CO-PO Matrices of Courses:

MCA-I SEMESTER-III

1. SEM III Subject Code: CC301: Java Programming

Course Code	Course Outcomes
CC301-1	1. Explain and Apply the Object Oriented Concepts for Solving Real problem
CC301-2	2. Create, Debug and Run Simple Java Programs using the Java SDK environment.
CC301-3	3. Develop the Small Applications using networking and Multithreading.
CC301-4	4. Apply Events Management and Layout Managers Using AWT, Swing for Developing the Software for Various Problems.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
C301.1	3	2	3	2	1	-	-	2
C301.2	3	2	2	3	1	-	-	2
C301.3	3	3	3	3	2	-	-	2
C301.4	3	2	3	3	2	1	-	2
Average	**3**	**2.25**	**2.75**	**2.75**	**1.5**	**1**	**-**	**2**

2. SEM III Subject Code: CC302: Data Analytics

Course Code	Course Outcomes
CC302-1	1. Understand basics of Data analysis.
CC302-2	2. Identify tools available for data analytics in python.
CC302-3	3. Evaluate different libraries of python for data analytics
CC302-4	4. Analyze visualization tools for graphical representation of data in python

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
C302.1	3	2	1	1				1
C302.2	2	1	1	3				1
C302.3	2	2	2	3				2
C302.4	1	1	2	3				2
Average	**2**	**1.5**	**1.5**	**2.5**				**1.5**

3. SEM III Subject Code: CC303: Cyber Security

Course Code	Course Outcomes
CC303-1	1. Understand the fundamentals of Cyber security vulnerabilities.
CC303-2	2. Demonstrate different Cyber Security techniques.
CC303-3	3. Apply different Internet and Cyber Security Controls.
CC303-4	4. Describe Information Technology Act 2000.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
C303.1	3	3	1	2	1		2	2
C303.2	2	2	2	3	1		3	2
C303.3	2	3	3	3	1	1	3	3
C303.4	1	2	1	1			3	1
Average	**2**	**2.5**	**1.75**	**2.25**	**1**	**1**	**2.75**	**2**

4. SEM III Subject Code: AEC305: Entrepreneurship Development

Course Code	Course Outcomes
AEC305-1	1. Understand the concept and significance of Entrepreneurship
AEC305-2	2. Understand eco-system available for entrepreneurship development
AEC305-3	3. Analyze risk and opportunities involved in IT business projects
AEC305-4	4. Prepare feasibility report for a project

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
AEC305.1	1	1	2		1	2	2	2
AEC305.2		2	2		1	2	2	2
AEC305.3	1	3	3	1		3	2	2
AEC305.4	1	3	3	1	1	3	1	2
Average	**1**	**2.25**	**2.5**	**1**	**1**	**2.5**	**1.75**	**2**

5. **SEM III Subject Code: DSE304: Cloud Computing**

Course Code	Course Outcomes
Course Code	Course Outcomes
DSE304-1	Differentiate between different types and services of cloud computing.
DSE304-2	Assess the role of virtualization in cloud computing.
DSE304-3	Identify security issues in cloud computing.

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
DSE304.1	2	2	1	2	1			2
DSE304.2	3	2	2	3				2
DSE304.3	2	3	2	2			3	2
DSE304.4	2	3	2	2	1	3	3	2
Average	**2.25**	**2.5**	**1.75**	**2.25**	**1**	**3**	**3**	**2**