University of Asia Pacific (UAP)
Department of Computer Science and Engineering (CSE)

Course Outline: CSE 307

Part A – Introduction

1. Course Code : CSE 307

2. Course Title : Project Strategy and Management

3. Course Type : Non-credit course

4. Level : 3rd year, 1st Semester

5. Academic Session : Spring 2025

6. Course Instructor : Bidita Sarkar Diba (Lecturer), Nahida Marzan (Lecturer)

7. Prerequisite : None

8. Credit Value : 3.00

9. Contact Hours : 3.0

10. Total Marks : 100

11. Course Objectives and Course Summary:

The objectives of this course are to:

1. Equip students with the knowledge and skills necessary to effectively plan, execute, and oversee projects within various organizational contexts. 206

2. Provide students with a comprehensive understanding of project management principles, strategies, and methodologies, enabling them to successfully lead and contribute to project initiatives.

The course will provide the fundamental concepts and practical applications of project management within modern business environments. Topics of this course include project initiation, planning, execution, monitoring, and closure, as well as risk management, stakeholder engagement, and project leadership strategies. Through case studies, simulations, and practical exercises, students will develop competencies in project scope definition, resource allocation, schedule management, and quality control. Additionally, the course emphasizes the integration of strategic planning with project management practices to achieve organizational objectives effectively.

13. Course Learning Outcomes: at the end of the Course, the Student will be able to –

CLO No	CLO Statement
CLO1	Describe the fundamentals of project integration management
CLO2	Understand the scope, resources, and time of project management
CLO3	Understand the cost, risk and quality of project management
CLO4	Develop system strategy and communication in project management

Mapping / Alignment of CLOs with Program Learning Outcomes (PLO) (Optional): *Note: Course Outcome (CO) is the same as the Course Learning Outcome (CLO) and Program Outcome (PO) is the same as the Program Learning Outcome (PLO).

CLO No	CLO Statement Upon successful completion of the course, students should be able to:	Corresponding PLOs (Appendix-1)	Bloom's taxonomy domain/level (Appendix-2) Delivery methods and activities	Bloom's taxonomy domain/level (Appendix-2) Delivery methods and activities	Assessment Tools
CLO1	Describe the fundamentals of project integration management	a	1/Understand	Lecture, Classwork, Assignments	Quiz, Written exam
CLO2	Understand the scope, resources and time of project management	b	1/Apply	Lecture, Classwork, Assignments	Quiz, Written exam
CLO3	Understand the cost, risk and quality of project management	b	1/Evaluate	Lecture, Classwork, Assignments	Quiz, Written exam
CLO4	Develop system strategy and	c	1/Analyze	Lecture, Classwork,	Quiz, Written exam

	communication in project management			Assignments	

Part B – Content of the Course

14. Course Content:

Project Management & Fundamentals, (What is Project, what is Project Management and its importance, Relation of Project Objectives, Project vs Process, Ten knowledge areas, Basic Functions of Managements), Management Functions and SWOT Analysis (Management Functions, Project Life Cycle, Funnel Diagram, Project vs Product, SWOT Analysis and Its Importance), Project Integration Management, Project Manager & Skills Project Manager, Scope Management, Risk Analysis, Foundations and development of management information systems (MIS), Project Cost Estimation, Project Communication Management, Project Stakeholder Management.

15. Alignment of topics of the course with CLOs:

SL. No	Topics / Content	Course Learning Outcome (CLO)
1.	Project management, project integration management, Managerial Capabilities	CLO1
2.	Project scope management, Project resource management, Project time management	CLO2
3.	Project cost management, Project risk management, Project quality management	CLO3
4.	Project communication management, system strategy	CLO4

16. Class Schedule/Lesson Plan/Weekly plan:

Topics	Specific Program Outcome (PLO) (s)	Time Frame	Suggested Activities	Teaching Strategy (s)	Alignment with CLO
Project management 1. Purpose and concept of projects and project management 2. Purpose and concept of projects and project management		Week 1	Practical example, assignment/ quiz	Lecture, Multimedia	CLO1

Project integration management 1. Purpose and concept of project integration management 2. Processes in project integration management		Week 2	Practical example, assignment/ quiz	Lecture, Multimedia	CLO1
Managerial Capabilities 1. Purpose and concept of project managerial capabilities 2. Processes in project managerial capabilities		Week 3	Practical example, assignment/ quiz	Lecture, Multimedia,	CLO1
CT1: Class test 1		Week 4	Class test	Lecture, Multimedia	CLO1/ CLO2
Project scope management 1. Purpose and concept of project scope management 2. Processes in project scope management		Week 5	Practical example, assignment/ quiz	Lecture, Multimedia	CLO2
Project resource management & Project time management 1. Purpose and concept of project resource management 2. Processes in project resource management 3. Purpose and concept of project time management 4. Processes in project time management 5. Typical types of schedules, and their creation and management techniques		Week 6	Practical example, assignment/ quiz	Lecture, Multimedia	CLO2
MID-SEMESTER EXAMINATION					
Project cost management 6. Purpose and concept of project cost management 7. Processes in project cost management 8. Typical techniques for estimating and managing costs		Week 8	Practical example, assignment/ quiz	Lecture, Multimedia	CLO3
Project risk management 9. Purpose and concept of project risk management 10. Processes in project risk management 11. Methods for identification of typical risks, analysis methods, and responses to risk		Week 9	Practical example, assignment/ quiz	Lecture, Multimedia	CLO3

