ITEC-425
Graduation Project (Phase 1)

General Information

Course Code	ITEC-425	Level/ Year	7th / 4th	Required (R)/ Selected Elective (SE)		R
Credit Hours	Theory		3	Lab	0	Total	3
Prerequisites	Nil					
Course Coordinator	Dr. Manju Sharma					

Course Description

This course marks the initial phase of the capstone project for students in the Bachelor of Information Technology (BIT) program. Students will begin by identifying a significant problem or challenge within the field of information technology and developing a comprehensive project proposal. The course emphasizes research, planning, and the application of theoretical knowledge to practical problems. Key activities include conducting a literature review, defining project objectives, and outlining the methodology and resources required. Students will work closely with faculty advisors to refine their project ideas and ensure feasibility. By the end of this course, students will have a well-defined project plan that sets the stage for successful implementation in the subsequent phase.

Course Objectives

♦ Develop a comprehensive project proposal, including objectives, scope, methodology, and expected outcomes.
♦ Conduct a thorough literature review to identify existing research and technologies relevant to the project.
♦ Evaluate the technical feasibility of the proposed project, including resource requirements and potential challenges.
♦ Create a detailed project plan, including timelines, milestones, and resource allocation.
♦ Demonstrate effective problem-solving skills by identifying potential issues and developing strategies to address them.
♦ Work effectively in a team environment, demonstrating strong collaboration and communication skills.
♦ Present the project proposal and initial findings clearly and professionally to a diverse audience, including peers, faculty, and industry professionals.
♦ Demonstrate critical thinking and innovative approaches to solving complex IT problems.

Course Contents

List of Topics	Weeks
UNIT 1: Introduction	1, 2, 3
UNIT 2: Literature Review, Project Proposal, and Methodology	4, 5, 6
UNIT 3: Project Proposal, Technical Feasibility Analysis, and Methodology	7, 8, 9
UNIT 4: Project Planning, and Ethical Considerations	10, 11, 12
UNIT 5: Initial Findings, Conclusion, and References	13, 14, 15

Textbook

Projects in Computing and Information Systems: A Student's Guide, 3rd Edition, By Christian Dawson, Pearson, 2015, ISBN 10: 1292073462, ISBN 13: 9781292073460.
How to do the Final Year Projects, 2nd Edition, By Hossein Hassani, Bookboon, 2015, ISBN 10: 8740302776, ISBN 13: 9788740302776.

Reference Materials

Doing Your Research Project: A Guide for First-Time Researchers, 7th Edition, By Stephen Waters, Judith Margaret Bell, 2018, McGraw-Hill Education, ISBN 10: 033524338X, ISBN 13: 9780335243389.

Writing your thesis - A Practical Guide for Students, 2nd Edition, By Librero Felix R., 2012, Philippines Open University, ISBN 10: 9717672105, ISBN 13: 9789717672106.

Course Learning Outcomes

CLO	Description	Cognitive Domain	Mapped PI
CLO#01	**Develop** a comprehensive project proposal, including objectives, scope, methodology, and expected outcomes.	Creating	PI 1.1
CLO#02	**Conduct** a thorough literature review to identify existing research and technologies relevant to the project.	Understanding	PI 1.3
CLO#03	**Apply** appropriate research methodologies to gather and analyze data for the project.	Applying	PI 2.2
CLO#04	**Evaluate** the technical feasibility of the proposed project, including resource requirements and potential challenges.	Analyzing	PI 1.2
CLO#05	**Create** a detailed project plan, including timelines, milestones, and resource allocation.	Creating	PI 3.1
CLO#06	**Demonstrate** effective problem-solving skills by identifying potential issues, security requirements, threats, and vulnerabilities as well as developing strategies to address them.	Analyzing	PI 2.1 PI 6.1 PI 6.3 PI 6.4
CLO#07	**Work** effectively in a team environment, demonstrating strong leadership skills, collaboration, and communication skills.	Applying	PI 5.1 PI 5.2 PI 5.3 PI 5.4
CLO#08	**Address** ethical considerations related to the project, including data privacy, security, and intellectual property.	Applying	PI 4.1 PI 4.2
CLO#09	**Present** the project proposal and initial findings clearly and professionally to a diverse audience, including peers, faculty, and industry professionals.	Applying	PI 3.2 PI 3.3 PI 3.4
CLO#10	**Demonstrate** critical thinking, innovative approaches, and the emerging trends to solving complex IT problems.	Applying	PI 1.4 PI 4.4

CLO-PI-SO Mapping

CLOs	SOs					
	SO1	SO2	SO3	SO4	SO5	SO6
CLO#01	PI 1.1	-	-	-	-	-
CLO#02	PI 1.3	-	-	-	-	-
CLO#03	-	PI 2.2	-	-	-	-
CLO#04	PI 1.2	-	-	-	-	-

CLO						
CLO#05	-	-	PI 3.1	-	-	-
CLO#06	PI 2.1	-	-	-	-	PI 6.1 PI 6.3 PI 6.4
CLO#07	-	-	-	-	PI 5.1 PI 5.2 PI 5.3 PI 5.4	-
CLO#08	-	-	-	PI 4.1 PI 4.2	-	-
CLO#09	-	-	PI 3.2 PI 3.3 PI 3.4	-	-	-
CLO#10	PI 1.4	-	-	PI 4.4	-	-

Approvals

Prepared by **Course Coordinator**	Dr. Manju Sharma		
Approved by **Track Leader**	Dr. Jayabrabu	**TL** **Signature**	
Last updated	August 18, 2024		