SJB Institute of Technology

|| Jai Sri Gurudev ||
Sri Adichunchanagiri Shikshana Trust (R)

BGS Health and Education City, Dr. Vishnuvardhana Road, Kengeri, Bengaluru-560060
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Recognized by UGC, New Delhi with 2(f) & 12 (B)

AUTONOMOUS SCHEME (Tentative) PG - MCA 1st year

SCHEME: 2023 **Aca. Year.: 2023-24** **Date: 22.01.2024**
SEM: I

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week L (Lecture)	T (Tutorial)	P (Practical)	O (PBL/ABL/SL/othrs.)	Examinations CIE Marks	SEE Dur.	SEE Th. Mrks	SEE Lab. Mrks.	Tot. Marks
1	BSC	1	23MCAT101	Mathematical Foundation for Computer Applications	MCA	MCA	3	3	0	--		50	3	50	-	100
2	IPCC	1	23MCAI102	Operating Systems - Linux			4	3	0	2		50	3	50	-	100
3	IPCC	2	23MCAI103	Computer Networks			4	3	0	2		50	3	50	-	100
4	PCC	1	23MCAT104	Programming in Python			3	3	0	--		50	3	50	-	100
5	PCC	2	23MCAT105	Database Systems & Modeling			3	3	0	--		50	3	50	-	100
6	PCCL	1	23MCAL106	Python Programming Laboratory			2	--	2	2		50	3	-	50	100
7	PCCL	2	23MCAL107	Database Systems & Modeling Laboratory			2	--	2	2		50	3	-	50	100
8	AEC	1	23MCAAE11	Ability Ennhancement course-1	IE	IE	2	--	2	2		50	3	50	-	100
				Total			23	15	6	10	0	400		300	-	800
9	MAC	1	23MCAM108	Basics of Programming & Computer Organization	MCA		PP	2	2			50		-	-	50

BSC-Basic Science Courses, PCC: Professional core. IPCC-Integrated Professional Core Courses, PCCL - Professional Core Course Laboratory, MAC - Mandatory Audit course for non Computer Science students only.Each Course (PCC/PCE) shall have case study discussion and may be considered as a part of assignment. AEC: Ability Enhancement Course,

SLC : 10 courses shall be defined at the begining of the course. The student should select any one course of their interest and mentors will be alloted to them to guide through the course. Weekly assignment reviews shall be done by mentors. The sudent should complete the course by end of 3rd semester. Rubrics and methodology will be defined separately. SLC will be credited in 4th Semester

S. Nagamani
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AUTONOMOUS SCHEME (Tentative) PG - MCA 1st year

SCHEME: 2023   **Aca. Year.: 2023-24**   **Date 22.03.2024**
SEM: II

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	L Lecture	T Tutorial	P Practical	O PBL/ABL/ SL/othrs.	CIE Marks	Dur.	Th. Mrks	Lab. Mrks.	Tot. Marks
1	PCC	3	23MCAT201	Data Structures & Analysis of Algorithms	MCA	MCA	3	3	--	--		50	3	50	_	100
2	PCC	4	23MCAT202	Object Oriented Programming			3	3	--	--		50	3	50	_	100
3	PCC	5	23MCAT203	Software Engineering & Product Management			3	3	--	--		50	3	50	_	100
4	IPCC	3	23MCAI204	Web Technologies -1			4	3	--	2		50	3	50	_	100
5	PEC	1	23MCAE21y	Professional Elective 1			3	2	2	--		50	3	50	_	100
6	PEC	2	23MCAE22y	Professional Elective 2			3	2	2	--		50	3	50	_	100
7	PCCL	3	23MCAL207	DSA Laboratory			2	--	2	2		50	3		50	100
8	PCCL	4	23MCAL208	Object Oriented Programming Laboratory			2	--	2	2		50	3		50	100
9	PCC	6	23MCAM209	Reseach Methodology & IPR			2	2	--	--		50	3	50		100
10	AEC	2	23MCAAE21	Ability Ennhancement course-2	IE	IE	2	--	2	2		50	3	50		100
				Total			27	18	10	6		500		400	100	1000

PCC: Professional core courses, PEC: Professional Elective Courses, IPCC-Integrated Professional Core Courses, PCCL - Professional Core Course Laboratory, AEC- Ability Enhancement Course.

