

B.N.M. Institute of Technology
An Autonomous Institution under VTU, Approved by AICTE
Department of Artificial Intelligence and Machine Learning

Minutes of the Meeting

Meeting Details **3rd BOS Meeting**

Date 01/09/2023
Time 11 AM to 1.30 PM
Venue A-Block, Seminar Hall, A215

Members Present	1. Dr. Sheba Selvam, Chairperson 2. Dr. N V Subba Reddy, VTU Nominee 3. Dr. Ramesh Kestur, Subject expert from outside university 4. Dr. Mary Anita EA, Subject expert from outside university 5. Dr. Ashwin U M, Subject expert from outside university 6. Ms. Mangala N, Industry expert 7. Mr. Akash Konnur, Industry expert 8. Dr. Anusha Preetham, Member Secretary 9. Dr. Sunita R, Member 10. Mr. Mohanesh B M, Member 11. Mr. Mahanthesha U Member 12. Mrs. Pavithra H C, Member 13. Mrs. Nagarathna C R, Member
Members Absent (Reasons)	-NIL-
Agenda	1. Welcome address 2. Introduction 3. Best practices in curriculum design 4. Presentation of scheme of 3rd to 8th semester AI and ML 5. Syllabus presentation of 5th, 6th semester AI and ML for 2021-Scheme 6. Syllabus presentation of 3rd, 4th semester AI and ML for 2022-Scheme 7. Any other suggestions to the department 8. Concluding remarks by member secretary
Proceedings of the meeting	
• The meeting started with Welcome speech by chairperson followed by introduction of VTU nominee, External Subject experts, Industry experts and BNMIT internal members. • Best practices in curriculum design was discussed. Various university like IIT- Hyderabad,	

Amrita University and Reva University scheme was referred while preparing Scheme. Online professional courses like great learning, Upgrade + IIIT-B etc. and Industry experts' opinion is considered for professional courses.

- Scheme and syllabus of 2021 and 2022 scheme of Artificial Intelligence and Machine Learning for Autonomous was presented.
- Suggestions by expert members are discussed during scheme presentation.
- Member Secretary briefed about suggestion discussed and concluded meeting with thank you note.

Recommendations / Suggestions from the BOS Members

Member1

Dr. N V Subba Reddy
Pro-Vice Chancellor, CMR
University
(VTU NOMINEE)

Under professional elective track:

- **TRACK 1:** Elective 3 – change it to Expert systems instead of expert system.
- **TRACK 5:** change the course title to “ Data Warehousing and Data Mining.

Member2

Dr. Ramesh Kestur
Senior Research Fellow and
Adjunct Faculty
IIIT-B
(Subject Expert from outside
university)

- **Computer Networks and security:** Add prerequisites in every module.
- **Artificial Intelligence:** Modify/reframe lab problem statements.
- Generative AI to be included in the curriculum. It can be made as a separate track in Professional Elective having Large Language Model Transformers, Visual Transformers.
- Students should have courses in this sequence NLP- Deep Learning- Generative AI.
- **Image Processing and Computer Vision:** Introduce OpenCv instead on matlab.
- **5th SEM-** Open Electives: In “Introduction to Machine Learning” – Add i) Linear Regression. ii) Ensemble coding, AdaBoost, Gradient Descent and so on. Introduce a separate module for – Model evaluation.
- Introduce Prompt Engineering course.
- 5th module of MES course can be included in “Sensors Robotics” (Professional Elective Track)
- **Machine Learning:** Decision Tree and ensemble learning should be split into different modules.
- Include AIML specific Professional Elective tracks having Reinforcement learning, Deep reinforcement learning, Time series forecasting. Remote sensing, healthcare.
- **5th Sem Open elective:** Replace “Introduction to AI” by Prompt Engineering.
- **Decision Driven Decision making:** include supervised,

	unsupervised, autoencoder concepts. In module 5, include NN, CNN, Gradient descent, backpropagation. • Sensors & Robotics: Add prerequisites in every module. Include ROS (Robotic Operating systems).
Member 3 Dr Mary Anita EA, Professor & Head, Dept. of Computer Science & Engineering, Christ (Deemed to be Univeristy), B'luru (Subject Expert from outside university)	• Suggested to verify spellings in syllabus.
Member 4 Dr. Ashwin U M Professor, Dept. of CSE Reva University (Subject Expert from outside university)	• In ARVR Skill development course on gaming can be included. In Professional Electives: • TRACK 5: change the course title to "Predictive Analytics" • In 6th SEM, in Big Data Analytics: lab component on Hadoop need to be removed.
Member 5 Ms. Mangala N Senior Director, CDAC (Industry Expert-1)	Under professional elective track: • TRACK 6: Use different nomenclature instead of having it as "General". Can change it to Application Engineering.
Member 6 Mr. Akash Konnur Software Engineer II, B'luru. (company name cannot be mentioned due to company policies) (Industry Expert-2)	• Software Engineering: Introduce Software Architecture module. • Computer Network & Security: use framework like springboot to implement programs. • Cloud Computing & Application: Include Mlops, refer online certification courses and include those content for syllabus. Include AWS, GCP, Azure. • Data Structures & Applications: include libraries, Demo can be given to the students how these libraries can be used rather than writing custom codes for STACKs, QUEUEs and so on. Include HashMaps, Hash Tables. • Object Oriented Programming using Java: Use java version of 8 or Beyond. Include executorial services, callable future interfaces, streams. • Operating System: Include assignment component and ask students to implement OS concepts in java. • Data Base Management System: Introduce ORM (Object Relational Mapping) such as entity framework, hibernate.

