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1051
04/03/25

Department of Information Technology

Date: 04/03/2025

CIRCULAR

A meeting of board of studies (BoS) is scheduled on 05/03/2025 at 4:00 PM in the conference room of the department. Followings are the agenda items for the meeting:

1. To discuss the BTech (IT) teaching scheme as per the NEP2020.
2. To discuss the Minor Degree scheme for B Tech (IT).
3. Any other item with the permission of the chair.


HOD, IT

Department of Information Technology

Date: 07th March, 2025

Sub: Minutes of the meeting of Board of Studies held on 05/03/2025 at 04.00 PM

The Board of Studies (BoS) meeting of the department of I.T. was held on 05/03/2025 in the Conference Room of the department.

The following members were present in the meeting of Board of Studies:

- | | |
|-------------------------|-------------------|
| 1. Dr. Sunita Varma | (Chairman) |
| 2. Dr. G.L. Prajapati | (External Expert) |
| 3. Dr. Vaibhav Jain | (External Expert) |
| 4. Mr. Upendra Jhariya | (External Expert) |
| 5. Dr. R. K. Sharma | (Member) |
| 6. Mr. Mukul Shukla | (Member) |
| 7. Mrs. Sonu Airen | (Member) |
| 8. Mr. Manjeet Sood | (Member) |
| 9. Mrs. Megha Kulcha | (Member) |
| 10. Mrs. Nishi Tiwari | (member) |
| 11. Dr. C.T. Singar | (Member) |
| 12. Mr. Mukesh Sakle | (Member) |
| 13. Dr. Puja Gupta | (Invitee Member) |
| 14. Dr. Upendra Singh | (Invitee Member) |
| 15. Mrs. Neha Agrawal | (Invitee Member) |
| 16. Mrs. Jasmeet Kaur | (Invitee Member) |
| 17. Mr. Akshay Gupta | (Invitee Member) |
| 18. Mr. Shashank Sharma | (Invitee Member) |

As per the discussion of the aforesaid meeting and the meeting of the Board of Studies following are the deliberations of the meeting:

Item 1: The B.Tech.(I.T.) scheme was discussed in lieu of the NEP 2020 guidelines and the common credit scheme as circulated by the Dean(ARSD). The scheme was discussed and in accordance with the guidelines are attached as (Annexure-I).

The Open Elective courses were discussed and the following Open Elective courses are finalized, that can be offered to the other branch students.

1. Cyber Security
2. Introduction of Machine Learning
3. Introduction of Block Chain
4. Introduction of Data Science

Item 2: The Minor Degree Scheme was discussed which was proposed by the department. The subjects of these Minor Degrees were finalized after discussion with the experts.

These Minor Degree Programmes will be offered from the next session 2025-2026. The Minor Degree Programmes will be offered in the NPTEL/MOOCs Mode.

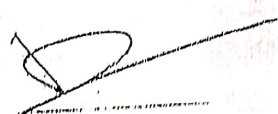
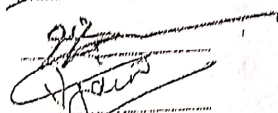
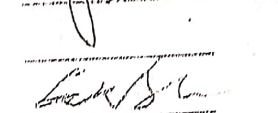
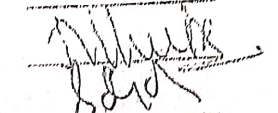
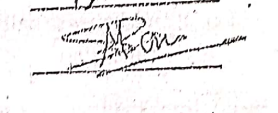
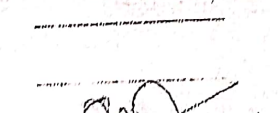
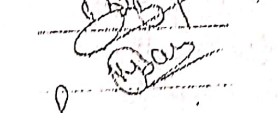
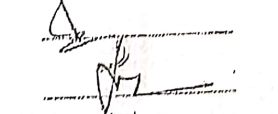
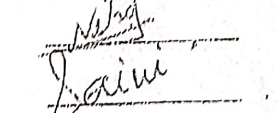
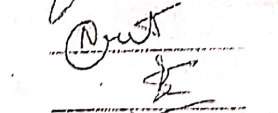
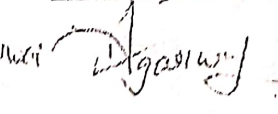
The Minor Degree Programmes and these courses are given in (Annexure-II)

The Data Science minor degree course is offered
Item 3: No item was discussed in the agenda item. from 2024-2025 session

Meeting ended with a vote of thanks to the chair.

