

II Year-I Semester

	COURSE: MATHEMATICS IV _ MA301BS
Subject Code	Course Outcomes
MA301BS.1	Students will able to analyze the complex functions with reference to their analyticity, integration using Cauchy's integral theorem
MA301BS.2	Student able to find the Taylor's and Laurent's series expansion of complex functions
MA301BS.3	Students will able solve the improper integrals and the bilinear transformation
MA301BS.4	Students will able to find Fourier series representation of a function in single variable and use it to solve wave, diffusion and Laplace equation.
MA301BS.5	Students will able to solve partial differential equations and apply them in different engineering problems.

													CO
СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	Average
MA301BS .1	3	3	3	2	2	1	0	0	0	1	1	2	1.5
MA301BS .2	3	2	2	2	1	2	0	0	0	1	2	1	1.33
MA301BS .3	3	3	2	2	2	1	0	0	1	2	1	1	1.5
MA301BS .4	3	3	3	3	2	1	0	0	1	1	1	1	1.58
MA301BS .5	3	2	2	2	2	1	0	0	1	1	1	1	1.33
PO													
Average	3	2.6	2.4	2.2	1.8	1.2	0	0	0.6	1.2	1.2	1.2	1.45



II Year-I Semester

	COURSE: Data Structures THROUGH C++_ CS302ES											
Subject Code	Course Outcomes											
CS302ES.1	Summarize object oriented programming concepts and understand the concepts of C++											
CS302ES.2	Explain basic operations of stacks, queues, and linked0lists											
CS302ES.3	Understand the basic operations of trees and its types											
CS302ES.4	Understand various sorting, searching and hashing techniques for a given problem											
CS302ES.5	Demonstrate graph traversal algorithms and height balancing in AVL and B trees											

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	CO
													Average
CS302ES.1	3	2	3	2	3	2	1	1	1	1	1	1	1.75
CS302ES.2	3	1	3	2	3	1	1	1	1	1	1	1	1.58
CS302ES.3	1	1	2	2	2	1	1	1	1	1	1	1	1.25
CS302ES.4	2	1	3	2	3	1	1	1	1	1	1	1	1.5
CS302ES.5	3	1	3	2	3	1	1	1	1	1	1	1	1.58
PO													
Average	2.4	1.2	2.8	2	2.8	1.2	1	1	1	1	1	1	1.53



II Year-I Semester

	COURSE: Digital Logic Design _ CS304ES
Subject Code	Course Outcomes
CS304ES.1	Recognize the conversion of one number system to other Number system
CS304ES.2	Classify different logic circuits by using Universal gates
CS304ES.3	Execute Boolean algebra and K0map as a tool to simplify and design logic circuits
CS304ES.4	Implement and analyze the operation of Combinational and Sequential Circuits
CS304ES.5	Check various types of sequential circuits like counters and universal Shift Registers and Understand Memories and Arithmetic and Logic micro operations

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	CO Average
CS304ES .1	3	3	1	0	0	2	0	0	0	0	0	0	0.75
CS304ES.2	3	3	1	0	0	2	0	0	0	0	0	0	0.75
CS304ES.3	3	3	1	0	0	2	0	0	0	0	0	0	0.75
CS304ES.4	3	2	2	0	0	3	0	0	0	0	0	0	0.83
CS304ES.5	3	2	1	0	0	3	0	0	0	0	0	0	0.75
РО													
Average	3	2.6	1.2	0	0	2.4	0	0	0	0	0	0	0.77



II Year-I Semester

COUR	SE: Mathematical Foundations and Computer Systems_ CS303ES
Subject Code	Course Outcomes
CS303ES.1	Understand mathematical logic and predicates
CS303ES.2	Explain set theory, functions and algebraic structures
CS303ES.3	Demonstrate the ability to describe computer programs using Recursive Functions
CS303ES.4	Apply basic Counting techniques to solve Combinatorial Problems
CS303ES.5	Utilize generating functions and substitutions to solve recurrence relations and demonstrate the Graphs and Trees as tools to visualize and simplify situations

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	СО
													Average
CS303ES.1	3	2	1	1	1	1	0	0	1	1	1	1	1.08
CS303ES.2	3	2	2	1	1	1	0	0	1	1	1	1	1.17
CS303ES.3	2	3	2	1	1	1	0	0	1	1	1	1	1.17
CS303ES.4	2	3	1	1	1	1	0	0	1	1	1	1	1.08
CS303ES.5	2	3	1	1	1	1	0	0	1	1	1	1	1.08
PO													
Average	2.4	2.6	1.4	1	1	1	0	0	1	1	1	1	1.12



