Sanjay Ghodawat University, Kolhapur
School of Computer Science and Application
Department of Master of Computer Application

Structure for Master of Computer Application Program R0
With effect from Academic Year 2020-21

Structure for First Year Odd Semester (Semester I)									
Course Code	Course Title	L	T	P	C		Evaluation Scheme		
						Component	Exam	WT %	Min. Pass %
MCA101 () Version: 1.0	Computational Mathematics	4	-	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA103 () Version: 1.0	Relational Database Management System	3	1	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA105 () Version: 1.0	Operating System	3	1	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA107 () Version: 1.0	Software Engineering & Project Management	3	-	-	3	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA109 () Version: 1.0	Java Programming	3	-	-	3	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA111 () Version: 1.0	Java Programming Lab	-	-	4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
MCA113 () Version: 1.0	RDBMS Lab	-	-	4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
MCA115 () Version: 1.0	Soft skill and Personality Development	-	-	2	1				
Total		16	2	10	23	Total Hours: 28, Total Credits: 23			

FET – Faculty Evaluation Theory; FEP - Faculty Evaluation Practical; CAT – Continuous Assessment Test; ESE – End Semester Examination; Au - Audit Course

Sanjay Ghodawat University, Kolhapur
School of Computer Science and Application
Department of Master of Computer Application

Structure for Master of Computer Application Program R0
With effect from Academic Year 2020-21

Course Code	Course Title	L	T	P	C	Component	Exam	WT %	Min. Pass %
Structure for First Year Even Semester (Semester II)									
							Evaluation Scheme		
MCA102 () Version: 1.0	Data Analytics	3	1	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA104 () Version: 1.0	Data Structures and Algorithms	3		-	3	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA106 () Version: 1.0	Program Elective I	4	-	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA108 () Version: 1.0	Web Technologies	4	-	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA110 () Version: 1.0	Python Programming	3	1	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA112 () Version: 1.0	Data Structures and Algorithms Lab using Python	-	-	4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
MCA114 () Version: 1.0	Web Technologies Lab	-	-	2	1	Practical 100 Marks	FEP	50	40
							POE	50	40
MCA116 () Version: 1.0	Soft skill and Personality Development	-	-	2	1				
Total		**17**	**2**	**8**	**23**	**Total Hours: 27, Total Credits: 23**			

FET – Faculty Evaluation Theory; FEP - Faculty Evaluation Practical; CAT – Continuous Assessment Test; ESE – End Semester Examination; Au - Audit Course

Sanjay Ghodawat University, Kolhapur
School of Computer Science and Application
Department of Master of Computer Application

Structure for Master of Computer Application Program R0
With effect from Academic Year 2020-21

Electives are to be decided by the students based on their personal choice, academic requirements and in consultation with mentor and HOD. Following electives are offered by the department:

Program Elective – I (for Semester II) MCA106_
Information and Network Security
Object Oriented Analysis and Design
Computational Intelligence
Distributed database management

Sanjay Ghodawat University, Kolhapur
School of Computer Science and Application
Department of Master of Computer Application

Structure for Master of Computer Application Program R0
With effect from Academic Year 2020-21

Structure for Second Year Odd Semester (Semester III)										
Course Code	Course Title	L	T	P	C		Evaluation Scheme			
						Component	Exam	WT %	Min. Pass %	
MCA201 ( ) Version: 1.0	Computer Networks & Security	3	1	-	4	Theory 100 Marks	FET	20	40	
							CAT I	15		
							CAT II	15		
							ESE	50	40	
MCA203 ( ) Version: 1.0	Machine Learning	4		-	4	Theory 100 Marks	FET	20	40	
							CAT I	15		
							CAT II	15		
							ESE	50	40	
MCA205 ( ) Version: 1.0	Program Elective II	3	-	-	3	Theory 100 Marks	FET	20	40	
							CAT I	15		
							CAT II	15		
							ESE	50	40	
MCA207 ( ) Version: 1.0	Mobile Application Development	3	-	-	3	Theory 100 Marks	FET	20	40	
							CAT I	15		
							CAT II	15		
							ESE	50	40	
MCA209 ( ) Version: 1.0	Software Quality Assurance And Testing	3	1	-	4	Theory 100 Marks	FET	20	40	
							CAT I	15		
							CAT II	15		
							ESE	50	40	
MCA211 ( ) Version: 1.0	Machine Learning Lab	-	-	4	2	Practical 100 Marks	FEP	50	40	
							POE	50	40	
MCA213 ( ) Version: 1.0	Mobile Application Development Lab	-	-	4	2	Practical 100 Marks	FEP	50	40	
							POE	50	40	
MCA215 ( ) Version: 1.0	Internship	-	-	-	2	Practical 100 Marks	FEP	50	40	
Total		**16**	**2**	**8**	**24**	**Total Hours: 26, Total Credits: 24**				

FET – Faculty Evaluation Theory; FEP - Faculty Evaluation Practical; CAT – Continuous Assessment Test; ESE – End Semester Examination; Au - Audit Course

Sanjay Ghodawat University, Kolhapur
School of Computer Science and Application
Department of Master of Computer Application

Structure for Master of Computer Application Program R0
With effect from Academic Year 2020-21

Electives are to be decided by the students based on their personal choice, academic requirements and in consultation with mentor and HOD. Following electives are offered by the department:

Program Elective – II (for Semester III) MCA205_
Internet of Things
Pattern Recognition Techniques and Applications
Cyber Forensics
Parallel Programming

Sanjay Ghodawat University, Kolhapur
School of Computer Science and Application
Department of Master of Computer Application

Structure for Master of Computer Application Program R0
With effect from Academic Year 2020-21

Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme		
							Exam	WT %	Min. Pass %
Structure for Second Year Even Semester (Semester IV)									
MCA202 ( ) Version: 1.0	.net Programming	3	1		4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA204 ( ) Version: 1.0	A.I and Applications	4	-	-	4	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA206 ( ) Version: 1.0	Program Elective III	3	-	-	3	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA208 ( ) Version: 1.0	Advanced Web Technology	3	-	-	3	Theory 100 Marks	FET	20	40
							CAT I	15	
							CAT II	15	
							ESE	50	40
MCA212 ( ) Version: 1.0	A.I and Applications Lab	-	-	4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
MCA214 ( ) Version: 1.0	Advanced Web Technology Lab	-	-	4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
MCA216 ( ) Version: 1.0	Project	-	-	8	4	Practical 200 Marks	FEP	50	40
							POE	50	40
Total		**13**	**1**	**16**	**22**	**Total Hours: 30, Total Credits: 22**			

FET – Faculty Evaluation Theory; FEP - Faculty Evaluation Practical; CAT – Continuous Assessment Test; ESE – End Semester Examination; Au - Audit Course

Sanjay Ghodawat University, Kolhapur
School of Computer Science and Application
Department of Master of Computer Application

Structure for Master of Computer Application Program R0
With effect from Academic Year 2020-21

Electives are to be decided by the students based on their personal choice, academic requirements and in consultation with mentor and HOD. Following electives are offered by the department:

Program Elective III (for Semester IV) MCA206_
Cloud Computing
Service Oriented Architecture
Ethical Hacking
Big Data Analytics