# Bharati Vidyapeeth (Deemed to be University), Pune Faculty of Management Studies Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur

MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

Sr. No.	Faculty	Code
Faculty of	of Management Studies	
1	Master of Computer Applications (MCA): 2022 NEP Program	

Bharati Vidyapeeth (Deemed to be University), Pune

Abhijeetdada Kadam Institute of Management & Social Sciences, Solapur

#### Bharati Vidyapeeth (Deemed to be University), Pune Faculty of Management Studies

#### Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur

MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

	Program	Code												
	Master of Computer Applications (MCA): 2022 NEP													
	Program													
			<del>-</del>											
Semester	Course/Subject	Code												
ı	Applied Database Management Systems	101												
	Computer Networks	102												
	Java Programming	103	<u> </u>											
	Computational Statistics	104												
	Management Concepts & Applications	105	<u> </u>											
	Lab on Applied Database Management Systems	106												
	Lab on Java Programming	107												
	MOOCS - I	108												
	Open Course - I (Any one)													
	Universal Human Values	109A	1											
	Cyber Security	109B												
	Soft Skills	109C												
	Object Oriented Coffware Francisco	201	7											
II	Object Oriented Software Engineering Cloud Computing Concepts	201	_											
	Data Structures using Python	202	_											
	Data Structures using Python  Data Warehousing & Data Mining	204												
	Web Supporting Technologies	205												
	Lab on Data Structures using Python	206	1											
	Minor Project - 1	207												
	MOOCS - II	208												
	Open Course - II (Any one)	200												
	Foreign Language	209A												
	Digital Technology	209B												
	Human Psychology at Workplace	209C												
	Transact Sychology at Workplace	2000												
III	Software Design Patterns	301	1											
	Artificial Intelligence	302	1											
	Information Security	303	1											
	EL-GRP-1 (A)	304	01A	02A	03A	04A	05A	06A	07A	08A	09A	10A	11A	12
	EL-GRP-2 (A)	305	01A	02A	03A	04A	05A	06A	07A	08A	09A	10A	11A	12
	Lab on Software Testing	306												
	Minor Project - 2	307												
	MOOCS - III	308												
	Open Course - III (Any one)													
	Social Change in Technology	309A												
	Water Management	309B												
	Economics for IT Industry	309C												
			- -											
IV	Seminar on Recent Trends in IT	401												
	EL-GRP-1 (B)	402	01B	02B	03B	04B	05B	06B	07B	08B	09B	10B	11B	12
	EL-GRP-2 (B)	403	01B	02B	03B	04B	05B	06B	07B	08B	09B	10B	11B	12
	Major Internship Project	404					·		·					

#### Bharati Vidyapeeth (Deemed to be University), Pune Faculty of Management Studies

### Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur

#### MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

	Program	Code
	Master of Computer Applications (MCA): 2022 NEP Program	
Elective Group	Cloud Computing	Code
01	Virtualization	01A
	AWS	01B
Elective Group	Data Science	Code
02	Statistical Programming in R	02A
	Introduction to Data Science	02B
Elective Croup	Linux	Code
Elective Group	Linux	
03	Linux Desktop Environment, Shell	03A
	Programming & System Administration	03B
Elective Group	Open Source Technologies	Code
04	Perl Scripting	04A
	Ruby	04B
Elective Group	Mobile Computing	Code
05	Java Script	05A
•	Android	05B
Elective Group	Dot Net Technologies	Code
06	C# Programming & Applications	06A
	ASP Dot Net with MVC	06B
Elective Group	Net Centric Technologies	Code
07	HTML 5	07A
	AJAX Programming	07B
Elective Group	Information Systems	Code
08	Recommender System	08A
	Knowledge Management	08B
Flori C	LIGT	0
Elective Group	IOT	Code
09	IoT Architecture Sensors & Fundamentals with Hands-on lab	09A
	Internet of Things: Sensing & Actuator Devices and	09B
	Smart City Use Case	
Elective Group	Big Data	Code
10	Introduction to Big Data	10A
	Business Intelligence Tools With Hadoop	10B
Elective Organi	Cubor Security	Cada
Elective Group	Cyber Security	Code
11	Introduction to Information Security Information Security Threats & Mitigation Strategies	11A 11B
	Innormation Security Threats a Mittigation Strategies	IIB
Elective Group	Data Management	Code
12	Data Management Environment	12A

12B

Industrial Data Management & Security

# Bharati Vidyapeeth (Deemed to be University), Pune Faculty of Management Studies Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur

MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

Program Outcome Code	Domain	Program Outcome Statement Our graduates
PO 1	Computational Knowledge	<u> </u>
PO 2	Problem Analysis	Apply fundamental knowledge of software engineering and various systems domain to analyze, identify, formulate and provide solutions to problems.
PO 3	Design / Development of Solutions	Design and evaluate solutions, systems, modules and processes for specified set of needs with appropriate consideration of societal values and industry expectations.
PO 4	Conduct Research in Computing 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.
PO 5	Modern Tool Usage	Use modern tools for delivering milestones like problem analysis, design, development, testing and deployment.
PO 6	Professional Ethics	Learn and inculcate professional ethics, cyber regulations, professional responsibilities and norms of professional computing world.
PO 7	Life-long Learning	Acknowledge the need for continuous professional development and practice it through self-motivated, independent learning.
PO 8	Management Domain	Involving in projects development as individual or group to solve problems in various domains and environments using computational and management skills.
PO 9	Communication Efficacy	Demonstrate efficacy in verbal and non- verbal means of communication like reports, design documentation and presentations to elaborate about complex computing.
PO 10	Innovation & Entrepreneurship	Provide conducive environment for innovation and entrepreneurship leading to solutions for betterment of society.