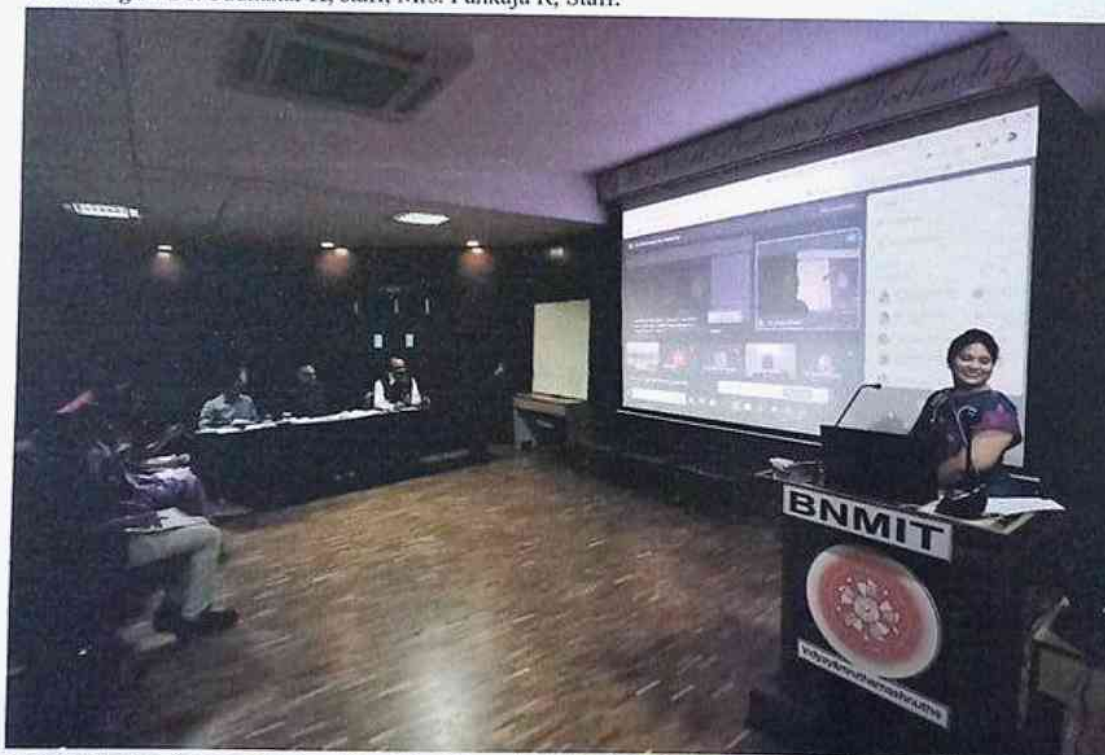
	Include MongoDB. • Design & Analysis of Algorithms: Introduce JUnit test cases. Include Java code in springboot Application. • General suggestions: introduce javascript module in the curriculum. Front end to back end connections. Teach Angular to python to Nosql connection. Introduce ReactJs.
Concluding Remarks by Member Secretary	• Spelling correction to be made in the syllabus. • Refine the title of few courses identified. • Introduce Generative AI in the curriculum. • Make use of libraries rather than making them write custom codes. Traditional codes are now made libraries. • Include MOOC course syllabus in the curriculum. • Introduce Prompt Engineering Course. • Include AI ML Specific courses in Professional Elective Tracks.



Dr. Sheba Selvam- HOD-AIML, Chairperson



Row-1(front) from left-to-right: Mr. Mahanthesha U, Member, Dr. Sunita R, Member, Dr. Anusha Preetham, BOS-Member Secretary, Mr. Akash Konnur, External Industry Expert, Dr. Ramesh Kestur, External Subject Expert. **Row-2 from left-to-right:** Dr. Anita C, Staff, Mrs. Nagarathna C R, Member, Mrs. Pavithra H C, Member, Ms. Abhilasha P K, Staff, Mr. Mohanesh B M, Member, Prof. Pradip Kumar Das, Staff. **Row-3 from left-to-right:** Dr. Sudhakar K, staff, Mrs. Pankaja R, Staff.



External experts connected online: Ms. Mangala N, Dr. N V Subba reddy, Dr. Ashwin U M, Dr. Mary Anita EA. **Chairperson near the podium:** Dr. Sheba Selvam, AIML-HOD **Members from Right:** Dr. S Y Kulkarni, BNMIT-Ad. Director, Dr. Ramesh Kestur, External subject Expert, Mr. Akash Konnur, External Industry Expert.



Chairperson near the podium: Dr. Sheba Selvam, AIML-HOD
 Members from Right: Dr. S Y Kulkarni, BNMIT-Ad. Director, Dr. Ramesh Kestur, External subject Expert,
 Mr. Akash Konnur, External Industry Expert.



Sheba Selvam
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A handwritten signature in green ink, likely belonging to the Chief Controller of Examinations.

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