

**G. NARAYANAMMA INSTITUTE OF TECHNOLOGY AND SCIENCE
(FOR WOMEN)**


AUTONOMOUS

(Accredited by NBA of AICTE & NAAC of UGC)

Department of Information Technology

**Minutes of the Fourth Board of Studies Committee (for IT) Meeting held at
the Department of Information Technology, GNITS (for Women):**

- The Board of Studies Committee of the IT Department, GNITS, Hyderabad, has been instituted with effect from 10/08/2021 (for a period of 3 years), with the following members:
 1. Dr. I.Ravi Prakash Reddy, Professor, GNITS, HYD. - BoS Chairman
 2. Dr. G. Vijaya Kumari, Professor, CSE, JNTUH, HYD. - University Nominee
 3. Dr.P.Krishna Reddy, Professor, IIITH, HYD. - Subject Expert
 4. Dr. Chakravaty Bhagvati, Professor, SCIS, UOH. - Subject Expert
 5. Dr. Raghavendra Kune, Scientist "AF", ADRIN, HYD. - Industry Member
 6. Dr. S.Ramacharan, Professor & HOD ,IT, GNITS, HYD. - Internal Member
 7. Mr.B.V.Prasad Babu, Assoc. Professor, IT, GNITS, HYD. - Internal Member
 8. Mr. C.Sudhakar Reddy, Assoc. Professor, IT, GNITS, HYD. - Internal Member
 9. Dr. V. Supriya, Assoc. Professor, IT, GNITS, HYD. - Internal Member
 10. Dr. Susmita Mandal, Asst. Professor, IDRBT, HYD. - Alumnae Member


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- The 4th Board of Studies Meeting of the Department of IT, GNITS (UGC Autonomous), Hyderabad, has been conducted on 27/07/2023, in CC-3 Lab IT Department, to finalize the syllabus for the BTech(IT) III and IV year students.

Minutes of the Fourth BoS Meeting of IT Department:

The following are the proceedings and the associated resolutions:

- 1) Dr. I.Ravi Prakash Reddy, BoS Chair, extended a cordial welcome to all the members of the BoS for IT, for the Fourth BoS Meeting of IT Department (after attaining the UGC Autonomous Status in April 2018), and introduced all the members.
- 2) The Minutes of the 3rd Board of Studies Meeting of the Department of IT, GNITS (UGC Autonomous), held during 24/9/2022 have been reconfirmed.
- 3) Approval and acceptance of the Course Structure for the B.Tech(Information Technology) III year and IV year (5th to 8th Semesters) was reconfirmed.
- 4) BoS Chair briefed the stakeholders feedback report on curriculum to the BoS members and proposed the following:
 - a. As per the feedback received from outgoing students, AI and ML are offered in third year instead of final year of the B.Tech Program to strengthen the profile and skillset of students appearing for placements
 - b. As per Faculty feedback, Syllabus revision is done in following courses:
 - i. Information Security shifted to III year II Semester from IV-II
 - ii. Full stack Development Course along with lab is offered in III year -I Sem.
 - c. As per the Employers feedback and considering the requirements of the current market in the IT industry, the following new courses and other changes in the curriculum were proposed:
 - i. Cloud Computing lab introduced in III year -I Sem.
 - ii. Advanced Computer Architecture as Professional Elective -1 in III year - I Sem.
 - iii. Principles of Programming Languages as Professional Elective -2 in III year - I Sem.
 - iv. Image Processing and Embedded Systems as Professional Elective -3 in III year - II Sem.
 - v. DevOps along with Lab as Professional Elective-4 in IV year - I Sem.
 - vi. Natural Language Processing as Professional Elective-5 in IV year - I Sem.
 - vii. Blockchain Technologies and Augmented Reality and Virtual Reality as Professional Elective-6 in IV year - II Sem.
 - d. Overall, 8 courses are deleted from the previous Curriculum (GNR 18) and 10 new Courses have been added to the current GNR 22 Curriculum.


