstrate about credit card payment system	PO 2,PO 4	2
AIT514.08	CLO 8	Explain about the design of electronic payment system card	PO 2	2
AIT514.09	CLO 9	Discuss about the Inter organizational commerce	PO 1,PO 3	3
AIT514.10	CLO 10	Demonstrate about the Intra organizational commerce	PO 1	3
AIT514.11	CLO 11	Describes about supply chain management	PO 3	2
AIT514.12	CLO 12	Explain about the Corporate digital library	PO 1,PO 3	2
AIT514.13	CLO 13	Understand about the advertising and marketing	PO 3,PO 4	2
AIT514.14	CLO 14	Understand the search and resource discovery paradigms	PO3,PO 4	2
AIT514.15	CLO 15	Describe information search and retrieval	PO 3	2
AIT514.16	CLO 16	Demonstrate about the commerce and catalogues	PO 2,PO 3	2
AIT514.17	CLO 17	Explain about information filtering	PO 2,PO 3	2
AIT514.18	CLO 18	Understand about the key multimedia concepts	PO1	2
AIT514.19	CLO 19	Demonstrate about the digital video and electronic commerce,	PO2	2
AIT514.20	CLO 20	Explain the desktop video processing and desktop video conferencing	PO1,PO4	2

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XI. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFICOUTCOMES:

Course Outcomes(COs)	Program Outcomes (POs)				Program Specific Outcomes (PSOs)		
	PO1	PO2	PO3	PO4	PSO1	PSO 2	PSO 3
CO1	3	2	3	2	2	2	1
CO2		2			2		
CO3	3		2	2	2		
CO4		2	2	2	2		
CO5	2	2		3			

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XII. MAPPING COURSE LEARNING OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFICOUTCOMES:

(CLOs)	Program Outcomes (POs)												Program Specific Outcomes (PSOs)		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO 2	PSO 3

CLO 1	3												3		1
CLO 2	3			2									1	2	1
CLO 3	3	3													
CLO 4	3	2											2		
CLO 5		2	3												1
CLO 6	3													2	
CLO 7		2											2		
CLO 8		2													
CLO 9	3		3										2		
CLO 10	3												2		
CLO 11			2												
CLO 12	3		2										2		
CLO 13			2	2										2	1
CLO 14			2	2									2		
CLO 15			2												
CLO 16		2	3												
CLO 17		2	3										2		
CLO 18	2														
CLO 19		2													
CLO 20	2			3											

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XIII. ASSESSMENT METHODOLOGIES –DIRECT

CIE Exams	PO 1,PO 2, PO3, PO 4, PSO1,PSO2, PSO3	SEE Exams	PO 1,PO 2, PO3, PO 4, PO5,PSO1,PSO2,PSO3	Assignments	PO2, PO3	Seminars	PO4
Laboratory Practices	-	StudentViva	-	MiniProject	-	Certification	-
Term Paper	-						

XIV. ASSESSMENT METHODOLOGIES -INDIRECT

✔	Early Semester Feedback	✔	End Semester OBE Feedback
✘	Assessment of Mini Projects by Experts		

XV. SYLLABUS

UNIT-I	**INTRODUCTION TO ELECTRONIC COMMERCE**
Electronic Commerce: Frame work, media coverage; anatomy of e-commerce applications: E-commerce Consumer applications, E-ecommerce organization applications.	
UNIT-II	**ELECTRONIC PAYMENT SYSTEMS**
Types of electronic payment systems; Digital token based electronic payment system: E-cash, properties of e-cash, electronic cash in action, business issues and electronic cash, operational risk and electronic Cash, electronic checks; smart cards and electronic payment system; Credit card based electronic payment system; Risk and electronic payment system; Designing electronic payment system.	
UNIT-III	**INTER AND INTRA ORGANIZATIONAL COMMERCE**
Inter organizational commerce: Electronic data interchange, electronic data interchange implementation, and value added networks; Intra organizational commerce: Work flow, automation customization and internal commerce, supply chain management. Corporate digital library: Document library, digital document types, corporate data warehouses; Advertising and marketing: Information based marketing, advertising on internet, on-line marketing Process, market research.	
UNIT-IV	**CONSUMER SEARCH AND RESOURCE DISCOVERY**
Search and resource discovery paradigms, information search and retrieval, commerce catalogues, Information filtering.	
UNIT-V	**MULTIMEDIA**
Multimedia: Key multimedia concepts, digital video and electronic commerce, desktop video processing, desktop video conferencing.	
Text Books:	
1. Ravi Kalakata, Whinston Andrew B, Frontiers of Electronic Commerce, Pearson, 1st Edition, 1996.	
Reference Books:	
1. David Whitley, E-Commerce-Strategy, Technologies and Applications, Tata McGraw-Hill, 2nd Edition, 2000. 2. Kamlesh K. Bajaj, E-Commerce the Cutting Edge of Business, Tata McGraw-Hill, 1st Edition, 2005. 3. Christopher Westland, Theodore H. K Clark, Global Electronic Commerce- Theory and Case Studies, University Press, 1st Edition, 1999.	

XVI. COURSE PLAN:

The course plan is meant as a guideline. Probably there may be changes.

Lecture No	Topics to be covered	Course Learning Outcomes (CLOs)	Reference
1-2	Electronic Commerce: Frame work, media coverage, anatomy of e-commerce	CLO 1	R1:1.1
3-4	consumer applications, E-ecommerce organization applications	CLO 2	T1:1.2
5-6	Types of electronic payment systems; Digital token based electronic payment system: E-cash	CLO 3	T1:1.3
7-9	Electronic Cash In Action, Business Issues And Electronic Cash	CLO 4	R1:1.5
10-12	Operational Risk And Electronic Cash, Electronic Checks.	CLO 5	T1:3.2
13-14	Smart cards and electronic payment system. Credit card based electronic payment system;	CLO 6	T1:3.5
15-16	Risk and electronic payment system; Designing electronic payment system	CLO 7	T1:4.3

17-20	Inter organizational commerce: Electronic data interchange	CLO 8	T1:5.2
21-23	Electronic Data Interchange Implementation, And Value Added Networks	CLO 9	T1:6.2
24-27	Intra organizational commerce: Work flow, automation customization and internal commerce, supply chain management.	CLO 10	T1:6.5
28-30	Corporate digital library: Document library, digital document types, corporate data warehouses	CLO 11	T1:6.5
31-33	Advertising and marketing: Information based marketing, advertising on internet, on-line marketing process, market research	CLO 12	T1:10.2
34-36	Search and resource discovery paradigms, information search and retrieval	CLO 13	T1:10.4
37-39	Commerce Catalogues, Information Filtering	CLO 14	R1:4.2.4
40-42	Multimedia: Key Multimedia Concepts, Digital Video And Electronic Commerce, Desktop Video Processing, Desktop Video Conferencing.	CLO 5, CLO16, CLO 17	T1:8.4
43-45	Desktop Video Processing, Desktop Video Conferencing.	CLO 18,CLO 19,CLO 20	T1:11.3

Prepared by:
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