Project quality management 12. Purpose and concept of project quality management 13. Processes in project quality management 14. Typical quality management techniques		Week 10	Practical example, assignment/ quiz	Lecture, Multimedia	CLO3
CT2: Class test 2		Week 11	Class test	Lecture, Multimedia	CLO2/ CLO3
Project communication management 15. Purpose and concept of project communication management 16. Processes in project communication management 17. Typical information distribution methods		Week 12	Practical example, assignment/ quiz	Lecture, Multimedia	CLO4
System strategy 18. Purpose and concept of system strategy 19. Processes in system strategy 20. Program management 21. Quality control 22. Strategy implementation management		Week 13	Practical example, assignment/ quiz	Lecture, Multimedia	CLO4
FINAL EXAMINATION					

17. Teaching-Learning Strategies:

Classroom lectures will be used to introduce key concepts, theories, and frameworks related to project strategy and management to provide a foundational understanding of the subject matter and facilitate discussions on real-world applications. Real-world case studies of successful and unsuccessful projects will be analyzed in the class to allow students to apply theoretical knowledge to practical scenarios to encourage critical thinking, problem-solving, and decision-making skills while illustrating the complexities of project management in various contexts. Group discussions will be facilitated to enable students to share perspectives, exchange ideas, and collaborate on project management challenges to encourage active participation, communication skills development, and the exploration of diverse viewpoints. There will be project-based learning activities allowing students to apply theoretical concepts to real projects, either individually or in teams to develop practical skills, project management competencies, and problem-solving abilities while experiencing the challenges and rewards of project execution.

18. Assessment Techniques of each topic of the course:

Assessment Type	% Weight	CLO1	CLO2	CLO3	CLO4
Final Exam (Written)	50%	10	-	20	20
Mid Exam (Written)	20%	15	5	-	-
Class Test (CT-1, CT-2)	30%	CT1 (5)	CT1 (10)	CT2 (10)	CT2 (5)
Total	**100%**	30	15	30	25

Part C – Assessment and Evaluation

19. Assessment Strategy

Class Tests: Altogether 2 class tests may be taken during the semester, 1 class test will be taken for midterm and 1 class test will be taken for final term. No makeup class tests will be taken. Students are strongly recommended not to miss any class tests.

Assignment: Assignments (Written and/or presentation.) will be given throughout the semester. Late submission will result in a 50% deduction in the score. Students will have to do the presentation on the given topic as an assignment.

CIE- Continuous Internal Evaluation (30 Marks)

Bloom's Category Marks (out of 30)	Tests (30)	Assignments (0)
Remember		
Understand	**15**	
Apply	**15**	
Analyze		
Evaluate		
Create		

SMEB- Semester Mid & End Examination (70 Marks)

Bloom's Category	Test
Remember	
Understand	
Apply	
Analyze	
Evaluate	
Create	

20. Evaluation Policy

Grades will be calculated as per the university grading structure and individual students will be evaluated based on the following criteria with respective weights.

1. Assessment 30%
2. Term Examination 50%
3. Mid-Term Examination 20%

UAP Grading Policy

Numeric Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	D	2.00
Less than 40%	F	0.00

Part D – Learning Resources

21. Text Book

1. Project Management for Information Systems - James Cadle, Donald Yeates
2. Information Systems Project Management - David Olson
3. Information Systems Project Management - David E. Avison, Gholamreza Torkzadeh

Appendix-1:

Washington Accord Program Outcomes (PO) for engineering programs:

(a) Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization as specified in K1 to K4 respectively to the solution of complex engineering problems.

(b) Identify, formulate, research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences. (K1 to K4)

(c) Design solutions for complex engineering problems and design systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations. (K5)

(d) Conduct investigations of complex problems using research-based knowledge (K8) and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.

(e) Create, select and apply appropriate techniques, resources and modern engineering and IT tools, including prediction and modeling, to complex engineering activities with an understanding of their limitations.

(f) Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems. (K7)

(g) Understand and evaluate the sustainability and impact of professional engineering work in the solution of complex engineering problems in societal and environmental contexts. (K7)

(h) Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice. (K7)

(i) Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

(j) Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

(k) Demonstrate knowledge and understanding of engineering management principles and economic decision-making and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

(l) Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Knowledge Profile

K1 A systematic, theory-based understanding of the natural sciences applicable to the discipline

K2 Conceptually based mathematics, numerical analysis, statistics and formal aspects of computer and information science to support analysis and modelling applicable to the discipline

K3 A systematic, theory-based formulation of engineering fundamentals required in the engineering discipline

K4 Engineering specialist knowledge that provides theoretical frameworks and bodies of knowledge for the accepted practice areas in the engineering discipline; much is at the forefront of the discipline

K5 Knowledge that supports engineering design in a practice area

K6 Knowledge of engineering practice (technology) in the practice areas in the engineering discipline

K7 Comprehension of the role of engineering in society and of the identified issues in engineering practice in the discipline: ethics and the engineer's professional responsibility to public safety; the impacts of engineering activity in economic, social, cultural, environmental and sustainability terms

K8 Engagement with selected knowledge in the research literature of the discipline

Appendix-2