

Course Code	ADU5615					
Level	05					
Course Title	Project in Mathematics					
Credit value	06					
Core/Optional	Optional					
Prerequisites	Limited Registration					
Hourly breakdown	Theory		Practical hours	Independent Learning	Assessments	Total hrs
	Meeting with Assigned supervisors 50 hours		Research Project-450 hours	Preparation and writing the Interim report and preparation for oral presentation -42 hrs. Preparation and writing the final report and preparation for Viva Voce Examination 57 hrs	Oral Presentation (Interim report) -30 minutes. Viva Voce Examination (Final Report) -One Hour	
Course Aim/s.	<ol style="list-style-type: none"> 1. Provide experience with using mathematical knowledge and concepts to understand and solve a problem (Problem in real life or problem in specific field) 2. Provide experience with relevant literature survey, experience with writing and presenting project proposals, and project reports. 					
PLOs addressed by course	<p>PLO1: Knowledge: Explain the fundamental, principles and broader knowledge pertaining to the chosen science disciplines offered for the degree.</p> <p>PLO2: Practical Knowledge and Application. Demonstrate the competency to use the knowledge and practical skills appropriately.</p> <p>PLO3: Communication: Demonstrate the competency in communicating efficiently and effectively to present information, ideas and concepts to the scientific community as well as to the wider society.</p> <p>PLO4: Individual Work, Team Work and Leadership: Demonstrate the competency in working independently and in groups in addressing issues in multi-disciplinary environments and completing the tasks on time through collaborative learning while exhibiting leadership.</p> <p>PLO5: Creativity and Problem Solving: Identify and analyze problems using quantitative and/or qualitative approaches using scientific methodology to provide valid conclusions.</p> <p>PLO6: Adaptability and Flexibility: Demonstrate the ability to adapt to diverse working environments using flexible approaches and strategies.</p> <p>PLO7: Information and Communication Technology Literate: Demonstrate the competency of using Information and Communication Technology for numerical and statistical analysis, and in day to day applications.</p> <p>PLO8: Vision for Life: Develop the capacity to project for future through identifying self-directed goals and continuously targeting towards them for self-improvement by undertaking further studies.</p> <p>PLO9: Lifelong Learning: Develop the capacity to foresee new trends and their impacts and continuously update knowledge and develop skills willingly to meet those future challenges.</p>					
Course Learning Outcomes (CLO)	<p>At the completion of this course student will be able to</p> <p>CLO1: Develop the ability to identify mathematical concepts behind a problem in real life or problem in specific field. Develop rational thinking. (PLO1,3,4,5,7,8,9)</p> <p>CLO2: Develop the ability to do a relevant literature survey on related research on a specific problem. (PLO1,5,7,8,9)</p> <p>CLO3: Develop the ability to carrying out a research on specific issue.(PLO1,2,3,4,5,6,7,8,9)</p> <p>CLO4: Develop the ability to write project proposals and project reports and develop the presentation skills. (PLO1,2,3,4,5,7,8,9)</p>					
Content (Main topics, sub topics)	<p>Supervisor's role and the student's role when carrying out a project proposal form, How to carry out the project, Step by step instructions to start the project, Step by step instructions to write the project report, Selection of a problem, Studying the problem and its environment, Collection of data and formulation of required theory, Application of theory in the problem, Possible project topics, Samples and population, A sample and a sample survey, Some methods of choosing a sample, Random Sampling, Stratified sampling, Descriptive Statistics, Presentation of data, Chi square goodness of fit test, Regression Analysis</p>					

Teaching Learning methods (TL)	Self-Learning/Independent learning of Self-study <ul style="list-style-type: none"> ▪ Instructional Material (IL) ▪ Online Activities (OL) ▪ Reference Work (RF) ▪ Compulsory contact sessions <ul style="list-style-type: none"> ▪ Contact sessions ▪ Research Project ▪ Assessments (AS) and Feedback –PS, VV, RF 	
Assessment strategy	Overall Continuous Assessment Mark (OCAM): 40.%	Final Assessment: 60%
	OCAM is computed from the marks of the Interim report and the oral presentation on the interim report by taking 60% of interim report and 40% of the oral presentation.	The final examination mark (FEM) will be based on a Viva Voce examination and the Final report with a weight of 0.4 for the Viva Voce Examination and 0.6 for the final report
Recommended Readings:	<ul style="list-style-type: none"> • As appropriately decided by the student and the supervisor based on the nature of project. 	