



|| Jai Sri Gurudev ||
Sri Adichunchanagiri Shikshana Trust (R)
SJB Institute of Technology

BGS Health and Education City, Dr. Vishnuvardhana Road, Kengeri, Bengaluru-560060

Approved by AICTE, New Delhi.

Autonomous Institute affiliated to Visvesvaraya Technological University, Belagavi

Accredited by NAAC with 'A+' grade, Certified by ISO 9001 - 2015

Recognized by UGC, New Delhi with 2(F) & 12 (B)



SJBIT/PS/Dean(Aca.)/2025/22

AUTONOMOUS SCHEME (Tentative) PG - MCA 1st year

REVISED

SCHEME: 2024

Date: 08.01.2025

SEM: I

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	O	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks.	
1	IPCC	1	MCA24I101	Programming in Python	MCA	MCA	4	3	0	2	--	50	3	50	-	100
2	BSC	1	MCA24T102	Mathematical Foundations for Computer Applications			3	3	0	0	--	50	3	50	-	100
3	PCC	1	MCA24T103	Computer Networks			3	3	0	0	--	50	3	50	-	100
4	PCC	2	MCA24T104	Database Management Systems			3	3	0	0	--	50	3	50	-	100
5	PCC	3	MCA24T105	Web Technologies			3	3	0	0	--	50	3	50	-	100
6	PCC	4	MCA24T106	Software Engineering			3	3	0	0	--	50	3	50	-	100
7	PCCL	1	MCA24L107	DBMS & Web Technologies Laboratory			2	--	2	2	--	50	3	-	50	100
8	MAC	1	MCA24M108	Research Methodology & IPR			PP/NP	1	--	--	2	50	--	--	--	50
9	AEC	1	MCA24AE11	Cyber Security Essentials	IE	IE	PP/NP	--	2	2	--	50	-	-	-	50
Total							21	19	4	6	2	450	21	300	50	800

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

SLC : 10 to 15 courses shall be defined at the begining of the course. The student should select any one course of their interest and mentors will be allotted to them to guide through the course. Weekly assignment reviews shall be done by mentors. The student should complete the course by end of 3rd semester. Rubrics and methodology will be defined separately.

S. Nagamani
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Head of the Department, of Master
of Computer Application
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Bengaluru-560060.

D. BABU N.V
Dean for Academic
SJB Institute of Technology
BGS Health & Education City
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25.1.2025
Principal
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67, BGS Health & Education City,
Dr. Vishnuvardhan Road,
Kengeri, Bengaluru - 560 060.



AUTONOMOUS SCHEME (Tentative) PG - MCA 1st year

REVISED

SCHEME: 2024

Date: 08.01.2025

SEM: II

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	O	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks.	
1	IPCC	2	MCA24I201	Machine Learning	MCA	MCA	4	3	0	2	--	50	3	50	-	100
	IPCC	3	MCA24I202	Internet of Things			4	3	0	2	--	50	3	50	-	100
2	PCC	5	MCA24T203	Object Oriented Programming using Java			3	3	0	0	--	50	3	50	-	100
3	PCC	6	MCA24T204	Data Structures & Algorithms			3	3	0	0	--	50	3	50	-	100
4	PCC	7	MCA24T205	Operating Systems-Linux			3	3	0	0	--	50	3	50	-	100
5	PCCL	2	MCA24L206	DSA Laboratory			2	--	2	2	--	50	3	-	50	100
6	PCCL	3	MCA24L207	Object Oriented Programming Laboratory			2	--	2	2	--	50	3	-	50	100
7	AEC	2	MCA24AE21	AWS Cloud Foundations	IE	IE	PP / NP	--	2	2	--	50	-	-	-	50
Total							21	15	6	10	0	400	21	250	100	750

PCC: Professional core. IPCC-Integrated Professional Core Courses,PEC: Professional Elective Courses,PCCL - Professional Core Course Laboratory, AEC - Ability Enhancement course. SL C : 10 Courses shall be defined at the beginning of the course. Gthe student should select any one course of their interest and mentors will be allotted to them to guide through the course. Weekly assignment reviews shall be done by mentors. The student should complete the course by end of 3rd semester. Rubrics and methodology will be defined separately. SL C will be credited in 4th semester.

S. Nagamani 08/1/25
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Dr. BABU A.V
Prof & Academic Dean
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AUTONOMOUS SCHEME (Tentative) PG - Second Year MCA

REVISED

SCHEME: 2024

Date: 08.01.2025

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	O	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks.	
1	IPCC	4	MCA24I301	Cloud Essentials	MCA	MCA	4	3	--	2		50	3	50	-	100
2	PEC	1	MCA24E3XY	Specializaions			3	2	2	--		50	3	50	-	100
3	PEC	2	MCA24E3XY	Specializaions			3	2	2	--		50	3	50	-	100
4	PEC	3	MCA24E3XY	Specializaions			3	2	2	--		50	3	--	50	100
5	INT	1	MCA24IN31	Internship			8	--	--	--	@	100	3	--	100	200
6	AEC	3	MCA24AE31	Data Visualization & Analysis with Power BI	IE	IE	PP/NP	--	2	2	--	50	-	-	-	50
Total							21	9	8	4	0	350	15	150	150	650

Note: PCC: Professional core Courses, PEC: Professional Elective Courses. PROJ-Project Work, IPCC- Integrated Professional Core Courses, SP- Societal Project, AEC - Ability Enhancement course. SLC : 10 Courses shall be defined at the beginning of the course. Gthe student should select any one course of their interest and mentors will be allotted to them to guide through the course. Weekly assignment reviews shall be done by mentors. The student should complete the course by end of 3rd semester. Rubrics and methodology will be defined separately. SLC will be creadited in 4th semester.

Specializations

Artificial Intelligence		Security	
Course Code	Course title	Course Code	Course title
MCA24E311	Data Mining & Visualization	MCA24E321	Network Security
MCA24E312	Exploratory Data Analytics	MCA24E322	Cyber Security
MCA24E313	Introduction to GenAI	MCA24E323	Block Chain Technology

Web Application Development		Software Development	
Course Code	Course title	Course Code	Course title
MCA24E331	Web Development using FULL STACK	MCA24E341	Software Metrics & Quality Assurance
MCA24E332	Advanced Web Technology	MCA24E342	Software Testing
MCA24E333	Advanced Databases	MCA24E343	Software Design & Patterns

S. Nagamani
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SCHEME: 2024

Date: 08.01.2025

SEM: IV

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	O	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks.	
1	PRJ1	1	MCA24PR41	Major Project work	MCA	MCA	12	--	--	--	@	100	3	--	100	200
2	TS	1	MCA24TS42	Technical Seminar			2	--	--	--	@	100	3	--	--	100
3	SLC	1	MCA24SL43	BOS recommended ONLINE NPTEL courses			3	--	--	--		50	--	50	--	100
Total							17	0	0	0	0	250	6	50	100	400

Note: PRJ-Project Work, SLC- Self Learning Course, TS - Technical Seminar

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