



# SRI RAMAKRISHNA ENGINEERING COLLEGE

[Educational Service : SNR Sons Charitable Trust]

Vattamalaipalayam, N.G.G.O. Colony Post,

Coimbatore – 641022.

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## MINUTES OF THE 10<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG B.TECH ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD ON 14.03.2026 AT 3.00 PM IN ONLINE MODE.

The following members attended the above meeting:

- |    |                                                                                                                                                                 |                                                     |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 1. | Dr. V. Karpagam,<br>Professor and Head,<br>Department of Artificial Intelligence and Data Science,<br>Sri Ramakrishna Engineering College,<br>Coimbatore-641022 | Chairperson                                         |
| 2. | Dr. Rajeswari Sridhar<br>Professor, Department of CSE,<br>National Institute of Technology,<br>Tiruchirappalli.                                                 | University Nominee                                  |
| 3. | Dr. Valliappan Raman<br>Professor,<br>Department of Artificial Intelligence and Data Science,<br>Coimbatore Institute of Technology, Coimbatore.                | University Nominee                                  |
| 4. | Mr. Hariharan Suresh<br>Senior Developer Relations Manager,<br>NVIDIA, Singapore.                                                                               | Subject Expert<br>(Industry)                        |
| 5. | Dr.P. Santhi Thilagam<br>Professor,<br>Department of Computer Science and Engineering,<br>National Institute of Technology, Surathkal, Karnataka.               | Subject Expert<br>(NIT)                             |
| 6. | Dr. Shyam Diwakar<br>Director, Amrita Mind Brain Center,<br>Amrita Vishwa Vidyapeetham, Amritapuri campus, Kollam,<br>Kerala.                                   | Subject Expert<br>(Expert from other<br>university) |
| 7. | Mr. Dheepak Ganesamoorthi (IT/2011-2015) Batch<br>Senior Product Manager,<br>Best Buy, Bengaluru                                                                | Alumnus                                             |

|     |                                                              |                |
|-----|--------------------------------------------------------------|----------------|
| 8.  | Dr. J. Anitha,<br>Professor/ AI&DS                           | Faculty Member |
| 9.  | Mrs. P. V. Kavitha,<br>Assistant Professor (Sl.Gr)/AI&DS     | Faculty Member |
| 10. | Dr. M. Logaprakash,<br>Assistant Professor (Sl.Gr)/AI&DS     | Faculty Member |
| 11. | Mrs.A.Kayalvizhi,<br>Assistant Professor (Sr.Gr)/AI&DS       | Faculty Member |
| 12. | Mrs.K.Sudha,<br>Assistant Professor (Sr.Gr)/AI&DS            | Faculty Member |
| 13. | Mrs. R.Rampriya,<br>Assistant Professor (OG)/AI&DS           | Faculty Member |
| 14. | Mrs.C.Kavitha,<br>Assistant Professor (OG)/AI&DS             | Faculty Member |
| 15. | Mrs. V. Gomathi Sankari ,<br>Assistant Professor (OG)/AI&DS  | Faculty Member |
| 16. | Dr.D. Indhumathy<br>Assistant Professor (Sl.Gr)/ Mathematics | Faculty Member |

Prof. Dr.V.Karpagam, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 10<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

❖ **ITEM No.1**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2022, 2023 & 2024.

❖ **ITEM No.2**

- It is resolved that Regulation 2025 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2025.

❖ **ITEM No.3**

- It is resolved that the Curriculum and Syllabi be approved for the following new courses



| Semester V                   |             |                                               |          |   |   |   |           |
|------------------------------|-------------|-----------------------------------------------|----------|---|---|---|-----------|
| S. No                        | Course Code | Course Title                                  | Category | L | T | P | C         |
| <b>THEORY</b>                |             |                                               |          |   |   |   |           |
| 1.                           | 25AD2300    | Deep Learning                                 | PCC      | 3 | 0 | 0 | 3         |
| 3.                           |             | Ability Enhancement Course                    | AEC      | 0 | 0 | 4 | 2         |
| 4.                           |             | Professional Elective- I                      | PEC      |   |   |   | 3         |
| 5.                           |             | Open Elective II                              | OEC      | 3 | 0 | 0 | 3         |
| 6.                           |             | Multi-disciplinary Course-II                  | MDC      |   |   |   | 3         |
| <b>THEORY CUM LABORATORY</b> |             |                                               |          |   |   |   |           |
| 7.                           | 25AD2350    | Computer Vision                               | PCC      | 2 | 0 | 2 | 3         |
|                              | 25AD2351    | Computer Networks and Communication Protocols | PCC      | 2 | 0 | 2 | 3         |
| <b>LABORATORY</b>            |             |                                               |          |   |   |   |           |
| 8.                           | 25AD2370    | Deep Learning Laboratory                      | PCC      | 0 | 0 | 2 | 1         |
| 9.                           | 25AD2471    | Multidisciplinary project                     | ELC      | 0 | 0 | 2 | 2         |
| <b>Total</b>                 |             |                                               |          |   |   |   | <b>23</b> |

