

DEPARTMENT OF COMPUTER SCIENCE WITH CYBER SECURITY

Programme: B.Sc., Computer Science with Cyber Security

PO No.	Programme Outcomes Upon completion of the B.Sc., Degree Programme the graduate will be able to
PO-1	Understanding the professional, ethical, legal, security and social issues and responsibilities for the IT profession
PO-2	Acquire the knowledge and apply the programming skills into one's own work as a member and leader in a team to manage projects in multidisciplinary environments
PO-3	Apply the knowledge of cyber security to solve security threats from hackers and criminals to keep the data secure
PO-4	Produce the entrepreneurs who can innovate and develop software products in a secure way
PO-5	Design, implement and evaluate a computational system to meet desired goals within realistic constraints

PSO No.	Programme Specific Outcomes Upon completion of these courses the student would
PSO-1	To train and develop the graduates towards excellence through necessary soft skills for communicating with industrial experts
PSO-2	To make a positive impact on society through preventing and reducing hacking of security by applying a wide range of cyber security technical skills
PSO-3	To prepare students to be continuous learners in a connected world and imbibe professional skills.
PSO-4	To motivate the students for meeting the industry needs by applying security practices and strategies in real time software project development
PSO-5	To strengthen the Industry-Academia interface that will help the graduates to emerge as leaders in academics or an inspiring revolutionary in entrepreneurship

Course Title	DATA STRUCTURES USING C PROGRAMMING	
CODE	22CYUC101	
CO No.	Course Outcomes	Knowledge Level
CO-1	Understand the concepts of C like variables, data types, manage I/O operations and operators.	K2
CO-2	Apply functions, strings and Arrays in C using data structure.	K3
CO-3	Implementing structures, unions and pointers	K4
CO-4	Explore how to use the concepts of Data Structures in C	K1
CO-5	Implement the data structure concepts like array, sorting and searching using C	K4

Course Title	DATA STRUCTURES USING C PROGRAMMING LAB	
CODE	22CYUCP01	
CO No.	Course Outcomes	Knowledge Level
CO-1	Construct C programs using arrays and operators	K1
CO-2	Demonstrate branching and looping concepts	K2
CO-3	Construct programs using Strings and Functions	K3
CO-4	Make use of pointers in C programs	K4
CO-5	Build Code for Problems in Data structures	K3

Course Title	MATHEMATICS -I Applied Mathematics	
CODE	22AIUA101/ 22CYUA101	
CO No.	Course Outcomes	Knowledge Level
CO-1	Identify and Apply the matrix operations for solving any matrix related problems	K1,K2&K3
CO-2	Determine and apply appropriate numerical methods for solving System of Linear Equations	K2,K3&K4
CO-3	Compare and distinguish the use of differentiation / integration methods and plan for solving scientific problems.	K3,K4
CO-4	Apply appropriate method to find the initial basic feasible solution and solve the transportation and assignment problems towards optimality	K3
CO-5	Exercise and experiment the network construction by employing PERT for project planning and CPM for scheduling	K2,K3

Course Title	DIGITALFUNDAMENTALSAND COMPUTER ARCHITECTURE	
CODE	22CYUC202	
CO No.	Course Outcomes	Knowledge Level
CO-1	Acquire knowledge on number systems and Boolean algebra	K2
CO-2	Ability to understand the digital logic circuits and Boolean functions	K3
CO-3	Acquire knowledge of input and output Organizations	K3
CO-4	Outline the fundamentals of data transfer Techniques	K2
CO-5	Outline the concept of Memory Organization and mapping Techniques	K2

Course Title	FUNDAMENTALS OF CYBER SECURITY	
CODE	22CYUC203	
CO No.	Course Outcomes	Knowledge Level
CO-1	Understand the cybercrime threats and security in computer systems and networks.	K2
CO-2	Describe the various legal responses in cybercrime.	K3
CO-3	Identify and detect the various hacking.	K2
CO-4	Identify and prevent the mobile and web applications threats in cyber security.	K3
CO-5	Apply the real time cyber forensics results.	K3

Course Title	LINUX AND SHELL PROGRAMMING LAB	
CODE	22CYUCP02	
CO No.	Course Outcomes	Knowledge Level
CO-1	Develop Linux utilities to perform File processing, Directory handling and User Management	K3
CO-2	Develop shell scripts using pipes, redirection, filters and Pipes	K3
CO-3	Develop shell scripts to display system configuration	K3
CO-4	Develop simple shell scripts using conditional statements	K3
CO-5	Develop simple shell scripts for files system	K3

Course Title	MATHEMATICS – II (COMPUTATIONAL STATISTICS)	
CODE	22CYUA202/22AIUA202	
CO No.	Course Outcomes	Knowledge Level
CO-1	Analyze and infer the type of data for using measures of Central Tendency.	K1,K2&K3
CO-2	Analyze and compare two or more different data sets using Measures of Dispersion.	K2,K3&K4
CO-3	Understand moments as a convenient and unifying method for summarizing several descriptive statistical measures.	K3,K4
CO-4	Recognize and apply the correlation/regression methods for finding the association between the dependent and independent variables.	K2,K3&K4
CO-5	Analyze the expected outcomes of given data using discrete uniform distribution, Binomial Distribution and Poison Distribution	K2,K3