OK

Department of Information Technology

Date: 14/02/2024

Minutes of BoS Meeting held on 12/02/2024 at 04:00 PM

A meeting of the Board of Studies (BoS) of Information Technology was held on 12/02/2024 at 04:00 PM in the conference room of the department. Following members attended the meeting:

1) Dr. Lalit Purohit (Head of Department)
2) Mr. Raghvendra Dikhit (External Expert)
3) Mr. Anunay Chouksey (External Expert)
4) Dr. Sutisa Verma
5) Dr. K K Sharma
6) Mr. Mukul Shukla
7) Mrs Sonu Airen
8) Mr. Manjeet Soni
9) Mrs Megha Kuliha
10) Mrs Jyoti Tiwari
11) Mr. Chandraprakash Cinger
12) Mrs Pooja Jain (Spl. Invitee)
13) Mr. Pritam Khotarkar (Spl. Invitee)

Following members could not attend the meeting

1) Dr. P. B Suri
2) Dr. Nilay Khare
3) Dr. Abhishek Shrivastava
4) Mr. Mukesh Sakle

The agenda wise deliberations of the meeting are as follows:

Agenda Item 1: Revision of the Scheme of BTech (IT), MTech (IT) and MCA in line with NEP-2020.

The scheme of BTech (IT), MTech (IT) and MCA was discussed and revised in line with National Education Policy (NEP) – 2020. The BoS recommend the following:

(A) For BTech (IT) course: The BTech (IT) program should incorporate elective subjects starting from the third year of study. Consequently, one elective (Elective I) is recommended, accompanied by the introduction of a 'Minor Project' during the Semester 'B' of the III year. Similarly, in Semester 'B' of the fourth year, a subject 'Research Work' component is introduced. Additionally, to signify specialization streams, elective subjects are categorized into different 'Baskets'. This arrangement ensures that students have five elective course choices aligned with their chosen 'Basket'. Furthermore, the exit policy of the BTech (IT) program is discussed and recommended in accordance with NEP 2020.

(B) For MTech (IT) course: MTech (IT) scheme was revised in line with NEP-2020 and RGPV ordinance (Ordinance No. dated). Now, the practical credits are counted as per 01 hour as 01 credit course. The MTech (IT) scheme is discussed and recommended in accordance with NEP-2020.

15/02/24

(C) **For MCA course:** Looking at the admission of students from non-professional backgrounds, one week of bridge course at the start of first semester is recommended by the BoS. The MCA scheme is discussed and recommended in accordance with NEP-2020.

The recommended scheme of BTech (IT), MTech (IT) and MCA courses applicable from July-2024, is attached as Annexure-I, Annexure-II and Annexure-III, respectively.

Agenda item 2: Any other item with the permission of the chair.

Under this item following discussion was held:

i) Looking to the current circumstances, it is imperative that the department prioritizes the quality of teaching. In light of this, it is essential for teachers to allocate sufficient time to prepare high-quality lectures and lab assignments. Additionally, the department must ensure the quality of assignments, question papers, and their evaluation, as these factors significantly impact overall educational standards. Recognizing the heavy teaching work load faced by both regular and contract faculty members, as well as the shortage of faculty within the department, the Board of Studies (BoS) recommends that the 1st year load of CO13004 (Computer Programming) may be removed/adjusted or MCA load may be shared (One section of 1st year MCA and one section of 2nd year MCA along with equal sharing of II year project batches), from July-2024 session.

ii) As a result of increased intake of the BTech (IT) and MCA courses to 120 students each, the two batches of MCA course will be progressed in their II year and two batches of BTech (IT) will be progressed in the II year. Looking at these additional batches in the department, the need arises for the development of two new laboratories, in addition to the existing laboratories. To accommodate this expansion, BoS recommends development of two laboratories before the start of the July-2024 academic session. Additionally, in order to facilitate seating arrangements for the increased faculty members, the provision of more faculty cabins is recommended by the BoS.

Meeting ended with the vote of thanks to the Chair.