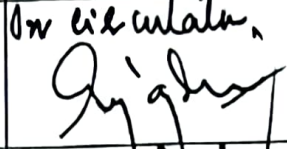

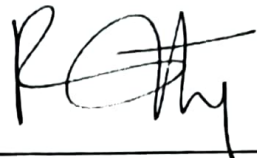


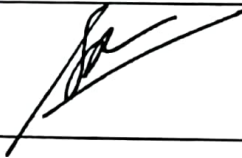
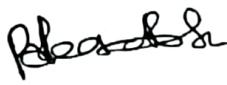




- 5) After detailed discussion and review of the stakeholder report, BoS Committee resolved to approve and accept the Course Structure, Course Contents and Syllabi for the B.Tech(Information Technology) III year and IV year (5th to 8th Semesters), as listed.
- 6) Resolved to approve the List of Professional Electives, Open Electives and Service Courses (for other departments) in addition to the Core Subjects and Labs, Summer Internship (for 2 Credits) after the completion of 3rd year (before commencement of 4th year), Seminar and B.Tech. Project as specified.
- 7) BoS Committee authorized the BoS Chair to bring into effect the same in the Book of Academic Regulations, Course Structure and Syllabi, for B.Tech. (IT), for the batches of students admitted from 2022-23 Academic Year onwards.
- 8) The BoS Committee authorized the BoS Chair, to include the required Course Numbers, and make any other minor corrections/ modifications if needed, in the final book preparation for the "Academic Regulations, Course Structure and Syllabi for the B.Tech. 4 Year Programme in IT", for GNITS (for Women), Hyderabad.
- 9) The BoS Committee formally authorized the BoS Chair, to suggest the Panels of Question Paper Setters, Examiners and Evaluators required for all the Subjects/Courses offered by IT Department, and for those listed in the UG and PG Course Structures (2022).




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Signatures of the Members Present:

S.No.	Name & Designation	Member Category	Signature
1	Dr. I.Ravi Prakash Reddy, Professor, IT, GNITS, HYD.	BoS Chairman	
2	Dr.G.Vijaya Kumari Professor of CSE, JNTUCEH, HYD	JNTUH Nominee	
3	Dr.P.Krishna Reddy, Professor, IIITH, HYD.	External Member	
4	Dr.Chakravarthy Bhagavathi Professor, CIS Dept, University of Hyderabad, HYD.	External Member	
5	Dr. Raghavendra Kune, Scientist "AE", ADRIN, HYD.	Industry Member	
6	Dr. Susmita Mandal, Asst. Prof., Centre for Payment Systems, IDRBT, HYD	Alumnae Member	
7	Dr. S.RamaCharan, Professor & Head, IT, GNITS, HYD.	Internal Member	
8	Mr.B.V.Prasad Babu, Assoc. Professor, IT, GNITS, HYD.	Internal Member	
9	Mr. C.Sudhakar Reddy, Assoc. Professor, IT, GNITS, HYD.	Internal Member	
10	Dr.V.Supriya, Assoc. Professor, IT, GNITS, HYD.	Internal Member	



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Dr. I. Ravi Prakash Reddy
Professor & BoS Chair

**B.Tech. 4 Year (8 semesters) Regular Programme in
INFORMATION TECHNOLOGY
Course Structure
(Applicable for the Batch admitted from the Academic Year 2022-23)**

III YEAR				I SEMESTER			
S.No.	Group	Sub Code	Subject	L	T	P	Credits
1	PC	125CN	Full Stack Development	3	1	0	4
2	PC	125CD	Computer Networks	3	0	0	3
3	PC	125CA	Cloud Computing	3	0	0	3
4	PE-1	Professional Elective-1 (Offline/Online)		3	0	0	3
		125BA	Artificial Intelligence				
		125CJ	Distributed Systems				
		125CC	Computer Graphics				
5	PE-2	Professional Elective-2 (Offline/Online)		3	0	0	3
		125CR	Human Computer Interaction				
		125CP	Fundamentals of Multi Media				
		125BS	Advanced Databases				
		125DD	Principles of Programming Languages				
6	PC	12533	Full Stack Development Lab	0	0	3	1.5
7	PC	12531	Computer Networks Lab	0	0	3	1.5
8	PC	12530	Cloud Computing Lab	0	0	2	1
TOTAL				15	1	8	20

III YEAR				II SEMESTER			
S.No.	Group	Sub Code	Subject	L	T	P	Credits
1	HS	126EG	Managerial Economics and Financial Analysis	3	0	0	3
2	PC	126EF	Machine Learning and Applications	3	1	0	4
3	PC	126BW	Automata and Compiler Design	3	0	0	3
4	PE-3	Professional Elective-3 (Offline/Online)		3	0	0	3
		126CE	Data Mining				
		126EA	Image Processing				
		126EQ	Software Testing Methodologies				
		126CL	Embedded Systems				
5	OE-1	Open Elective-1 (Offline/Online)		3	0	0	3
6	PC	12643	Machine Learning and Applications Lab	0	0	2	1
7	HS	12628	Advanced Communication Skills Lab	0	0	2	1
8	PW	12644	Mini Project-2	0	0	4	2
			Industry Oriented Mini Project/Internship (during Summer between II and III years)				
TOTAL				15	1	8	20