II Year-I Semester

COURS	COURSE: Object Oriented Programming Through Java _ CS305ES											
Subject Code	Course Outcomes											
CS305ES.1	Summarize object oriented programming concepts											
CS305ES.2	Develop applications using different types of inheritances											
CS305ES.3	Create and use user defined packages, streams and utilities											
CS305ES.4	Analyze and recover runtime exceptions arise in the applications											
CS305ES.5	Apply parallel processing applications using threads and develop internet based interactive applications using peripheral functions (API)											

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	CO
													Average
CS305ES.1	3	2	3	2	3	2	1	1	1	1	1	1	1.75
CS305ES.2	3	1	3	2	3	1	1	1	1	1	1	1	1.58
CS305ES.3	1	1	2	2	2	1	1	1	1	1	1	1	1.25
CS305ES.4	2	1	3	2	3	1	1	1	1	1	1	1	1.5
CS305ES.5	3	1	3	2	3	1	1	1	1	1	1	1	1.58
PO													
Average	2.4	1.2	2.8	2	2.8	1.2	1	1	1	1	1	1	1.53



II Year-I Semester

	COURSE: IT Workshop Lab _ CS307ES
Subject Code	Course Outcomes
CS307ES.1	Apply knowledge to assemble the computer
CS307ES.2	Learn types software installations
CS307ES.3	Ability to solve various trouble shooting
CS307ES.4	Make use of MS Office package
CS307ES.5	Design the documents and presentations by using MS Word and Power Point Presentation and
	Design the tabular and graphical representation of budget sheet etc using MS Excel

Mapping

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	CO
													Average
CS307ES.1	2	1	3	0	2	1	1	0	0	2	1	1	1.17
CS307ES.2	2	1	2	0	2	1	1	0	0	2	1	1	1.08
CS307ES.3	2	1	2	0	3	1	1	0	0	3	1	1	1.25
CS307ES.4	2	1	3	0	3	1	1	0	0	3	1	1	1.33
CS307ES.5	2	1	3	0	3	1	1	0	0	3	1	1	1.33
PO													
Average	2	1	2.6	0	2.6	1	1	0	0	2.6	1	1	1.23



II Year-I Semester

COURSE: Object Oriented Programming Through Java Lab _ CS308ES								
Subject Code	Course Outcomes							
CS308ES.1	Make use of JAVA SDK environment to create 0 debug and run java programs							
CS308ES.2	Create applications based on code reusability							
CS308ES.3	Develop programs using threads							
CS308ES.4	Develop and debug real time problems using exception handling							
CS308ES.5	Create interactive applications using event handling mechanisms and develop applications using utilities.							

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	CO
													Average
CS308ES.1	3	2	3	2	3	2	1	1	1	1	1	1	1.75
CS308ES.2	3	1	3	2	3	1	1	1	1	1	1	1	1.58
CS308ES.3	1	1	2	2	2	1	1	1	1	1	1	1	1.25
CS308ES.4	2	1	3	2	3	1	1	1	1	1	1	1	1.5
CS308ES.5	3	1	3	2	3	1	1	1	1	1	1	1	1.58
PO													
Average	2.4	1.2	2.8	2	2.8	1.2	1	1	1	1	1	1	1.53



II Year-I Semester

COURSE: Environmental Science and Technology_MC300 ES								
Subject Code	Course Outcomes							
	understand technologies on the basis of ecological principles principles and							
MC300ES.1	environmental regulations							
	evaluate technologies on the basis of ecological principles principles and environmental							
MC300ES.2	regulations							
	develop technologies on the basis of ecological principles principles and environmental							
MC300ES.3	regulations							
MC300ES.4	understand the impacts of developmental activities and mitigation measures							
MC300ES.5	understand the importance of ecological balance for sustainable development							

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	СО
													Average
MC300ES.1	1	1	0	1	2	3	3	2	2	3	2	3	1.92
MC300ES.2	1	1	1	1	1	3	3	2	2	3	2	3	1.92
MC300ES.3	1	0	1	1	2	3	3	2	2	3	2	3	1.92
MC300ES.4	1	1	1	1	2	2	3	2	2	2	2	2	1.75
MC300ES.5	1	1	1	2	2	2	3	2	2	3	2	2	1.92
PO													
Average	1	0.8	0.8	1.2	1.8	2.6	3	2	2	2.8	2	2.6	1.88