## Bharati Vidyapeeth (Deemed to be University), Pune Faculty of Management Studies

## Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur

MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

Program Outcome Code	Program Outcome Statement  Our graduates	Attainment S	Summary (%) Cohort
		Target^	Actual*
PO 01	Apply knowledge of computing fundamentals, mathematics and given domain to design appropriate models for a given problem and/or requirements.	80	98
PO 02	Apply fundamental knowledge of software engineering and various systems domain to analyze, identify, formulate and provide solutions to problems.	80	97
PO 03	Design and evaluate solutions, systems, modules and processes for specified set of needs with appropriate consideration of societal values and industry expectations.	80	98
PO 04	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.	80	97
PO 05	Use modern tools for delivering milestones like problem analysis, design, development, testing and deployment.	80	98
PO 06	Learn and inculcate professional ethics, cyber regulations, professional responsibilities and norms of professional computing world.	80	NA
PO 07	Acknowledge the need for continuous professional development and practice it through self-motivated, independent learning.	80	97
PO 08	Involving in projects development as individual or group to solve problems in various domains and environments using computational and management skills.	80	98
PO 09	Demonstrate efficacy in verbal and non- verbal means of communication like reports, design documentation and presentations to elaborate about complex computing.	80	NA
PO 10	Provide conducive environment for innovation and entrepreneurship leading to solutions for betterment of society.	80	97

#### Note:

**<sup>^</sup>Target Benchmark: 80% of the students should pass the course.** 

<sup>\*</sup>Actual Passed: The percentage of students that actually passed the course.

## Bharati Vidyapeeth (Deemed to be University), Pune Faculty of Management Studies Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

Program Outcome Code	Program Outcome Statement Our graduates	Attainn 2022 (	nent (%) Cohort		Semester I											Semester II												
		Target <sup>^</sup>	Actual*	101	102	103	104	105	106	107	108	109A	109B	109C	201	202	203	204	205	206	207	208	209A	209B	209C			
PO 01	Apply knowledge of computing fundamentals, mathematics and given domain to design appropriate models for a given problem and/or requirements.	80	94		97	94	61		100	100			100			100	90	90	100	100								
PO 02	Apply fundamental knowledge of software engineering and various systems domain to analyze, identify, formulate and provide solutions to problems.	80	94		97	94	61		100	100			100		84	100	90	90	100	100	100			Υ				
PO 03	Design and evaluate solutions, systems, modules and processes for specified set of needs with appropriate consideration of societal values and industry expectations.	80	94	94	97	94	61		100	100			100	100	84	100	90	90	100	100	100			Y				
PO 04	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.	80	91		97		61		100				100			100		90						Y				
PO 05	Use modern tools for delivering milestones like problem analysis, design, development, testing and deployment.	80	94		97	94	61		100	100			100	100		100		90	100					Y				
PO 06	Learn and inculcate professional ethics, cyber regulations, professional responsibilities and norms of professional computing world.	80	93		97		61					Υ	100	100		100		90						Υ	100			
PO 07	Acknowledge the need for continuous professional development and practice it through self-motivated, independent learning.	80	93		97		61				Υ	Υ	100	100		100			100			Y						
PO 08	Involving in projects development as individual or group to solve problems in various domains and environments using computational and management skills.	80	94		97		61	94					100	100		100					100				100			
PO 09	Demonstrate efficacy in verbal and non- verbal means of communication like reports, design documentation and presentations to elaborate about complex computing.	80	94		97		61					Y	100	100		100			100				Y	Y	100			
PO 10	Provide conducive environment for innovation and entrepreneurship leading to solutions for betterment of society.	80	92		97		61						100	100		100								Y				

Note:

\*Target Benchmark: 80% of the students should pass the course.

\*Actual Passed: The percentage of students that actually passed the course.