1) Dr. Lalit Purohit (Chairman, BoS) ....
2) Mr. Raghvendra Dikhit (External Expert) ..Attended Online......
3) Mr. Anunay Chouksey (External Expert) ..Attended Online......
4) Dr. Sunita Verma ....
5) Dr. K K Sharma ....
6) Mr. Mukul Shukla ....
7) Mrs Sonu Airen ....
8) Mr. Manjeet Soni ....
9) Mrs Megha Kuliha ....
10) Mrs Jyoti Tiwari ....
11) Mr. Chandraprakash Gingar ....
12) Mrs Pooja Jain (Spl. Invitee) ....
13) Mr. Pritam Khatariar (Spl. Invitee) ....

ANNEXURE - I (BTech IT Scheme Page 03 - 11)
[illegible]

Annexure - I (BTech)

SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

DEPARTMENT OF INFORMATION TECHNOLOGY

SUMMARY OF CREDITS

YEAR	SEMESTER	
	A	B
I	20	20
II	23	22
III	22	22
IV	18	14
Total	83	78
Grand Total		161

12/08/2014

Semester : I

S.No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Credits
				L	T	P	T	P	Theory		Practical		
									Th.	CW	Pr.	SW	
1	BSC	MA10001	Mathematics – I	3	1	0	4	0	70	30	0	0	4
2	BSC	PH10006	Physics	2	1	-	3	0	70	30	0	0	3
3	ESC	CE10013	Fundamentals of Civil Engineering and Applied Mechanics	2	1	-	3	0	70	30	0	0	3
4	ESC	ME10149	Engineering Graphics	2	0	-	2	0	70	30	0	0	2
5	ESC	EE10015	Fundamentals of Electrical Engineering	3	0		3	0	70	30	0	0	3
6	BSC	PH10006	Physics	-	0	2	0	1	0	0	30	20	1
7	ESC	ME10149	Engineering Graphics	-	0	4	0	2	0	0	60	40	2
8	ESC	EE10005	Fundamentals of Electrical Engineering		0	2	0	1	0	0	30	20	1
9	MC	CH10200	Environmental Science	0	1	0	0	0	0	0	0	100	0
10	MC	HU10191	Extra Cocurricular Activity	0	0	2	0	1	0	0	0	50	1
11	MC	HU.....	Induction program in Universal Human Value	0	0	2	0	0	0	0	0	0	0
			Total	11	4	12	15	5	350	150	120	230	20

Induction program of three week duration

Semester : II

S.No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Credits
				L	T	P	T	P	Theory		Practical		
									Th.	CW	Pr.	SW	
1	BSC	MA10501	Mathematics – II	3	1	0	4	0	70	30	0	0	4
2	BSC	CH10506	Chemistry	3	0	0	3	0	70	30	30	20	3
3	HSMC	HU10651	Technical English	2	0	0	2	0	70	30	30	20	2
4	ESC	CO10504	Programming for Problem Solving	2	1	0	3	0	70	30	30	20	3
5	ESC	ME10658	Basic Electronics Engineering	2	0	0	2	0	70	30	30	20	2
6	BSC	CH10506	Chemistry Lab	0	0	2	0	1	70	30	0	0	1
7	HSMC	HU10651	Language Lab	0	0	2	0	1	70	30	0	0	1
8	ESC	CO10594	Programming for Problem Solving Lab	0	0	2	0	1	70	30	0	0	1
9	ESC	IP10581	Manufacturing Practices	0	1	4	0	2	0	0	60	40	2
10	MC	HU10191	Extra Cocurricular Activity	0	0	2	0	1	0	0	0	50	1
11	MC	HU.....	Induction program in Universal Human Value	0	0	2	0	0	0	0	0	0	0
			Total	12	3	14	14	6	560	240	180	170	20

*Mandatory Non credit course. PASS/FAIL status will appear in Marksheet

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE

Batch: 2023 - 2027
(NEP - 2020)

Bachlor of Technology (Information Technology)
Diploma (Information Technology)

