INDUS UNIVERSITY

DEPARTMENT OF COMPUTER SCIENCE

Departmental Vision:

The department of Computer Applications aims to generate groomed, technically competent and skilled intellectual professionals to meet the current challenges of the modern computing industry with greater social impact.

Departmental Mission:

The missions of department are:

M1: To offer high-grade, value-based Graduate and Post-graduate program in the field of Computer Applications.

M2: To provide conducive environment so as to achieve excellence in teaching-learning, research and development activities.

M3: To facilitate students to nurture skills and professional competency to meet the ever-changing needs of society and industry.

M4: To provide students with the tools to become productive, participating global citizens and life-long learners.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1. Ability to demonstrate and implement model tools and technology to meets industry requirement.

PSO2. Able to incorporate extensive computer concept and interdisciplinary knowledge into computer application domain.

Program Outcomes (POs)

MCA graduates will be able to:

- **PO1.** Computer knowledge: Apply the knowledge of mathematics, science, computer fundamentals and specialization to the solution of complex problems.
- **PO2.** Problem analysis: Identify, formulate, review research literature, and analyze complex computer science problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and computer sciences.
- PO3. Design/development of solutions: Design solutions for complex computer science

problems and design system components or processes that meet the specified needs with appropriate consideration for cultural, social environment.

- **PO4.** Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO5.** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern IT tools including prediction and modeling to complex activities with an understanding of the limitations.
- **PO6.** The digital youth and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional skill-set.
- **PO7.** Environment and sustainability: Understand the impact of the professional computer science solutions in social and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8.** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the computer science practice.
- **PO9.** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10.** Communication: Communicate effectively on complex activities with the computer science community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO11.** Project management and finance: Demonstrate knowledge and understanding of the computer and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO12.** Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

A.Y.2020-2021

Semester: V

Subject Name: Web Development Tools

(MCA-508)

- CO1. Identify the benefits of using of .NET MVC and the need for MVC (BT-1)
- CO2. Understands how to work with Models, Views (Razor) and Controllers, How to use Various ActionResult, How to use Scaffolding Templates (BT-2)
- CO3. Apply Validations with Annotations, Authentication with MVC application (BT-3)
- CO4. Experiment of AJAX, JSON, JQuery with in a MVC Application (BT-4, 5)
- CO5. Design and development of Entity Framework Code First Methodology (BT-6)
- CO6. Develop Web Applications using MVC Design Pattern and Routing (BT-6)

COURSE OUTCOME (CO) and PROGRAM OUTCOME (PO) Matrix

(1 - Low, 2-Medium, 3- High)

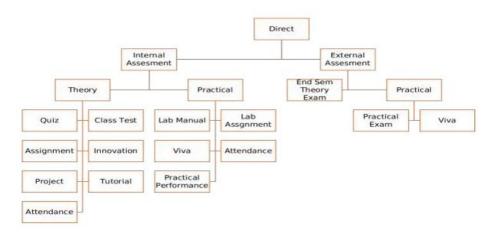
(Average of COs course wise for each POs)

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO12
CO 1	3	-	3	-	1	-	-	-	-	-	-	1
CO 2	3	-	3	ı	2	-	-	-	-	-	•	1
CO 3	2	-	3	1	3	-	-	1	-	-	•	2
CO 4	2	-	2	ı	2	-	-	-	1	-	•	3
CO 5	1	-	2	ı	2	-	-	-	2	-	•	2
CO 6	2	-	3	•	3	-	-	-	3	1	-	1
MCA-50 2	2.1 7	0	2.67	1	2.17	0	0	1	2	1	0	1.67

COURSE OUTCOME and PROGRAM SPECIFIC OUTCOME Matrix

CO	PSO 1	PSO 2
CO 1	1	1
CO 2	1	2
CO 3	2	2

MCA-502	1.50	2.33
CO 6	2	3
CO 5	1	3
CO 4	2	3



Direct Assessment method – The knowledge and skills learnt by the students are assessed directly from their performance through internal assessment and external assessment processes.

External assessment- Performance of student is recorded in university theory exams, laboratory exams and project evaluation.

Internal assessment- Performance of student is recorded through class assignments and tutorials, internal assessment tests, laboratory assignments, seminars and project progress review and evaluation.

Attainment of Course Outcomes (CO's) Test

For End Semester Theory and Practical Exams

- 1. Attainment Level 1: If < 45% students scoring ≥60% marks
- 2. Attainment Level 2: If >45-75% students scoring ≥60% marks
- 3. Attainment Level 3: If >75-100% students scoring ≥60% marks

For Internal Theory and Practical Exams

- 1. Attainment Level 1: If <45% students scoring ≥75% marks
- 2. Attainment Level 2: If >45-75% students scoring ≥75% marks
- 3. Attainment Level 3: If >75-100% students scoring ≥75% marks

Internal Component with COs mapping

Component 1: Mid Semester Examination (CO1, CO2, CO3, CO4, CO5, CO6) (40 marks)

Component 2: Presentation (CO1, CO2, CO3, CO4, CO5, CO6)

(05 marks)

Component 3: Assignment (limited to 2) / Case Study (CO1, CO2, CO3, CO4, CO5,

CO6) (20 marks)

Component 4: Attendance (05 marks to all >80% attendance)

Course Attainment Academic Year 2020-2021

Course	Name	with	Web Development Tools - MCA-508
Code			
Class			5 th Semester, MCA
Faculty 1	Name		Jalpa Poriya

CO Attainment Internal component	1	2	3	4	Internal assessment component total (1 to 4)
CO 1					
CO 2					
CO 3					
CO 4					
CO 5					
CO 6					

Indirect Attainment from the student's feedback for each COs

S. N	Course Outcome	L	M	Н
1	Identify the benefits of using of .NET MVC and the need for MVC			
2	Understands how to work with Models, Views (Razor) and Controllers, How to use Various ActionResult, How to use Scaffolding Templates			
3	Apply Validations with Annotations, Authentication with MVC application			
4	Experiment of AJAX, JSON, JQuery with in a MVC Application			
5	Design and development of Entity Framework Code First Methodology			
6	Develop Web Applications using MVC Design Pattern and Routing			

1-Low (L), 2-Medium (M), 3- High (H)

Total student given feedback:

S.	Course Outcome	Value	
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N		
1	Identify the benefits of using of .NET MVC and the need for MVC	
2	Understands how to work with Models, Views (Razor) and Controllers, How to use Various ActionResult, How to use Scaffolding Templates	
3	Apply Validations with Annotations, Authentication with MVC application	
4	Experiment of AJAX, JSON, JQuery with in a MVC Application	
5	Design and development of Entity Framework Code First Methodology	
6	Develop Web Applications using MVC Design Pattern and Routing	·

% CO Attainmen t	Interna l Exam	Interna l Exam *0.6	End sem Exa m	End sem Exa m *0.4	Direct Attainmen t (DA)	Indirect Attainmen t (IA)	Overal l = 0.8*D A + 0.2*IA				
CO 1											
CO 2											
CO 3											
CO 4											
CO 5											
CO 6											
	Overall Course Attainment										
	Set Target for the course										
				Course	Course Attainment Status(Yes/No)						

Best Performing CO:
Least Performing CO:

Observations:

Plan of Action: