### **INDUS UNIVERSITY**

### DEPARTMENT OF COMPUTER SCIENCE

#### **Department Vision Statement**

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.

#### **Department Mission**

The mission of the Department is

**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 the core concepts of Information Technology, principles and Tools to design IT systems effectively.

**PSO2.** Able to prepare students with the base of computer science skills and practical knowledge to meets social and global requirement.

### Program Outcomes (POs)

**PO1**. IT knowledge: Apply the knowledge of mathematics, science, IT fundamentals and specialization to the solution of complex problems.

**PO2**. Problem analysis: Ability to identify and formulate problems related to information technology and apply knowledge to solve industry problems.

**PO3**. Design/development of solutions: Ability to design, develop, test and maintain system as per the needs of industry.

**PO4**. Conduct investigations of complex problems: Ability to apply mathematical models, algorithms in the computer based system.

**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. Ethics: Recognize and apply the ethical role and responsibility.

**PO8**. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary.

**PO9**. Communication: Communicate effectively on complex activities with the IT 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.

**PO10**. Project management and finance: Demonstrate knowledge and understanding of the IT 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.

**PO11**. Life-long learning: Ability to engage in lifelong learning in the broadest context of technological change.

#### A.Y.2020-2021

#### **SEMESTER-III**

#### Subject Name: Web Development Tools

#### (MSC0311)

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**

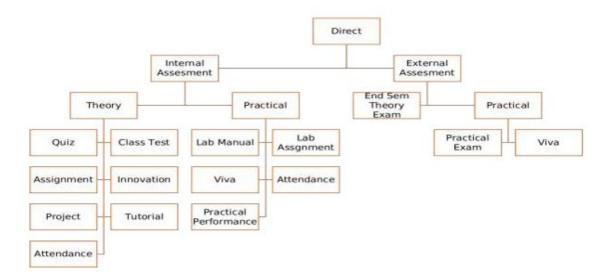
(1 - Low, 2-Medium, 3- High)

	PO1	PO2	PO 3	<b>PO 4</b>	PO 5	PO 6	<b>PO</b> 7	PO8	PO9	PO10	PO11
<b>CO</b> 1	3	-	3	-	1	1	-	-	-	-	1
CO 2	3	-	3	-	2	1	-	-	-	-	1
<b>CO 3</b>	2	-	3	1	3	1	1	-	I	-	2
<b>CO 4</b>	2	-	2	-	2	-	-	1	-	-	3
CO 5	1	-	2	-	2	-	-	2	-	-	2
CO 6	2	-	3	-	3	-	-	3	1	-	1
MSC 0306	2.17	0	2.67	1	2.17	0	1	2	1	0	1.67

(Average of COs course wise for each POs)

### COURSE OUTCOME and PROGRAM SPECIFIC OUTCOME Matrix

CO	PSO 1	PSO 2
CO 1	1	1
CO 2	1	2
CO 3	2	2
<b>CO 4</b>	2	3
CO 5	1	3
CO 6	2	3
MSC0306	1.50	2.33



**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  $\ge 60\%$  marks
- 2. Attainment Level 2: If >45-75% students scoring  $\geq$ 60% marks
- 3. Attainment Level 3: If >75-100% students scoring  $\ge 60\%$  marks

For Internal Theory and Practical Exams

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

Weights of Attainments are assigned as per University Evaluation criteria as below

For A.Y. 2020-21

1. For all courses except courses marked with (*)	
INDUS University End Semester Examinations:	Weightage: 40%
Internal Assessment:	Weightage: 60%
2. Courses marked with (*)	
INDUS University External Examinations:	Weightage: 0%
Internal Assessment:	Weightage: 100%

### 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 Code	Web Development Tools – MSC0311
Class	3 <sup>rd</sup> Semester, MSc IT
Faculty 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	Μ	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. N	Course Outcome	Value
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)	Overall = 0.8*DA + 0.2*IA
CO 1							
CO 2							
CO 3							
<b>CO 4</b>							
CO 5							
CO 6							
	Overall Course Attainment						
	Set Target for the course						
	Course Attainment Status(Yes/No)						

# **Best Performing CO:**

# **Least Performing CO:**

Observations:

- 1
- 2
- 3

Plan of Action:

1

2

**Jalpa Poriya** Faculty Signature