Semester : III

S.No.	Subject Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Marks	Total Credits
				L	T	P	T	P	Theory		Practical			
									Th.	CW	Pr.	SW		
1	BSC	MA28	Mathematics - III	3	1	-	4	-	70	30	-	-	100	4
2	PCC	IT28	Data Structures	3	1	-	4	-	70	30	-	-	100	4
3	PCC	IT28	Object Oriented Programming	3	-	-	3	-	70	30	-	-	100	3
4	PCC	IT28	Computer Organization & Architecture	3	-	-	3	-	70	30	-	-	100	3
5	ESC	EC28	Digital System Design	3	-	-	3	-	70	30	-	-	100	3
6	HSMC	HU28	Values, Humanities and Professional Ethics	-	2	-	2	-		100	-	-	100	2
7	PCC	IT28	Data Structures Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	IT28	Object Oriented Programming Lab	-	-	2	-	1	-	-	60	40	100	1
9	ESC	EC28	Digital System Design Lab	-	-	2	-	1	-	-	60	40	100	1
10	PCC	IT28	Basic Linux & Shell Programming	-	-	2	-	1	-	-	60	40	100	1
11	MC	HU28	Environmental Science*	2	-	-	-	-	-	50			50	0
			Total	17	4	8	19	4	350	300	240	160	1050	23

* Mandatory non credit course

Semester : IV

S.No.	Subject Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks					Total Credits
				L	T	P	T	P	Theory		Practical			
									Th.	CW	Pr.	SW		
1	PCC	IT28	Discrete Structures	3	1	-	4	-	70	30	-	-	100	4
2	PCC	IT28	Design and Analysis of Algorithms	3	1	-	4	-	70	30	-	-	100	4
3	PCC	IT28	Software Engineering	3	-	-	3	-	70	30	-	-	100	3
4	HSMC	HU28	Economics for Engineers	3	-	-	3	-	70	30	-	-	100	3
5	ESC	EC28	Data Communication	3	-	-	3	-	70	30	-	-	100	3
6	PCC	IT28	Design and Analysis of Algorithms Lab	-	-	2	-	1	-	-	60	40	100	1
7	PCC	IT28	Software Engineering Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	IT28	Python Programming Lab	-	-	2	-	1	-	-	60	40	100	1
9	PCC	IT28	Skill Lab-I (Web Programming)	-	1	2	-	2	-	-	60	40	100	2
10	MC	HU28	Essence of Indian Knowledge Tradition*	2	-		-	-	-	50			50	0
			Total	17	3	8	17	5	350	200	240	160	950	22

* Mandatory non credit course

Diploma in Information Technology will be awarded after acquiring additional 30 credit out of which 06 credit in three months industrial training within five years.

** 2 weeks training during semester break after IV sem is mandatory.

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Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
Choice Based Grading System (CBGS)
Bachlor of Technology (Information Technology)
Vocational Degree (Information Technology)

Semester : V

Sr. No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks Alloted				Total Credits
				L	T	P	T	P	Theory		Practical		
									End Sem	CW	End Sem	SW	
1	PCC	IT38___	Computer Networks	3	0	-	3		70	30	-	-	3
2	PCC	IT38___	Data Base Management Systems	3	0	-	3		70	30	-	-	3
3	PCC	IT38	Operating Systems	3	-	-	3		70	30	-	-	3
4	PCC	IT38___	Theory of Computation	3	1	-	4		70	30	-	-	4
5	PEC	IT38___	Artificial Intelligence	3	0		3	-	70	30	-	-	3
6	PCC	IT38___	Computer Networks Lab		0	2	-	1	-	-	60	40	1
7	PCC	IT38	Data Base Management Systems LAB	-	0	2	-	1	-	-	60	40	1
8	PCC	IT38	Operating Systems Lab	-	0	2	-	1	-	-	60	40	1
9	PCC	IT38	Skill Lab-II (Android Programming Lab)	-	0	2	-	1	-	-	60	40	1
10	INT	IT38	Industrial Training*	-	0	0	-	2	-	-	-	100	2
11	MC	IIU28___	Constitution of India*	-	2		-	-	-	50			0
			Total	15	1	8	16	6	350	150	240	260	22

* Evaluation of 02 weeks training done during semester break after IV sem.

