

Course Title	IT Project Management				
Course Code	DIS503				
Course Type	Compulsory				
Level	Postgraduate				
Year / Semester	1 <sup>st</sup> / 1 <sup>st</sup>				
ECTS	7.5	Lectures / week	1	Laboratories / week	-
Course Purpose and Objectives	<p>Every year, billions of dollars are invested in thousands of information technology (IT) projects around the world. With the immense focus on IT products and advancements in software and hardware systems, it's no surprise that interest in this field is rapidly growing. Project management has evolved into a multifaceted challenge that demands not only technical skills but also a broad set of people skills. Today, project management encompasses the oversight of technology, people, culture, stakeholders, and other diverse elements critical to the successful completion of a project. It requires a balanced knowledge of leadership, team building, conflict resolution, negotiation, and influence, alongside the traditional technical skill set.</p> <p>This course adopts a holistic and integrated approach to managing projects, merging the human aspects and organizational culture with the tools and methods used in project management. It delves into both technical and managerial challenges, aiming to equip students with comprehensive knowledge and understanding of a wide range of project planning and management techniques, and how these are applied within professional information and communication projects.</p> <p>Upon completing this course, students will gain a clear understanding and deep knowledge of:</p> <ul style="list-style-type: none"> <li>▪ How a project is organized, monitored, and controlled.</li> <li>▪ How activities and tasks are identified, planned for, and resources are allocated, leveled, and smoothed.</li> <li>▪ How risks are identified, analyzed, and mitigated.</li> </ul>				

	<ul style="list-style-type: none"> <li>▪ How stakeholders are identified, analyzed, and managed, including the creation of power/interest grids.</li> <li>▪ How a project team is formed and the role of the project manager.</li> <li>▪ How project costs are identified, a project budget is created, and costs are controlled and monitored through techniques such as Earned Value Management (EVM).</li> <li>▪ How projects can be compressed to meet deadlines without compromising quality or reducing the project scope.</li> </ul>		
Learning Outcomes	<p>After the completion of the course, students will be able to:</p> <p>CLO[1] Demonstrate critical understanding of the processes, practices and techniques involved in managing software projects.</p> <p>CLO[2] Critically evaluate and address the issues relating to the management of time, cost, scope, risk and stakeholders.</p> <p>CLO[3] Critically discuss and evaluate plan-based/predictive project life cycles and more contemporary adaptive/change-driven processes such as Agile.</p> <p>CLO[4] Demonstrate advanced knowledge and ability to create project schedules and budgets and compress them.</p> <p>CLO[5] Demonstrate knowledge and critically apply a range of risk analysis techniques within a project management context.</p> <p>CLO[6] Demonstrate the ability to effectively self-organize within teams and engage in collaborative work to achieve project goals.</p> <p>A detailed breakdown of Course Objectives based on the Course Learning Outcomes can be found below:</p> <table border="1" data-bbox="493 1646 1489 1919"> <tr> <td data-bbox="493 1646 726 1919">1. Knowledge</td> <td data-bbox="726 1646 1489 1919"> <p>By completing the course you will be able to:</p> <p>C.O.[1]. Analyze and critically evaluate the organization of complex projects, including the identification of activities and tasks, and the comprehensive assessment, management, and mitigation of risks.</p> </td> </tr> </table>	1. Knowledge	<p>By completing the course you will be able to:</p> <p>C.O.[1]. Analyze and critically evaluate the organization of complex projects, including the identification of activities and tasks, and the comprehensive assessment, management, and mitigation of risks.</p>
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		<p>C.O.[2]. Examine and apply advanced methodologies and techniques for monitoring and controlling projects, ensuring alignment with strategic objectives.</p> <p>C.O.[3]. Explain the concepts of project and project schedule.</p> <p>C.O.[4]. Develop, evaluate, and monitor comprehensive project budgets, incorporating financial management principles</p> <p>C.O.[5]. Evaluate and optimise the allocation of resources to activities and tasks, applying resource management theories and tools to enhance project efficiency and effectiveness.</p> <p>C.O. [13] Analyse the principles and practices of self-organising teams, including the roles, responsibilities, and behaviours that promote effective collaboration and team cohesion.</p>
	<p>2. Skills</p>	<p>C.O.[6]. Apply compression techniques to IT projects to optimize timelines and resources, ensuring project delivery within constraints.</p> <p>C.O.[7]. Develop and demonstrate critical thinking and analytical skills in addressing complex project management issues and challenges. Apply Critical Path Method (CPM) and identify critical paths, critically assess stakeholder management strategies, and evaluate both predictive and adaptive project life cycles to choose the most appropriate approach for specific projects.</p> <p>C.O.[8]. Prepare and present detailed project management proposals, demonstrating a clear understanding of project requirements.</p> <p>C.O.[12] Utilise advanced collaborative tools and techniques, including AI tools, to enhance communication, coordination, and productivity within project teams.</p>