Signature of the members:

1. Dr. Sunita Varma
2. Dr. G.L. Prajapati
3. Dr. Vaibhav Jain
4. Mr. Upendra Jhariya
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. Dr. C.P. Singar
12. Mr. Mukesh Sakle
13. Dr. Puja Gupta
14. Dr. Upendra Singh
15. Mrs. Neha Agrawal
16. Mrs. Jasmeet Kaur
17. Mr. Akshay Gupta
18. Mr. Shashank Sharma
19. Mr. Deepesh Agrawal




SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE
DEPARTMENT OF INFORMATION TECHNOLOGY

SUMMARY OF CREDITS			
YEAR	SEMESTER		Credits
	A	B	
I	20	20	40
II	23	22	45
III	24	22	46
IV	16	14	30
Total	83	78	161

Additional	*	As per department Choice	General Proficiency (Communication Skill, Professionalism, Presentation Skill, etc..)	
	*	As per department Choice	Professional Practice (Technical visit, Expert lectures, poster presentation, technical exhibition, Alumni interaction, participation in Hackethon, Coding Plateform ranking, Technical events outside the institute, Idea Lab, IIC activity etc.)	
Grand Total		161 + 02*		

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	MA28005	Mathematics - III	3	-	-	3	-	70	30	-	-	100	3
2	PCC	IT28018	Data Structures	3	1	-	4	-	70	30	-	-	100	4
3	PCC	IT28011	Object Oriented Programming	3	-	-	3	-	70	30	-	-	100	3
4	PCC	IT28009	Computer Organization & Architecture	3	-	-	3	-	70	30	-	-	100	3
5	ESC	EC28012	Digital System Design	3	-	-	3	-	70	30	-	-	100	3
6	HSMC	HU28481	Values, Humanities and Professional Ethics	-	2	-	2	-	-	100	-	-	100	2
7	PCC	IT28401	Data Structures Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	IT28402	Object Oriented Programming Lab	-	-	2	-	1	-	-	60	40	100	1
9	ESC	EC28403	Digital System Design Lab	-	-	2	-	1	-	-	60	40	100	1
10	PCC	IT28404	Basic Linux & Shell Programming	-	-	2	-	1	-	-	60	40	100	1
11	MC	ITM2002	Environmental Science*	2	-	-	-	-	-	50			50	0
12	MC	IT_____	Design Thinking	-	-	-	1	-	-	30	-	-	30	1
			Total	17	3	8	19	4	350	330	240	160	1080	23

* Mandatory non credit course

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	IT28511	Discrete Structures	3	1	-	4	-	70	30	-	-	100	4
2	PCC	IT28504	Design and Analysis of Algorithms	3	1	-	4	-	70	30	-	-	100	4
3	PCC	IT28513	Software Engineering	3	-	-	3	-	70	30	-	-	100	3
4	HSMC	HU28507	Economics for Engineers	3	-	-	3	-	70	30	-	-	100	3
5	ESC	EC28505	Data Communication	3	-	-	3	-	70	30	-	-	100	3
6	PCC	IT28801	Design and Analysis of Algorithms Lab	-	-	2	-	1	-	-	60	40	100	1
7	PCC	IT28802	Software Engineering Lab	-	-	2	-	1	-	-	60	40	100	1
8	PCC	IT28803	Python Programming Lab	-	-	2	-	1	-	-	60	40	100	1
9	PCC	IT28804	Skill Lab-I (Web Programming)	-	1	2	1	1	-	-	60	40	100	2
10	MC	HUM2052	Essence of Indian Knowledge Tradition*	2	-		-	-	-	50			50	0
			Total	17	3	8	18	4	350	200	240	160	950	22
* Mandatory non credit course														
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														
** 2 weeks training during semester break after IV sem is mandatory.														

Semester : V

S.No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks Alloted				Total Credits
				L	T	P	T	P	Theory		Practical		
									End	CW	End	SW	
1	PCC	IT38____	Computer Networks	3	0	-	3		70	30	-	-	3
2	PCC	IT38____	Data Base Management Systems	3	1	-	4		70	30	-	-	4
3	PCC	IT38____	Operating Systems	3	-	-	3	-	70	30	-	-	3
4	OEC	<u>IT38____</u>	Open Elective-I	3	1	-	4		70	30	-	-	4
5	PCC	IT38____	Theory of Computation	3	1	-	4	-	70	30	-	-	4
6	PCC	IT38____	Computer Networks Lab	-	0	2	-	1	-	-	60	40	1
7	PCC	IT38____	Data Base Management Systems	-	0	2	-	1	-	-	60	40	1
8	PCC	IT38____	Operating Systems Lab	-	0	2	-	1	-	-	60	40	1
9	PCC	IT38____	Skill Lab -II (Mobile Application	-	0	2	-	1	-	-	60	40	1
10	INT	IT38____	Industrial Training*	-	0	0	-	2	-	-	-	100	2
11	MC	HUM3802	Constitution of India*	-	2		-	-	-	50			0
			Total	15	3	8	18	6	350	150	240	260	24

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	CW	End	SW	
1	PEC	IT38____	Advanced Computer Networks	3	-	-	3	-	70	30	-	-	3
2	PCC	IT38____	Compiler Design	3	-	-	3	-	70	30	-	-	3
3	PCC	IT38____	Cloud Computing	3	-	-	3	-	70	30	-	-	3
4	PCC	IT38____	Machine Learning	3	-	-	3	-	70	30	-	-	3
5	PEC	_____	Elective – I	3	-	-	3	-	70	30	-	-	3
6	PCC	IT38____	Advanced Computer Networks Lab	-	-	2	-	1	-	-	60	40	1
7	PCC	IT38____	Cloud Computing Lab	-	-	2	-	1	-	-	60	40	1
8	PCC	IT38____	Machine Learning Lab	-	-	2	-	1	-	-	60	40	1
9	PRO	IT38____	Minor Project	-	-	8	-	4	-	-	60	40	4
			Total	15	0	14	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