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
Choice Based Grading System (CBGS)
Bachlor of Technology (Information Tecnology)

Semester : VI

S.No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks Alloted				Total Credits
				L	T	P	T	P	Theory		Practical		
									End Sem	CW	End Sem	SW	
1	PEC	IT38	Big Data Analytics	3	-	-	3	-	70	30	-	-	3
2	PCC	IT38	Compiler Design	3	-	-	3	-	70	30	-	-	3
3	PCC	IT38	Machine Learning	3	-	-	3	-	70	30	-	-	3
4	PCC	IT38	Cloud Computing	3	-	-	3	-	70	30	-	-	3
5	PEC	IT38	Elective – I	3			3	-	70	30	-	-	3
6	PCC	IT38	Machine Learning Lab	-	-	2	-	1	-	-	60	40	1
7	PCC	IT38	Cloud Computing Lab	-	-	2	-	1	-	-	60	40	1
8	PCC	IT38	Big Data Analytics Lab	-	-	2	-	1	-	-	60	40	1
9	PRO	IT38	Minor Project	-	-	4	-	2	-	-	60	40	2
10	INT	IT38	Industrial Training**					2					2
			Total	15	0	10	15	7	350	150	240	160	22

** 2 weeks training during semester break after VI sem is mandatory.

Diploma in Information Technology will be awarded after acquiring additional 10 credit out of which 06 credit as three months industrial training within five years

Elective – I		
	IT38.....	Soft Computing
	IT38.....	Distributed Computing
	IT38.....	Object Oriented Analysis & Design
	IT38.....	Internet & Web Technology

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
Choice Based Grading System (CBGS)
Bachelor of Technology (Information Technology)

Semester : VII

S.No.	Subject Code	Category	Subject Name	Hours/Week			Maximum Marks Allotted				Credits		Total Credits
				L	T	P	Theory		Practical		T	P	
							End Sem	CW	End Sem	SW			
1	IT48	PCC	Information Security	3	-	-	70	30	-	-	3	-	3
2		PEC	Elective – II	3	-	-	70	30	-	-	3	-	3
3		PEC	Elective – III	3			70	30	-	-	3	-	3
4	IT48	PCC	Information Security Lab			2		-	60	40	-	1	1
5	IT48	INT	Seminar	-		4		-	-	100	-	2	2
6	IT48	INT	Industrial Training**	-				-	-	100		2	2
7	IT48	PRO	Major Project	-		8		-	60	40	-	4	4
8	IT48	PRO	Research Paper / Project Work (BA Group)			8		-	60	40		4	4
Total			For AB group	9	0	14	0	0	60	300	0	9	9
			For BA group	12	0	14					12	9	18
			Grand Total				-	-		-	-	-	18

** Evaluation of 02 weeks training done during semester break after VI sem

Semester : VIII

S.No.	Subject Code	Category	Subject Name	Hours/Week			Maximum Marks Allotted				Credits		Total Credits
				L	T	P	Theory		Practical		T	P	
							End Sem	CW	End Sem	SW			
1		PEC	Elective – IV	3	-	-	70	30		-	3	-	3
2		PEC	Elective – V	3		-	70	30		-	3		3
3	IT48	INT	Industrial Training/ Internship	-	-	8	-	-		100	-	4	4
4	IT48	PRO	Research Work			8	-	-	60	40	-	4	4
5	IT48	PRO	Major Project (BA group)	-		8	-	-	60	40	-	4	4
Total			For AB group	6	0	20	140	60	0	200	6	10	14
			For BA group	6	0	20	140	60	120	200	6	10	14
			Grand Total				-	-	-		-	-	14

Note: Student require to complete 6 weeks of industrial training/internship during the semester break

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
Choice Based Grading System (CBGS)
Bachelor of Technology (Information Technology)

LIST OF ELECTIVES

Semester : VII

Elective – II

S.No.	Subject Code	Subject Name
1	IT48___	Deep Learning
2	IT48___	Advance Computer Networks
3	IT48___	Agile Technology
4	IT48___	UI/UX Design