SLC : 10 courses shall be defined at the begining of the course. The student should select any one course of their interest and mentors will be alloted to them to guide through the course. Weekly assignment reviews shall be done by mentors. The sudent should complete the course by end of 3rd semester. Rubrics and methodology will be defined separately. SLC will be credited in 4th Semester

Professional Elective 1 [23MCA21y]		Professional Elective 2 [23MCA22y]	
Course Code	Course title	Course Code	Course title
23MCAE211	Data Mining & Warehousing	23MCAE221	Artificial Intelligence & Machine Learning
23MCAE212	UI & UX Design	23MCAE222	Mobile Computing
23MCAE213	Cloud Computing	23MCAE223	Edge Computing
23MCAE214	Computer Vision	23MCAE224	Digital Marketing

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Note: changes in course codes of Professional elective courses.

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AUTONOMOUS SCHEME (Tentative) PG - Second Year MCA

SCHEME: 2023   **Aca. Year.:** 2024-25   **Date:** 22.01.2024

SEM: III

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/ SL/othrs.		Dur.	Th. Mrks	Lab. Mrks.	
1	PCC	7	23MCAT301	Data Analytics	MCA	MCA	3	3	--	--		50	3	50	-	100
2	PCC	8	23MCAT302	Internet of Things			3	3	--	--		50	3	50		100
3	IPCC	4	23MCAI303	Web Technologies - 2			4	3	--	2		50	3	50	-	100
4	PEC	3	23MCAE33y	Professional Elective 3			3	2	2	--		50	3	50	-	100
5	PEC	4	23MCAE34y	Professional elective 4			3	2	2	--		50	3	50	-	100
6	PCCL	5	23MCAL306	Data Analytics Lab			2	--	2	2		50	3	--	50	100
7	PCCL	6	23MCAL307	IoT Laboratory			2	--	2	2		50	3	--	50	100
8	PRJ	1	23MCAPR31	Societal Project			2	--	--	--	@	100	--	--	--	100
9	PRJ	2	23MCAPR32	Mini Project			2	--	--	--	@	100	--	--	--	100
10	INT	1	23MCAIN31	Internship			2	--	--	--	@	50	3	--	50	100
11	AEC	2	23MCAAE31	Ability Ennhancement course-3	IE		2		2	2		50	3	50	--	100
				Total			28	13	10	8		700	21	250	150	1100

Note: PCC: Professional core Courses, PEC: Professional Elective Courses. PROJ-Project Work, IPCC- Integrated Professional Core Courses, SP- Societal Project,

SLC : 10 courses shall be defined at the begining of the course. The student should select any one course of their interest and mentors will be alloted to them to guide through the course. Weekly assignment reviews shall be done by mentors. The sudent should complete the course by end of 3rd semester. Rubrics and methodology will be defined separately.

SLC will be credited in 4th Semester

Professional Elective - 3 [23MCA33y]		Professional Elective - 4 [23MCA34y]	
Course code	Course Title	CourseCode	Course Title
23MCAE331	Generative AI	23MCAE341	Enterprises resource Planning
23MCAE332	Cyber Security &Block chain Technology	23MCAE342	Software Metrics & Quality Assurance
23MCAE333	Devops	23MCAE343	Semantic Web and Social Networks
23MCAE334	NOSQL	23MCAE344	Optimization Techniques

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Note: Changes in course codes of professional elective courses.

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AUTONOMOUS SCHEME (Tentative) PG - Second Year MCA

SCHEME: 2023   **Aca. Year.: 2024-25**   **Date: 22.01.2024**

SEM: IV

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				CIE Marks	Examinations SEE			Tot. Marks
								L Lecture	T Tutorial	P Practical	O PBL/ABL/ SL/othrs.		Dur.	Th. Mrks	Lab. Mrks.	
1	PRJ	3	23MCAPR41	Major Project work with Seminar & Technical Paper writing	MCA	MCA	20	--	--	--	@	250	3	--	250	500
2	SLC	1	23MCASL42	BOS recommended ONLINE NPTEL courses			2	--	--	--	@	50	--	50	--	100
				Total			22	0	0	0	0	250	3	--	250	500

Note: PRJ-Project Work, SLC- Self Learning Course

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