

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



(Accredited by NBA of AICTE & NAAC of UGC)



**Department of Computer Science and Engineering**  
**(Data Science)**

Minutes of the 4<sup>th</sup> Board-of-Studies (BoS) Committee Meeting for B.Tech CSE (Data Science) Department held at the Department of CSE, GNITS, Hyderabad on 28/07/2023.

- The Board of Studies Committee of the CSE (Data Science) Department, GNITS, Hyderabad, has been instituted with effect from 14/09/2022 (for a period of 3 years), with the following members:
    - Dr. M. Seetha, Professor, Dept. of CSEGNITS, Hyderabad
    - Dr. K. Kamakshi Prasad, Senior Professor of CSE, JNTUCEH, Hyderabad
    - Dr. Chakravarthy Bhagvati, Professor, CIS Dept., UoH, Hyderabad
    - Dr. Y. Rama Devi, Professor of CSE, CBIT, Hyderabad
    - Mr. P. Mohan, Senior Data Scientist, Tech Mahindra, Hyderabad
    - Dr. N. Kalyani, Professor, Dept. of CSE, GNITS, Hyderabad
    - Dr. A. Sharada, Professor, Dept. of CSE, GNITS, Hyderabad
    - Mrs. Jayashree S Patil, Associate Professor, Dept. of CSE, GNITS
    - Dr. D. V. Lalita Parameswari, Associate Professor, Dept. of CSE, GNITS, Hyderabad
    - Dr. G. Malini Devi, Associate Professor, Dept. of CSE, GNITS, Hyderabad
    - Dr. Raghavender K V, Associate Professor, Dept. of CSE, GNITS, Hyderabad
    - Dr. O. Obulesu, Associate Professor, Dept. of CSE (Data Science), GNITS, Hyderabad
    - Mrs. Sony Salavadi, PAN India Mgr., BookMyStall, Hyderabad
- BoS Chairman  
-University Nominee  
-Subject Expert  
-Subject Expert  
-Industry Member  
-Internal Member  
-Internal Member  
-Internal Member  
-Internal Member  
-Internal Member  
-Internal Member  
-Internal Member  
-Alumnae Member
- 3<sup>rd</sup> Meeting of the BoS Committee of the B.Tech CSE (Data Science) was held on 28/07/2022, at the CSE Department, C-11 Lab, GNITS, Hyderabad.

**Minutes of the 4<sup>th</sup> BoS Meeting of B.Tech CSE (Data Science) Department:**

The 4<sup>th</sup> Board-of-Studies Meeting of the Department of CSE (Data Science), GNITS (UGC Autonomous), Hyderabad, has been conducted on 28/07/2023, within the Department, and the following are the 'Minutes of the 4<sup>th</sup> BoS Meeting, and the associated resolutions.

- The Minutes of the 3<sup>rd</sup> Board-of-Studies Meeting of the Department of CSE(DS), GNITS (UGC Autonomous), held on 23-09-2022, have been reconfirmed.
- After detailed discussions and satisfactory deliberations, the following resolutions are considered and approved unanimously.
  - Resolved to approve the course structure, course contents and Syllabi for the B.Tech Computer Science & Engineering (DS) III year and IV year (5<sup>th</sup> to 8<sup>th</sup> Semesters), as listed. The course structure requirements are as per the guidelines suggested by AICTE Model Curriculum of January, 2018 (160 Credits for B.Tech. Program).
  - Resolved to approve the Professional Electives, Open Electives and Service Courses (for other departments), in addition to the Core courses and Labs, Summer Internship (for 2 Credits) after the completion of 2<sup>nd</sup> year (before commencement of 3<sup>rd</sup> year). Seminar and B.Tech. Project as specified.

3. To provide laboratory for Professional Elective-4 in IV B.Tech. I Semester.
4. BoS Chair briefed about the stakeholders feedback report on curriculum to the BoS members and proposed the following :
  - a. As per the feedback received from outgoing students, **Full Stack Development Theory with Laboratory** is introduced in III B.Tech I Semester.
  - b. Syllabus is revised for **Neural Networks and Deep Learning** theory and lab subjects.
  - c. **Mobile Application Development Theory** subject is introduced in III B.Tech I Semester to provide awareness on Emerging Technologies.
  - d. **Data Science, Software Testing Methodologies, Soft Computing Theory** subjects are introduced in III B.Tech II Semester to provide awareness on Recent Technologies.
  - e. As per faculty feedback, the syllabi is revised for the below subjects in the curriculum.
    - i. **Machine Learning** theory with laboratory in III B.Tech I Semester
    - ii. **Automata and Compiler Design** is included III B.Tech II Semester.
  - f. 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 :
    - **Soft Computing** is introduced as Professional Elective-3 in III year –II Semester.
    - **Software Testing Methodologies** is introduced as Professional Elective-3 in III B.Tech II Semester.
    - **Web and Social Media Analytics and DevOps** theory with laboratory is included newly as Professional Elective-4 in IV B.Tech I Semester.
    - **Exploratory Data Analysis, Spatial and Multimedia Databases and Privacy**
    - **Preserving in Data Mining** are included newly as Professional Elective-5 in IV B.Tech I Semester.
    - **Social Network Analysis, Data Stream Mining and Database Security** are included newly as Professional Elective-6 in IV B.Tech II Semester.