Elective – III

S.No.	Subject Code	Subject Name
1	IT48___	Natural Language Processing
2	IT48___	Wireless and Mobile Computing
3	IT48___	Software Architecture & Design
4	IT48___	Scripting Framework

Semester : VIII

Elective – IV

S.No.	Subject Code	Subject Name
1	IT48___	Image Processing
2	IT48___	Internet of Things
3	IT48___	Software Project Management
4	IT48___	Web Services & API Design

Elective – V

S.No.	Subject Code	Subject Name
1	IT48___	Social Network Analysis
2	IT48___	Edge and Fog Computing
3	IT48___	Software Testing
4	IT48___	DevOps

Shri G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
Choice Based Grading System (CBGS)
Bachlor of Technology (Information Technology)

Exit Clause Subjects (As per NEP-2020)

I Year								
S.No.	Subject Code	Subject Name	Hours/Week			Credits		Total Credits
			L	T	P	T	P	
1	IT28.....	Data Structures	2	-	-	2	-	2
2	IT28.....	Data Structures Lab	-	-	4	-	2	2
3	IT28.....	Internship & Industrial Training	-	-	12	-	6	6
							Total	10

II Year (Diploma in Information Technology)								
S.No.	Subject Code	Subject Name	Hours/Week			Credits		Total Credits
			L	T	P	T	P	
1	IT38.....	Computer Networks	2	-	-	2	-	2
2	IT38.....	Mini Project	-	-	4	-	2	2
3	IT38.....	Internship & Industrial Training	-	-	12	-	6	6
							Total	10

II Year (Vocational Degree in Information Technology)								
S.No.	Subject Code	Subject Name	Hours/Week			Credits		Total Credits
			L	T	P	T	P	
1	IT48.....	Information Security	2	-	-	2	-	2
2	IT48.....	Major Project	-	-	4	-	2	2
3	IT48.....	Internship & Industrial Training	-	-	12	-	6	6
							Total	10

*L=Lecture, P=Practical, T=Tutorial

BASKET 1	BASKET 2	BASKET 3	BASKET 4
AI-ML	NETWORKING	SOFWARE ENGINEERING	FULL STACK DEVELOPMENT
Soft Computing	Distributed Computing	Object Oriented Analysis & Design	Internet & Web Technology
DeepLearning	Advanced Computer Networks	Agile Technology	UI/UX Design
Natural Language Processing	Wireless and Mobile Computing	Software Architecture & Design	Scripting Framework
Image Processing	Internet of Things	Software Project Management	Web Services & API Design
Social Network Analysis	Edge & Fog Computing	Software Testing	Dev-Ops

Annexure – II

DEPARTMENT OF INFORMATION TECHNOLOGY
MTECH 2023-2025 SCHEME

I M.TECH. INFORMATION TECHNOLOGY

SEMESTER - I

S.No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	MA------	Mathematical Foundation of Computer Science	3	-	-	3	-	70	30	-	-	100
1	IT------	Advanced Data Structure	3	-	-	3	-	70	30	-	-	100
2	IT------	Advanced Computer Networks	3	-	-	3	-	70	30	-	-	100
3		Elective I	3	-	-	3	-	70	30	-	-	100
4		Elective II	3	-	-	3	-	70	30	-	-	100
6	IT------	Laboratory. – I	-	-	4	-	4	-	-	40	60	100
7	IT------	Laboratory. – II	-	-	4	-	4	-	-	40	60	100
8	IT------	Comprehensive Viva	-	-	-	-	-	-	-	-	Grade	Grade
		Total	15	0	08	15	08	350	150	80	120	700

