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



# (Accredited by NBA of AICTE & NAAC of UGC)



-Alumnae Member

### Department of Computer Science and Engineering (Artificial Intelligence & Machine Learning)

Minutes of the 4th Board-of-Studies (BoS) Committee Meeting for B.Tech CSE (AI&ML) Department held at the Department of CSE, GNITS, Hyderabad on 28/07/2023.

- The Board of Studies Committee of the CSE(AI&ML) Department, GNITS, Hyderabad, has been instituted with effect from 14/09/2022 (for a period of 3 years), with the following members:
  - -BoS Chairman 1. Dr. M. Seetha, Professor, Dept. of CSEGNITS, Hyderabad -University Nominee 2. Dr. K. Kamakshi Prasad, Senior Professor of CSE, JNTUCEH, Hyderabad 3. Dr.Chakravarthy Bhagvati, Professor, CIS Dept., UoH, Hyderabad - Subject Expert - Subject Expert 4. Dr. Y. Rama Devi, Professor of CSE, CBIT, Hyderabad -Industry Member 5. Mr. P. Mohan, Senior Data Scientist, Tech Mahindra, Hyderabad 6. Dr. N. Kalyani, Professor, Dept. of CSE, GNITS, Hyderabad -Internal Member -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 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. K. Prasanna, Assoc. Prof., Dept. of CSE(Al&ML), GNITS, Hyderabad -Internal Member 13. Dr. S. Ravi Kumar Raju, Assoc. Prof., Dept. of CSE(AI&ML), GNITS, Hyd. -Internal Member 14. Dr. B. Sasidhar, Asst. Professor, Dept. of CSE(Al&ML), GNITS, Hyderabad -Internal Member
- 3<sup>rd</sup> Meeting of the BoS Committee of the B.Tech CSE (AI & ML) was held on 28/07/2022, at the CSE Department, C-11 Lab, GNITS, Hyderabad.

## Minutes of the 4th BoS Meeting of B.Tech CSE (AI&ML) Department:

15. Mrs. Sony Salavadi, PAN India Mgr., BookMyStall, Hyderabad

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

- Board-of-Studies Meeting of the Department of 1. The Minutes of the 3rd CSE(AI&ML), GNITS (UGC Autonomous), held on 23-09-2022, reconfirmed.
- 2. 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 (AI & ML) III year and IV year (5th to 8th 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).

- ii. 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 Lab 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, Randomized Algorithms **Theory** subjects are introduced in III B.Tech I Semester to provide awareness on Emerging Technologies.
  - d. Cognitive Computing, R Programming **Theory** subjects are introduced in III B.Tech II Semester to provide awareness on Recent Technologies and data visualization.
  - e. Cognitive Computing, R Programming **Theory** subjects are introduced in III B.Tech II Semester to provide awareness on Recent Technologies and data visualization.
  - f. Reinforcement learning theory with lab subject is newly introduced in IV B.Tech I Semester.
  - g. 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.
  - h. 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:
    - Cognitive Computing is introduced as Professional Elective-3 in III year -II Semester.
    - \* Internet-of-Things and Applications is introduced as Professional Elective-3 in III B.Tech II Semester.
    - Data Analytics and Devops theory with laboratory is included newly as Professional Elective-4 in IV B.Tech I Semester.
    - Expert Systems, Data Warehousing and Business Intelligence are included newly as Professional Elective-5 in IV B.Tech I Semester.
    - **& Conversational AI, Federated Machine Learning and Quantum Computing** are included newly as Professional Elective-6 in IV B.Tech II Semester.
- 5. 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.
- 6. The BoS Committee authorized the BoS Chairperson of CSE (AI&ML), 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 (AI&ML)", for GNITS, Hyderabad.

- 7. The BoS Committee formally authorized the BoS Chair of CSE(AI&ML) Department, to suggest the Panels of Question Paper Setters, Examiners and Evaluators required for all the Subjects offered by CSE(AI&ML) Department, and listed in the UG Course Structures (2022).
- 8. 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.
- Chairperson informed the board that 11 new courses were added and 10 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. Kamakshi Prasad, Senior Professor of CSE, JNTUCEH, Hyderabad	University Nominee	Capraco
3.	Dr.ChakravarthyBhagavathiProfessor, CIS Dept., University of Hyderabad, Hyderabad	Subject Expert	RAM
4.	Dr. Y. Rama Devi, Professor, Dept. of CSE, CBIT, Hyderabad	Subject Expert	Xana an
5.	Mr. P Mohan, Senior Data Scientist, Tech Mahindra, Hyderabad	Industry Member	phr
6.	Dr. N. Kalyani, Professor, Dept of CSE, GNITS, Hyderabad	Internal Member	
7.	Dr. A. Sharada, Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	Hly
8.	Mrs. Jayashree S Patil, Associate Professor, Dept of CSE, GNITS, Hyderabad	Internal Member	TRIL
9.	Dr.D.V. Lalita Parameswari, Associate Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	Dr. Lparamagna
10.	Dr. G. Malini Devi, Associate Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	Cofalial
11.	Dr Raghavender K V, Associate Professor, Dept. of CSE, GNITS, Hyderabad	Internal Member	Roef.
12.	Dr. K. Prasanna, Associate Professor, Dept. of CSM, GNITS, Hyderabad	Internal Member	Musemin
13.	Dr. S. Ravikumar Raju , Associate Professor, Dept. of CSM, GNITS, Hyderabad	Internal Member	
14.	Dr. B. Sasidhar, Asst.Professor, Dept. of CSM, GNITS, Hyderabad	Internal Member	18
15.	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 Laboratory	III Year – I Sem	Industry Requirement
3	PE-1 Data Mining Computer Graphics	III Year – I Sem	Foundational knowledge in AI & ML and
4	PE-2 Mobile Application Development Randomized Algorithms	III Year – I Sem	Industry Requirement and foundational knowledge in AI & ML
5	PE-3 Cognitive Computing Cryptography and Network Security	III Year- II Sem	Foundational knowledge in AI & ML
6	Reinforcement Learning	IV Year-I Sem	Current Trending Technology
7	Reinforcement Learning Laboratory		Current Trending Technology
8	PE-4 DevOps	IV Year-I Sem	Current Trending Technology
9	PE-4 Lab DevOps Laboratory	IV Year-I Sem	Current Trending Technology
10	PE-5 Expert Systems Dataware Housing & Business Intelligence	IV Year-I Sem	Current Trending Technology
11	PE-6 Software Testing Methodologies Conversational AI Quantum Computing Federated Machine Learning	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	Data Visualization	III Year – I Sem	Merged with python programming
2	PE-1 Distributed Systems	III Year – I Sem	To incorporate latest technologies.
3	Data Visualization Lab	III Year – I Sem	Merged with python programming.
4	Data Mining and Predictive Analytics	III Year – II Sem	Merged with Data Mining
5	PE-2 Web Development Technologies	III Year – II Sem	Concepts added in Full Stack Development

6	PE-2 Lab Web Development Technologies Lab Internet of Things and Applications Lab	III Year – II Sem	Concepts added in Full Stack Development & IoT applications can be carried out in mini project
7	PE-3 Fuzzy Logic and Applications	IV Year-I Sem	To incorporate latest technologies.
8	PE-4 Information Retrieval Systems	IV Year-I Sem	To incorporate latest technologies.
9	PE-5 Human Computer Interaction Digital Forensics	IV Year-II Sem	To incorporate latest technologies.
10	PE-6 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:

Number of New Courses Introduced	Number of Courses  Modified (Modified content >=20%)	Number of deleted courses
11	4	10