Signatures of the BoS Members Present:

Name	Signature	Name	Signature
Dr. I.Ravi Prakash Reddy		Dr. S.Ramacharan -	
Dr. G. Vijaya Kumari		Mr.B.V.Prasad Babu	
Dr.P.Krishna Reddy		Mr. C.Sudhakar Reddy	
Dr.Chakravaty Bhagvati		Dr. V. Supriya	
Dr. Raghavendra Kune		Dr. Susmita Mandal	

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**B.Tech. 4 Year (8 semesters) Regular Programme in
INFORMATION TECHNOLOGY**

Course Structure

(Applicable for the Batch admitted from the Academic Year 2022-23)

IV YEAR				I SEMESTER			
S.No.	Group	Sub Code	Subject	L	T	P	Credits
1	HS	127FN	Fundamentals of Management	3	0	0	3
2	PC	127DS	Cryptography and Network Security	3	0	0	3
3	PE-4	Professional Elective - 4		3	0	0	3
		127ED	Internet of Things				
		127FB	DevOps				
		127CZ	Mobile Application Development				
4	PE-5	Professional Elective - 5 (Offline/Online)		3	0	0	3
		127CS	Information Retrieval Systems				
		127FZ	Soft Computing				
		127GJ	Wireless Networks and Mobile Computing				
		127FS	Natural Language Processing				
5	OE-2	Open Elective - 2 (Offline/Online)		3	0	0	3
6	PC	12751	Cryptography and Network Security Lab	0	0	2	1
7	PC	Lab (Linked to PE4)		0	0	2	1
		12758	Internet of Things Lab				
		12754	DevOps Lab				
		12760	Mobile Application Development Lab				
8	PW-1	12763	Project Work (Phase - I)	0	0	6	3
TOTAL				15	0	10	20

IV YEAR				II SEMESTER			
S.No.	Group	Sub Code	Subject	L	T	P	Credits
1	HS	128GW	Entrepreneurship and Project Management (Offline/Online)	2	0	0	2
2	PE-6	Professional Elective - 6 (Offline/Online)		3	0	0	3
		128GU	E-Commerce				
		128EP	Software Project Management				
		128EW	Blockchain Technologies				
		128GP	Augmented Reality and Virtual Reality				
3	OE-3	Open Elective - 3 (Offline/Online)		3	0	0	3
4	PW	12870	Seminar (Presentation with Report before 1 st Mid Exams)	1	0	2	2
5	PW-2	12869	Project Work (Phase - II)	0	0	20	10
TOTAL				9	0	22	20

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Dr. G. Vijaya Kumari		Mr.B.V.Prasad Babu	
Dr.P.Krishna Reddy		Mr. C.Sudhakar Reddy	
Dr.Chakravaty Bhagvati		Dr. V. Supriya	
Dr. Raghavendra Kune		Dr. Susmita Mandal	

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LIST OF OPEN ELECTIVES OFFERED BY VARIOUS DEPARTMENTS FOR B.TECH.