SEMESTER - II

S.No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	IT-----	Advanced Algorithms	3	-	-	3	-	70	30	-	-	100
2	IT-----	Soft Computing	3	-	-	3	-	70	30	-	-	100
3		Elective III	3	-	-	3	-	70	30	-	-	100
4		Elective IV	3	-	-	3	-	70	30	-	-	100
5		Elective V	3	-	-	3	-	70	30	-	-	100
6	IT-----	Laboratory. III	-	-	4	-	4	-	-	40	60	100
7	IT-----	Laboratory. IV	-	-	4	-	4	-	-	40	60	100
8	IT-----	Seminar	-	-	1	-	1	-	-	100	-	100
9	IT-----	Comprehensive Viva	-	-	-	-	-	-	-	-	Grade	Grade
		Total	15	0	09	15	09	350	150	180	120	800

List of Electives :

Elective I		Semester I
S.No.	Subject Code	Subject
1	IT----	Advanced Databases
2	IT------	Cloud Comparing
3	IT-----	Data Encryption and Compression
4	IT-------	Artificial Intelligence

Elective II		Semester I
S.No.	Subject Code	Subject
1	IT-----	Data Mining and Data Warehousing
2	IT------	Internet and Web Technology
3	IT------	Digital Forensics

Elective III		Semester II
S.No.	Subject Code	Subject
1	IT——	Big Data Analytics
2	IT——	Wireless Networks
3	IT——	Secure Coding
Elective IV		Semester II
S.No.	Subject Code	Subject
1	IT——	Machine Learning
2	IT——	Cyber Security and IT Laws
3	IT——	Information Retrieval
Elective V		Semester II
S.No.	Subject Code	Subject
1	IT——	Internet of Things
2	IT——	Steganography and Digital Watermarking
3	IT——	Human Computer Interaction

15/02/24

Bridge Course for MCA Course (Applicable from July 2024 onwards) (MCA)

- **Note**
  - Duration one week starting of 1st semester.
  - Each lecture is one hour and 2 hours of practical work per day
  - Total 4 hours theory and 2-hour practical per day
  - Total duration in one day is 7 hours including lunch
  - 5th day of the week is the evaluation of the bridge course
  - Practical in C language.

I. Fundamentals of Computer Application

- Lecture 1: Introduction to Computers
  - Overview of Computers and Computing
  - Historical Development of Computers
  - Basic Components of a Computer System
  - Introduction to Hardware and Software
- Lecture 2: Understanding Operating Systems
  - Role and Functions of an Operating System
  - Common Operating Systems (e.g., Windows, macOS, Linux)
  - File Systems and File Management
- Lecture 3: Essential Software Applications
  - Word Processing Software (e.g., Microsoft Word)

Initiators

    - Spreadsheet Software (e.g., Microsoft Excel)
    - Presentation Software (e.g., Microsoft PowerPoint)
- Lecture 4: Introduction to the Internet
    - Basics of Computer Networks
    - Internet Services and Protocols
    - Web Browsers and Search Engines
- Lecture 5: Basic Computer Security
    - Understanding Cybersecurity
    - Common Threats and Best Practices
    - Password Management and Online Safety
- Lecture 6: Introduction to Programming Concepts
    - Basics of Programming
    - Overview of Programming Languages
    - Writing Simple Code (e.g., Hello World)
- Lecture 7: Introduction to Data and Databases
    - Understanding Data Types
    - Basics of Databases and Database Management Systems
    - Introduction to SQL (Structured Query Language)
- Lecture 8: Computer Ethics and Future Trends
    - Importance of Computer Ethics
    - Ethical Considerations in Computer Use
    - Future Trends in Computing (e.g., Artificial Intelligence, Internet of Things)

14/02/2024

2. Fundamentals of programming lecture

1. Lectures 1 and 2
   - Concept of programming language
   - Classification of programming language
   - Types of programming language
   - Concept of assembler, interpreter, and compiler
2. Lectures 3 and 4
   - Variables, Constant, literals, keywords, data types, and operators
3. Lectures 5 and 6
   - Control statements, loops, and array
4. Lectures 7 and 8
   - Function, recursion, pointer
5. Lecture 9
   - Basic principle of object-oriented programming

14/2/2024

SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
I MASTER OF COMPUTER APPLICATIONS (2YDC) Applicable from July 2024

