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. Ability to implement computer science concept and interdisciplinary knowledge into computer application domain.

Program Outcomes (POs)

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-III

Subject Name: Object Oriented Analysis & Design (MCA-308)

Course Outcomes

CO 1: Understand the concept of Object Oriented approach and relate it with UML diagrams. (BT- 2)

CO 2: Articulate the notations and their meaning in terms of UML diagram. (BT- 3)

CO 3: Relate and illustrate various UML diagrams. (BT – 3, 4)

CO 4: Design system based on UML diagrams. (BT – 6)

CO 5: Identify the system concept and connect with UML diagrams. (BT- 1)

CO 6: Connect object oriented methodology through real-time example. (BT – 4)
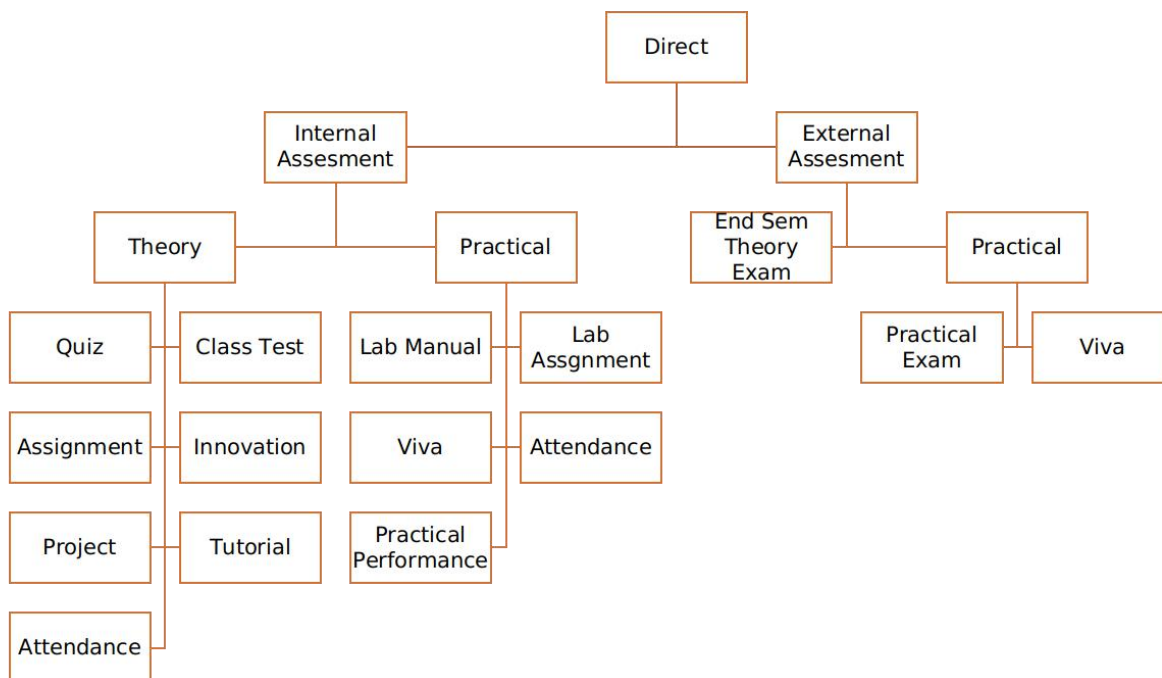
COURSE OUTCOME (CO) and PROGRAM OUTCOME (PO) Matrix

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

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	-	1	-	-	-	-	-	1	2
CO2	3	-	-	-	2	-	-	-	-	-	-	2
CO3	1	-	-	-	3	-	-	-	-	-	-	2
CO4	2	3	1	-	2	-	-	-	-	-	-	3
CO5	2	2	2	3	2	-	-	-	-	-	1	2
CO6	1	3	2	2	2	-	-	-	-	-	2	3
MCA308	2	2.5	1.75	2.5	2	0	0	0	0	0	1.33	2.33

COURSE OUTCOME and PRGORAM SPECIFIC OUTCOME Matrix

CO	PSO1	PSO2
CO1	1	1
CO2	1	2
CO3	2	1
CO4	2	2
CO5	3	2
CO6	3	3
MCA308	2	1.83

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)

For End Semester Theory 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 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

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	Object Oriented Analysis & Design – MCA308
Class	3rd Semester, MCA
Faculty Name	Kirtankumar Rathod

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

Sr. No.	Course Outcome	L	M	H
CO1	Do you understand the concept of Object Oriented Approach and relate it with UML diagrams?			
CO2	Are you able to classify the notations and their meaning in terms of UML diagram?			
CO3	Can you relate and illustrate various UML diagrams?			
CO4	Can you design system based on UML diagrams?			
CO5	Can you identify the system concept and connect			

	with UML diagrams?			
CO6	Do you connect object oriented methodology through real-time example?			

Total Student given feedback: 0 out of 0

Sr. No.	Course Outcome	Value
CO1	Do you understand the concept of Object Oriented Approach and relate it with UML diagrams?	
CO2	Are you able to classify the notations and their meaning in terms of UML diagram?	
CO3	Can you relate and illustrate various UML diagrams?	
CO4	Can you design system based on UML diagrams?	
CO5	Can you identify the system concept and connect with UML diagrams?	
CO6	Do you connect object oriented methodology through real-time example?	

% CO Attainment	Internal Exam	Internal Exam *0.6	End sem Exam	End sem Exam *0.4	Direct Attainment (DA)	Indirect Attainment (IA)	Overall = 0.8*DA + 0.2*IA
CO 1							
CO 2							
CO 3							
CO 4							
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	

Plan of Action:

1	
2	

Kirtankumar Rathod
Faculty Signature