S. No.	Name of the Department Offering Open Electives	Open Elective-1 (B. Tech. III Year II Semester)	Open Elective-2 (B. Tech. IV Year I Semester)	Open Elective-3 (B.Tech. IV Year II Semester)
1	CSE/ IT/ CST	<ul style="list-style-type: none"> ➤ Fundamentals of Data Structures(126KF) ➤ Fundamentals of Database Management Systems (126KG) ➤ Operating Systems(126KK) ➤ Software Engineering (126KQ) 	<ul style="list-style-type: none"> ➤ Internet of Things (127KY) ➤ Cyber Security (127KT) 	<ul style="list-style-type: none"> ➤ Cloud Computing (128LE) ➤ Blockchain Technologies (128LD)
2	CSM	<ul style="list-style-type: none"> ➤ R Programming (126KP) 	<ul style="list-style-type: none"> ➤ Machine Learning Basics (127KZ) 	<ul style="list-style-type: none"> ➤ Introduction to Natural Language Processing (128LL)
3	CSD	<ul style="list-style-type: none"> ➤ Fundamentals of Data Science (126KE) ➤ Fundamentals of Artificial Intelligence (126KD) 	<ul style="list-style-type: none"> ➤ Data Visualization using Python (127KU) 	<ul style="list-style-type: none"> ➤ Data Mining (128LF)
4	ECE	<ul style="list-style-type: none"> ➤ Biomedical Electronics and Applications (126KA) ➤ Principles of Mobile Communications(126KN) ➤ Verilog HDL Programming (126KR) 	<ul style="list-style-type: none"> ➤ Electronic Measuring Instruments (127KV) ➤ Geo-Informatics (127KW) 	<ul style="list-style-type: none"> ➤ Wearable Devices (128LP) ➤ Elements of Satellite Communications (128LG)
5	ETM	<ul style="list-style-type: none"> ➤ Principles of Communications (126KM) 	<ul style="list-style-type: none"> ➤ Telecommunication Switching Systems (127LC) 	
6	EEE	<ul style="list-style-type: none"> ➤ Electrical Materials (126KC) 	<ul style="list-style-type: none"> ➤ Renewable Energy Sources(127LA) 	<ul style="list-style-type: none"> ➤ Waste Management Techniques and Power Generation (128LN)
7	Mech. Engg.	<ul style="list-style-type: none"> ➤ Operations Research (126KL) 	<ul style="list-style-type: none"> ➤ Research Methodology (127LB) 	
8	H&M	<ul style="list-style-type: none"> ➤ Introduction to Data Analytics(126KJ) ➤ Intellectual Property Rights(126KH) 	<ul style="list-style-type: none"> ➤ Industrial Management (127KX) ➤ Behavioral Skills and Professional Communication(127KS) 	<ul style="list-style-type: none"> ➤ Marketing Management (128LM)
9	BS	<ul style="list-style-type: none"> ➤ Disaster Management (126KB) 		<ul style="list-style-type: none"> ➤ Environmental Impact Assessment (128LH)

Note: Open Elective – Students should take Open Electives from List of Open Electives Offered by Other Departments/Branches Only.

Ex: - A Student of Computer Science and Engineering can take Open Electives from all other departments/branches except Open Electives offered by Computer Science and Engineering Dept.

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Dr. G. Vijaya Kumari		Mr.B.V.Prasad Babu	
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List of New Courses

S.No	Subject Name	Year and Sem
1	Full Stack Development	III Year - I Sem
2	Advanced Computer Architecture	III Year - I Sem
3	Principles of Programming Languages(PE-2)	III Year - I Sem
4	Full Stack Development Lab	III Year - I Sem
5	Cloud Computing Lab	III Year - I Sem
6	Image Processing(PE-3) Software Testing Methodologies(PE-3) Embedded Systems(PE-3)	III Year -II Sem
7	DevOps(PE-4)	IV Year - I Sem
8	Natural Language Processing(PE-5)	IV Year - I Sem
9	Cryptography and Network Security LAB	IV Year - I Sem
10	DevOps Lab(PE-4 Lab)	IV Year - I Sem
11	Block Chain Technologies(PE-6) Augmented Reality and Virtual Reality(PE-6)	IV Year - II Sem

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List of Modified Courses (Modified content >=20%)

S.No	Subject Name	Year and Sem
1	Computer Networks	III Year - I Sem
2	Cloud Computing	III Year - I Sem
3	Artificial Intelligence(PE-1)	III Year - I Sem
4	Human Computer Interaction(PE-2)	III Year - I Sem
5	Computer Networks Lab	III Year - I Sem
6	Machine Learning and Applications	III Year -II Sem
7	Automata and Compiler Design	III Year -II Sem
8	Data Mining (PE-3)	III Year - II Sem
9	Machine Learning and Applications Lab	III Year -II Sem
10	Cryptography and Network Security	IV Year - I Sem
11	Mobile Application Development(PE-4)	IV Year - I Sem
12	Soft Computing(PE-5)	IV Year - I Sem
13	Wireless Networks and Mobile Computing(PE-5)	IV Year - I Sem
14	Internet of Things Lab(PE-4 Lab)	IV Year - I Sem
15	Mobile Application Development Lab(PE-4 Lab)	IV Year - I Sem

List of deleted courses

S. No	Subject Name	Year and Sem
1	Web Technologies	III Year -II Sem
2	Web Technologies Lab	III Year -II Sem
3	Network Programming	IV Year - I Sem
4	Network Programming Lab	IV Year - I Sem
5	Advanced Operating Systems(PE-5)	IV Year - II Sem
6	Internet Technologies(PE-6)	IV Year - II Sem
7	Android Programming(OE-3)	IV Year - I Sem
8	Principles of Artificial Intelligence(OE-4)	IV Year - II Sem




BoS Chair

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