Scheme 2024-25

SEMESTER I

S. No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Minimum Marks				
			L	T	P			Th.	CW	SW	Pr.	Total
1	CT.....	Computer Organization & Architecture	3	-	-	3	-	70	30	-	-	100
2	MA.....	Statistical Computing Techniques	3	-	-	3	-	70	30	-	-	100
3	CT.....	Mathematical Foundations of Computer Science	3	-	-	3	-	70	30	-	-	100
4	CT.....	Data Structure	3	-	-	3	-	70	30	-	-	100
5	CT.....	Software Engineering	3	-		3	-	70	30	-	-	100
6	CT.....	Statistical Computing Techniques (LAB)	-	-	2	-	1	-	-	40	60	100
7	CT.....	Data Structure (LAB)	-	-	2	-	1	-	-	40	60	100
8	CT.....	C programming lab	-	2	2	-	1	-	-	40	60	100
9	CT.....	Software Engineering (LAB)	-	-	2	-	1	-	-	40	60	100
10	HU.....	Communication Skill Lab	-	-	2	-	1	-	-	20	30	50
			15	2	10	15	5	350	150	180	270	950

SEMESTER II

S. No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Minimum Marks				
			L	T	P			Th.	CW	SW	Pr.	Total
1	CT.....	Computer Networks	3	-	-	3	-	70	30	-	-	100
2	CT.....	Data base Management Systems	3	-	-	3	-	70	30	-	-	100
4	CT.....	Operating Systems	3	-	-	3	-	70	30	-	-	100
5	CT----	Design and Analysis of Algorithm	3	-	-	3	-	70	30	-	-	100
	CT----	Object Oriented Programming using Java	3	-	-	3	-	70	30	-	-	100
6	CT----	Computer Networks (LAB)	-	-	2	-	1	-	-	40	60	100
7	CT----	Data base Management Systems (LAB)	-	-	2	-	1	-	-	40	60	100
8	CT----	Operating Systems (LAB)	-	-	2	-	1	-	-	40	60	100
	CT....	Design and Analysis of Algorithm (LAB)			2	-	1	-	-	40	60	100
9	CT----	Object Oriented Programming using Java (LAB)	-	-	2	-	1	-	-	40	60	100
10	CT-----	Minor Project	-	-	2	-	1	-	-	40	60	100
			15	0	12	15	6	350	150	240	360	1100

18/02/2014

INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
II MASTER OF COMPUTER APPLICATIONS (2YDC) Applicable from Admission year 2024

SEMESTER III

S. No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Minimum Marks				
			L	T	P			Th.	CW	SW	Pr.	Total
1	CT.....	Information Security	3	-	-	3	-	70	30	-	-	100
2	MB.....	Fundamental of Management & Organization Behaviour	3	-	-	3	-	70	30	-	-	100
3	CT.....	Internet and Web Technology	3	-	-	3		70	30	-	-	100
4		Elective I	3	-	-	3		70	30	-	-	100
5		Elective II	3	-	-	3	-	70	30	-	-	100
7	CT-----	Internet and Web Technology LAB	-	-	2	-	1	-	-	40	60	100
8	CT----	Elective I LAB	-	-	2	-	1	-	-	40	60	100
9	CT----	Python LAB	-	1	2	-	1	-	-	40	60	100
9	CT-----	Mobile APP Development LAB	-	-	2	-	1	-	-	40	60	100
10	CT----	Skill Development LAB	-	-	2	-	1	-	-	40	60	100
			15	1	10	15	5	350	150	200	300	1000

S. No.	Subject Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Minimum Marks				
			L	T	P			Th.	CW	SW	Pr.	Total
1	CT.......	Major Project	-	-	16	-	16	-	-	300	200	500
		Total Credits 16	0	0	16	0	16	0	0	300	200	500

Elective-I	Elective-II
1. Data Science 2. Machine Learning 3. Data mining and warehousing 4. Distributed computing	1. Advanced Operating System 2. Artificial Intelligence 3. Mobile computing 4. Internet of Thing 5. Cloud computing

TOTAL CREDITS FOR MCA = 77

16/07/24