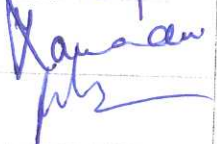


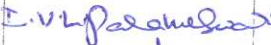



Based on the recommendations of various Regulatory bodies and various stakeholders **Research Methodology** is included as Open Elective offered by Mechanical department in IV year - I Semester.

5. The BoS Committee authorized the BoS Chairperson of **CSE (Data Science)**, to include the required Course Numbers, and make any other minor corrections/ modifications if needed, in the final book preparation for the “ Course Structure and Syllabi for the B.Tech. 4 Year Programme in **CSE (Data Science)**”, for GNITS, Hyderabad.
6. The BoS Committee formally authorized the BoS Chairperson of **CSE (Data Science)** Department, to suggest the Panels of Question Paper Setters, Examiners and Evaluators required for all the Subjects offered by **CSE (Data Science)** Department, and listed in the UG Course Structure (2022).
7. The BOS members suggested to make all the courses based on emergent technologies that are not core courses of the program and are being offered as electives, to be offered as Open

Electives by other Computer Science based branches, so that the students can benefit by opting them.

8. Chairperson informed the board that **11** new courses were **added** and 5 were **deleted** in Professional Core. Professional Elective courses in GNR 22 Regulations compared to GNR 18 Regulations.

**Signatures of the Members Present:**

S.No.	Name & Designation	Member Category	Signature
1.	Dr. M. Seetha, Professor, Dept. of CSE, GNITS, Hyderabad	BoS, Chairman	
2.	Dr. K. Kamakshi Prasad, Senior Professor of CSE, JNTUCEH, Hyderabad	University Nominee	
3.	Dr. Chakravarthy Bhagavathi, Professor, CIS Dept., University of Hyderabad, Hyderabad	Subject Expert	
4.	Dr. Y. Rama Devi, Professor, Dept. of CSE, CBIT, Hyderabad	Subject Expert	
5.	Mr. P Mohan, Senior Data Scientist, Tech Mahindra, Hyderabad	Industry Member	
6.	Dr. N. Kalyani, Professor, Dept of CSE, GNITS, Hyderabad	Internal Member	
7.	Dr. A. Sharada, Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	
8.	Mrs. Jayashree S Patil, Associate Professor, Dept of CSE, GNITS, Hyderabad	Internal Member	
9.	Dr. D.V. Lalita Parameswari, Associate Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	
10.	Dr. G. Malini Devi, Associate Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	
11.	Dr. Raghavender K V, Associate Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	
12.	Dr. O. Obulesu, Associate Professor, Dept. of CSE (Data Science), GNITS, Hyderabad	Internal Member	
13.	Mrs. Sony Salavadi, PAN India Manager, Book my stall, Hyderabad	Alumnae	

The list of newly added, deleted and modified courses are as shown in the Table 1, Table 2 and Table 3 below.

**Table 1: List of Newly added Courses (III and IV Years) for GNITS R-22**

S.No	Subject Name	Year and Sem	Justification
1	Full Stack Development	III Year - I Sem	Industry Requirement
2	Full Stack Development Lab	III Year - I Sem	Industry Requirement
3	PE-1 Computer Graphics	III Year - I Sem	Foundational knowledge to understand AR & VR
4	PE-2 Mobile Application Development	III Year - I Sem	Industry Requirement

5	Data Science	III Year- II Sem	Current Trending Technology
6	Data Science Lab	III Year- II Sem	Current Trending Technology
7	<b>PE-3</b> Software Testing Methodologies Image Processing	III Year- II Sem	Current Trending Technology
8	<b>PE-4</b> Web & Social Media Analytics DevOps	IV Year-I Sem	Current Trending Technology
9	<b>PE-4 Lab</b> Neural Networks and Deep Learning Lab Web and Social Media Analytics Lab DevOps Lab	IV Year-I Sem	Current Trending Technology
10	<b>PE-5</b> Exploratory Data Analysis Spatial and Multimedia Database Cryptography and Network Security Privacy Preserving in Data Mining	IV Year-I Sem	Current Trending Technology
11	<b>PE-6</b> Social Network Analysis Data Stream Mining Database Security	IV Year-II Sem	Current Trending Technology

**Table 2: List of Deleted Courses (III and IV Years) from GNITS R-18**

S.No	Subject Name	Year and Sem	Justification
1	<b>PE-2</b> Web Development Technologies Computer Vision and Pattern Recognition	III Year – II Sem	Concepts added in Full Stack Development and Image Processing
2	<b>PE-2 Lab</b> Web Development Technologies Lab Internet of Things and Applications Lab Computer Vision and Pattern Recognition Lab	III Year – II Sem	Concepts added in Full Stack Development and Image Processing. IoT applications can be carried out in mini project.
3	<b>PE-3</b> Distributed Databases Recommender Systems	IV Year-I Sem	To incorporate latest technologies.
4	<b>PE-5</b> Human Computer Interaction Digital Forensics	IV Year-II Sem	To incorporate latest technologies.
5	<b>PE-6</b> Software Project Management Real time systems	IV Year-II Sem	To incorporate latest technologies.

**Table 3: Comparison with GNITS-R-18 CSE - III & IV year Syllabus**

<b>Number of New Courses Introduced</b>	<b>Number of Courses Modified (Modified content <math>\geq</math>20%)</b>	<b>Number of deleted courses</b>
<b>11</b>	<b>6</b>	<b>5</b>

