



|| 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/RS/Dean(PCA)/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 beginning 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
HOD-MCA
Head of the Department of Master
of Computer Application
SJBIT Institute of Technology
Bengaluru-560060.

D. BABU, N.V
Dean Academic
SJBIT Institute of Technology
BGS Health & Education City
Kengeri, Bengaluru-560060

08.01.2025
Principal
SJBIT Institute of Technology
67, BGS Health & Education City,
Dr. Vishnuvardhan Road,
Kengeri, Bengaluru - 560 060.

Note: Revised with corrections in L.T:P:O and totalling of marks.


28/01/15



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
2	IPCC	3	MCA24I202	Internet of Things			4	3	0	2	--	50	3	50	-	100
3	PCC	5	MCA24T203	Object Oriented Programming using Java			3	3	0	0	--	50	3	50	-	100
4	PCC	6	MCA24T204	Data Structures & Algorithms			3	3	0	0	--	50	3	50	-	100
5	PCC	7	MCA24T205	Operating Systems-Linux			3	3	0	0	--	50	3	50	-	100
6	PCCL	2	MCA24L206	DSA Laboratory			2	--	2	2	--	50	3	-	50	100
7	PCCL	3	MCA24L207	Object Oriented Programming Laboratory			2	--	2	2	--	50	3	-	50	100
8	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 Dr BABU NY Prof & Academic Dean SJBIT end of 3rd semester. Rubrics and methodology will be defined separately. SL C will be creadited in 4th semester.

S. Nagamani
 Head of the Department of Master
 of Computer Application
 HOD MCA
 SJBIT
 08/1/25

Dr BABU NY
 Prof & Academic Dean
 SJBIT
 BGS Health & Education City
 Kengeri, Bengaluru-560060
 Dean- Academics

Principal
 SJBIT
 # 67, BGS Health & Education City,
 Dr. Vishnuvardhan Road,
 Kengeri, Bengaluru - 560 060
 08.01.2025



AUTONOMOUS SCHEME OF TEACHING & EXAMINATIONS (STE) PG - MCA IInd year

SCHEME: 2024

Sem : III

Date: 07.07.2025

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	SL/othr		Dur.	Th. Mrks	ab. 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	3	200	100	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 credited in 4th semester.

Specializations

Artificial Intelligence [MCA24E31Y]		Security [MCA24E32Y]	
Course Code	Course title	Course Code	Course title
MCA24E311	Data Mining & Warehousing	MCA24E321	Network Security
MCA24E312	Exploratory Data Analytics	MCA24E322	Cyber Security
MCA24E313	Introduction to GenAI	MCA24E323	Block Chain Technology

Note: The PEC in S1.No.4- MCA24E3XY Specialization, the SEE
So marks is in Theory marks as for S1.No② & ③, which
was mistakenly mentioned in Lab marks due to Typographical Error

S. Nargamani
0777125.


Dr. BABU. N.V.

Prof & Academic Dean
SJB Institute of Technology
BGS Health & Education City
Kengeri, Bengaluru-560060

REVISED

Date: 07/07/25

Web Application Development [MCA24E33Y]		Software Development [MCA24E34Y]	
Course Code	Course title	Course Code	Course title
MCA24E331	Full Stack Web Development	MCA24E341	DevOps
MCA24E332	UI & UX Design	MCA24E342	Software Testing
MCA24E333	Advanced Databases	MCA24E343	Software Project Management

S. Nagamani
HOD-MCA 07/07/25.
Head of the Department of Master
of Computer Application
SJB Institute of Technology
Bengaluru-560060.

[Signature]
Dean- Academics
Dr. BABU. N.V
Prof & Academic Dean
SJB Institute of Technology
BGS Health & Education City
Kengeri, Bengaluru-560060

[Signature] 05.08.25
Principal
Principal
SJB Institute of Technology
67, BGS Health & Education City,
Dr. Vishnuvardhan Road,
Kengeri, Bengaluru - 560 060.

[Signature]
Academic Director

Note: As discussed in the 4th BOS meeting the following changes in Courses & names to be noted.

- 1) In Artificial Intelligence Stream,
 - a) Data Mining & Visualization is renamed as Data Mining & Warehousing. (MCA24E311)
- 2) In web Application development Stream,
 - a) web development using FULL STACK is renamed as Full Stack web Development (MCA24E331)
 - b) Instead of Advanced web Technology, it was suggested to have UI & UX Design (MCA24E332).
- 3) In Software Development Stream,
 - a) Software Metrics & Quality Assurance is replaced with DevOps in MCA24E341.
 - b) Software Design & Patterns is replaced with Software Project Management in MCA24E343.

S. Nagamani
07/7/25.



|| 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)



REVISED
Date: 27/7/25

AUTONOMOUS SCHEME OF TEACHING & EXAMINATIONS (STE)

PG - MCA IInd year

SCHEME: 2024

SEM: IV

Date: 07.07.2025

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 MOOC courses			3	--	--	--	-	50	--	50	--	100
Total							17	0	0	0	0	250	3	50	100	400

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

S. Nagamani
HOD-MCA
Head of the Department
of Computer Application
SJB Institute of Technology
Bengaluru-560060.

Dr. BABU. N.V
Prof & Academic Dean
SJB Institute of Technology
BGS Health & Education City
Kengeri Bengaluru-560060

Principal
SJB Institute of Technology
67, BGS Health & Education City,
Dr. Vishnuvardhan Road,
Kengeri, Bengaluru - 560 060.

Academic Director