## Bharati Vidyapeeth (Deemed to be University), Pune Faculty of Management Studies Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

Program Outcome Code	Program Outcome Statement Our graduates	Attainm 2022 C			Semester III																			
		Target <sup>^</sup>	Actual*	301	302 303 EL-GRP-1 (A): 304 & EL-GRP-2 (A): 305  01A 02A 03A 04A 05A 06A 07A 08A 09A 10A 11A 12A 30																			
							01A	02A	03A	04A	05A	06A	07A	08A	09A	10A	11A	12A	306	307	308	309A	309B	309C
PO 01	Apply knowledge of computing fundamentals, mathematics and given domain to design appropriate models for a given problem and/or requirements.	80	99	90	100	100	Y	100	Y	Y	100	100	100	Y	Y	Y	Y	Y	100	100		100	Y	Υ
PO 02	Apply fundamental knowledge of software engineering and various systems domain to analyze, identify, formulate and provide solutions to problems.	80	99	90	100	100	Υ	100	Υ	Υ	100	100		Υ	Υ	Υ	Y	Υ	100	100		100	Υ	Y
PO 03	Design and evaluate solutions, systems, modules and processes for specified set of needs with appropriate consideration of societal values and industry expectations.	80	99	90	100	100	Υ	100	Y	Υ	100	100	100	Υ	Υ	Υ	Y	Υ	100	100		100	Υ	Y
PO 04	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.	80	99	90	100	100	Υ	100	Y			100		Y	Y	Υ	Y	Υ	100			100	Y	Υ
PO 05	Use modern tools for delivering milestones like problem analysis, design, development, testing and deployment.	80	99	90		100	Υ	100	Υ			100	100	Υ	Υ	Υ	Y	Υ	100			100	Υ	Υ
PO 06	Learn and inculcate professional ethics, cyber regulations, professional responsibilities and norms of professional computing world.	80	98	90		100	Υ		Y			100	100	Υ	Υ		Y		100			100	Υ	Υ
PO 07	Acknowledge the need for continuous professional development and practice it through self-motivated, independent learning.	80	98	90		100	Υ	100	Υ			100		Υ			Y				Υ	100	Υ	Y
PO 08	Involving in projects development as individual or group to solve problems in various domains and environments using computational and management skills.	80	100			100			Υ			100		Υ		Υ	Y	Υ	100	100		100		Υ
PO 09	Demonstrate efficacy in verbal and non- verbal means of communication like reports, design documentation and presentations to elaborate about complex computing.	80	98	90		100	Y		Y			100	100	Υ			Y		100			100	Υ	Y
PO 10	Provide conducive environment for innovation and entrepreneurship leading to solutions for betterment of society.	80	100			100	Υ					100		Υ			Y					100	Y	Y

Note:

^Target Benchmark: 80% of the students should pass the course.

\*Actual Passed: The percentage of students that actually passed the course.

#### Bharati Vidyapeeth (Deemed to be University), Pune **Faculty of Management Studies** Board of Studies in Computer Applications and Systems Studies AKIMSS, Solapur

MCA 2022 NEP Program: Attainment of Program Outcomes (POs): 2022 Cohort

Program Outcome Code	Program Outcome Statement Our graduates		nent (%) Cohort							Seme	ster IV						
		Target <sup>^</sup>	Actual*	401				I	L-GRP-1	(B): 402 a	& EL-GRP	-2 (B): 40	3				
					01B	02B	03B	04B	05B	06B	07B	08B	09B	10B	11B	12B	404
PO 01	Apply knowledge of computing fundamentals, mathematics and given domain to design appropriate models for a given problem and/or requirements.	80	100	100	Υ	Y	Υ	Υ	100	Υ	100	Y	Υ	Υ	Υ	Y	
PO 02	Apply fundamental knowledge of software engineering and various systems domain to analyze, identify, formulate and provide solutions to problems.	80	100		Y	Υ	Υ	Υ	100		100	Y	Y	Υ	Y	Y	100
PO 03	Design and evaluate solutions, systems, modules and processes for specified set of needs with appropriate consideration of societal values and industry expectations.	80	100		Υ	Υ	Υ	Υ	100	Υ	100	Υ	Υ	Υ	Υ	Y	100
PO 04	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.	80	100	100	Υ	Y	Y				100	Υ	Υ	Y		Y	
PO 05	Use modern tools for delivering milestones like problem analysis, design, development, testing and deployment.	80	100	100	Y	Y	Y		100	Y	100	Y	Υ	Y	Y	Y	
PO 06	Learn and inculcate professional ethics, cyber regulations, professional responsibilities and norms of professional computing world.	80	#DIV/0!		Υ		Υ			Υ		Y		Υ	Υ	Y	
PO 07	Acknowledge the need for continuous professional development and practice it through self-motivated, independent learning.	80	100		Υ		Υ		100			Υ		Υ	Υ	Y	
PO 08	Involving in projects development as individual or group to solve problems in various domains and environments using computational and management skills.	80	100		Y		Υ					Y		Y		Y	100
PO 09	Demonstrate efficacy in verbal and non- verbal means of communication like reports, design documentation and presentations to elaborate about complex computing.	80	#DIV/0!		Υ		Υ			Υ		Υ		Υ	Y		
PO 10	Provide conducive environment for innovation and entrepreneurship leading to solutions for betterment of society.	80	100		Υ		Υ		100			Υ		Y	Υ		

Note:

\*Target Benchmark: 80% of the students should pass the course.

\*Actual Passed: The percentage of students that actually passed the course.