	<p>3. Competencies (Responsibility and autonomy)</p>	<p>C.O.[9]. Analyse the structural elements of software projects (software project management) autonomously.</p> <p>C.O.[10]. Independently monitor all phases of a project, ensuring adherence to timelines, budgets, and quality standards</p> <p>C.O.[11]. Independently evaluate the outputs of a project to ensure deliverables meet stakeholder expectations and project objectives.</p>	
Prerequisites		Required	
Course Content	<p><b>1st week:</b> Course Overview and Introduction to Project Management [CLO1]</p> <p><b>2nd week:</b> Project Strategy, Processes, and Methods – Predictive VS Agile Project Management [CLO1, CLO2, CLO3]</p> <p><b>3rd week:</b> Project Initiation Management: Project selection, Creating the business case, financial value of Projects, project scoring models, project charter, Project Scope Management: WBS and Smart Objectives [CLO1, CLO2, CLO3, CLO4]</p> <p><b>4th week:</b> Project Schedule Management Part 1: Introduction to Network Diagrams (AON and AOA) [CLO1, CLO2, CLO4, CLO6]</p> <p><b>5th week:</b> Project Schedule Management Part 2: PERT Evaluation, Critical Path Analysis, and Project Completion [CLO1, CLO2, CLO4, CLO6]</p> <p><b>6th week:</b> Project Resource Management: Allocating resources to schedules, Resource Smoothing and Levelling [CLO1, CLO2, CLO6]</p> <p><b>7th week:</b> Project Risk Management: Identifying, analysing, and mitigating risk, qualitative and quantitative risk management [CLO1, CLO2, CLO5]</p> <p><b>8th week:</b> Project cost management: Creating the budget and controlling costs with EVM [CLO1, CLO2, CLO4]</p> <p><b>9th week:</b> Accelerating Projects: Project Crashing [CLO1, CLO2, CLO4]</p> <p><b>10th week:</b> Project Stakeholder Management: Stakeholders, Role of the Project Manager, the Team, Coursework Feedback Session [CLO1, CLO2, CLO6]</p> <p><b>11th week:</b> Advanced topics in Planning and Scheduling: Introduction to Scrum Part 1 [CLO1,CLO2 CLO3, CLO6]</p> <p><b>12th week:</b> Advanced topics in Planning and Scheduling: Introduction to Scrum Part 2 [CLO1,CLO2 CLO3, CLO6]</p> <p><b>13th week:</b> Final Course Revision: Practice and review exercises, Exam Q&amp;A [CLO1, CLO2, CLO3, CLO4, CLO5, CLO6]</p>		

Teaching Methodology	<p>Mix of lectures, active learning techniques, and activities. More precisely:</p> <ul style="list-style-type: none"> <li>▪ Interactive lectures</li> <li>▪ Group activities/discussions</li> <li>▪ Interactive activities and tutorials</li> <li>▪ Formative and Summative Assignments</li> <li>▪ Case study discussion and peer review exercises</li> <li>▪ Web links and educational videos</li> <li>▪ Online quizzes</li> </ul> <p>The course, in addition to the exam and 4 interactive activities, is assessed through one major piece of individual coursework. Students are expected to plan and manage a project based on a given business environment, create the project's schedule and identify the critical path, evaluate, and manage risks, identify costs and create the budget, identify stakeholders, and perform stakeholders' analysis.</p> <p>Formative assessment also forms a key part of the course and is a vital way to monitor and further support students' learning. The goal of formative assessment is to help enhance students' understanding and knowledge, receive detailed feedback on the work submitted, and further improve their knowledge and understanding prior to the submission of their summative assessment.</p>								
Bibliography	<p><b>Required textbook</b></p> <ol style="list-style-type: none"> <li>1. Maylor H. and L. Turner 2022. Project Management, 5<sup>th</sup> Edition. Pearson</li> <li>2. Schwalbe, K. 2021. An Introduction to Project Management, Seventh Edition: Predictive, Agile, and Hybrid Approaches, 7<sup>th</sup> edition</li> <li>3. Pinto, K.J., 2019. Project Management: Achieving Competitive Advantage, 5th Edition, Pearson. ISBN-13: 978-0-13-473045-5</li> <li>4. Schwalbe, K. 2019. Information Technology Project Management. 9th edition. Cengage. ISBN-13: 9781337101356</li> </ol> <p><b>Further reading</b></p> <ol style="list-style-type: none"> <li>5. Girvan and Paul. 2017. Agile and Business Analysis: Practical guidance for IT professionals, CS, The Chartered Institute for IT; 1st edition</li> <li>6. Schwaber, K and Sutherland, J. 2020. The Scrum Guide: The Rules of the Game</li> <li>7. Stellman and Greene. 2014. Learning Agile: Understanding Scrum, XP, Lean, and Kanban. O'Reilly Media</li> </ol>								
Assessment		Percentage	CLO1	CLO2	CLO3	CLO4	CLO5	CLO6	

	4 Interactive Activities	20%	√	√	√	√		√	
	Main Coursework	20%		√	√		√	√	
	Final Exam	60%		√	√	√	√	√	
Language	English								