Elective – I				
	IT38__	Object Oriented Analysis and Design		IT38__ Statistics & Probability
	IT38__	Social Networking (NPTEL)		IT38__ Embeded System (NPTEL)

Semester : VIII

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	IT48_____	Elective – III	3	-	-	3	-	70	30	-	-	3
2	PEC	IT48_____	Elective – IV	3	-	-	3	-	70	30	-	-	3
3	INT	IT48_____	Industrial Training/ Internship *	-	-	-	-	8	-	-		100	8
OR													
4	INT	Code 4	Industrial Training/ Internship **	-	-	-	-	14	-	-		100	14
Grand Total									-	-	-	-	14
	Note: *Student require to complete 6-8 weeks of industrial training/internship during the semester												
	Note: **Student require to complete 12-16 weeks of industrial training/internship during the semester break												

LIST OF ELECTIVES

Elective – III		
S.No.	Sub Code	Subject Name
1	IT48____	Cyber Security & IT Laws
2	IT48____	Large Language Models (NPTEL)
3	IT48____	Business Analytics & Text Mining (NPTEL)
4	IT48____	Introduction to industry 4.0 and industry 5.0 (NPTEL)

Elective – IV		
S.No.	Sub. Code	Subject Name
1	IT48____	UI/UX Design (NPTEL)
2	IT48____	Real Time Operating Systems
3	IT48____	GIS Drone and Machine Learning (NPTEL)
4	IT48____	Blockchain and its Application (NPTEL)

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

III 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

Department of Information Technology
MINOR Degree in Software Engineering (NPTEL)

S.No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Credits
				L	T	P	T	P	Theory		Practical		
									End Sem	CW	End Sem	SW	
1	-----	IT	Software Testing	-	-	-	3	1	-	-	-	-	4
2	-----	IT	Software Project Mangment	-	-	-	3	1	-	-	-	-	4
3	-----	IT	Open Source Software	-	-	-	3	1	-	-	-	-	4
4	-----	IT	Software Maintenance	-	-	-	3	1	-	-	-	-	4
5	-----	IT	DevOps	-	-	-	3	1	-	-	-	-	4
Total				0	0	0	15	5	0	0	0	0	20

IT				IT		
IT				IT		

Department of Information Technology
MINOR Degree in Machine Learning (NPTEL)

S.No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum			Total Credits	
				L	T	P	T	P	Theory		Practical		
									End Sem	CW	End Sem		SW
1	-----	IT	Advanced Machine	-	-	-	3	1	-	-	-	-	4
2	-----	IT	Natural Language	-	-	-	3	1	-	-	-	-	4
3	-----	IT	Programming for machine	-	-	-	3	1	-	-	-	-	4
4	-----	IT	Computer vision and	-	-	-	3	1	-	-	-	-	4
5	-----	IT	Image Processing	-	-	-	3	1	-	-	-	-	4
5	-----	IT	Generative AI	-	-	-	3	1	-	-	-	-	4
Total				0	0	0	15	5	0	0	0	0	20

IT				IT		
IT				IT		

Department of Information Technology
MINOR Degree in Core Computing IoT and Cloud System (NPTEL)

S.No.	Category	Subject Code	Subject Name	Hours/Week			Credits		Maximum Marks				Total Credits
				L	T	P	T	P	Theory		Practical		
									End Sem	CW	End Sem	SW	
1	-----	IT	Distributed System	-	-	-	3	1	-	-	-	-	4
2	-----	IT	Building Cloud and Big Data Projects	-	-	-	3	1	-	-	-	-	4
3	-----	IT	Mini-Project based on Cloud Computing & Big Data	-	-	-	3	1	-	-	-	-	4
4	-----	IT	IoT	-	-	-	3	1	-	-	-	-	4
5	-----	IT	Edge and Fog Computing	-	-	-	3	1	-	-	-	-	4
Total				0	0	0	15	5	0	0	0	0	20

IT				IT		
IT				IT		

[illegible]

IT				IT		
IT				IT		

Minor Degree (Total Credite : 20)				
S.No.	Data Science	Software Engineering	Machine Learning	Core Computing IOT and Cloud System
1	Programming Using Python	Software Testing	Advanced Machine Learning	Distributed System
2	Probability & Statistics	Software Project Mangment	Natural Language Processing	Building Cloud and Big Data Applications
3	Data Mining	Open Source Software	Programming for Machine Learning	Mini-project/Hands on Cloud Computing & Big Data
4	Data Science - I (Using Python)	Software Maintenance	Computer Vision and Image processing	IOT
5	Data Science - II (Using R)	DevOps	Genrative AI	Edge and Fog Computing
6	Data Science for Engineers			
7	Advanced R Programming for Data Analytics			
8	Data Analytics			