| Semester VI                  |                   |                                        |          |   |   |   |           |
|------------------------------|-------------------|----------------------------------------|----------|---|---|---|-----------|
| S. No                        | Course Code       | Course Title                           | Category | L | T | P | C         |
| <b>THEORY</b>                |                   |                                        |          |   |   |   |           |
| 1.                           | 25HS2104          | Principles of Project Management       | HSSM     | 2 | 0 | 0 | 2         |
| 2.                           | 25AD2301          | Cloud Computing Essentials             | PCC      | 3 | 0 | 0 | 3         |
| 3.                           | 25AD2302          | Natural Language Processing            | PCC      | 3 | 0 | 0 | 3         |
| 4.                           |                   | Multi-disciplinary Course-III          | MDC      | 3 | 0 | 0 | 3         |
| 5.                           |                   | Skill Enhancement Course               | SEC      | 0 | 0 | 4 | 2         |
| 6.                           |                   | Professional Elective- II              | PEC      | 3 | 0 | 0 | 3         |
| 7.                           |                   | Value Added Course                     | VAC      | 0 | 0 | 4 | 2         |
| <b>THEORY CUM LABORATORY</b> |                   |                                        |          |   |   |   |           |
| 8.                           | 25AD2352          | Cyber Security                         | PCC      | 2 | 0 | 2 | 3         |
| 9.                           | <b>LABORATORY</b> |                                        |          |   |   |   |           |
| 10.                          | 25AD2371          | Natural Language Processing Laboratory | PCC      | 0 | 0 | 2 | 1         |
| 11.                          | 25AD2372          | Cloud Computing Laboratory             | PCC      | 0 | 0 | 2 | 1         |
| <b>Total</b>                 |                   |                                        |          |   |   |   | <b>23</b> |

❖ **ITEM No. 4**

It is resolved that the syllabi for the following new Professional Core courses under Regulations 2025 be approved and passed.

- 25AD2300 - Deep Learning
- 25AD2351 - Computer Networks and Protocols
- 25AD2350- Computer Vision
- 25AD2370 - Deep Learning Laboratory
- 25AD2301- Cloud Computing Essentials
- 25AD2302 - Natural Language Processing
- 25AD2352- Cyber Security
- 25AD2371- Natural Language Processing Laboratory
- 25AD2372 - Cloud Computing Laboratory

❖ **ITEM No. 5**

It is resolved that the syllabi for the following new Professional Elective courses under Regulations 2025 be approved and passed.

| Professional Elective Verticals                                                                                                                                                                                                   |                                                                                                                                                                     |                                                                                                                                                                                      |                                                                                                                                                                                      |                                                                                                                   |                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Artificial Intelligence / Machine Learning                                                                                                                                                                                        | Data Science                                                                                                                                                        | Secure Systems                                                                                                                                                                       | Creative Media                                                                                                                                                                       | Web Technologies                                                                                                  | Emerging Technologies                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>➤ 25AD2320- Machine Learning Operations</li> <li>➤ 25AD2321- Reinforcement Learning</li> <li>➤ 25AD2322 - Agentic AI</li> <li>➤ 25AD2420- Edge AI and Embedded Machine Learning</li> </ul> | <ul style="list-style-type: none"> <li>➤ 25AD2330 - Big Data Analytics</li> <li>➤ 25AD2331 - Stream Processing</li> <li>➤ 25AD2332 - Recommender Systems</li> </ul> | <ul style="list-style-type: none"> <li>➤ 25AD2340- Web Application Security</li> <li>➤ 25AD2341 - Blockchain Technologies</li> <li>➤ 25AD2342 Secure Software Development</li> </ul> | <ul style="list-style-type: none"> <li>➤ 25AD2346- Augmented and Virtual Reality</li> <li>➤ 25AD2347 - Game design and development</li> <li>➤ 25AD2248- Digital Marketing</li> </ul> | <ul style="list-style-type: none"> <li>➤ 25AD2249- Full Stack Development</li> <li>➤ 25AD2360 - DevOps</li> </ul> | <ul style="list-style-type: none"> <li>➤ 25AD2361 - GPU Architecture and Programming</li> <li>➤ 25AD2362 - Robotic Process Automation</li> <li>➤ 25AD2363- Quantum Computing</li> </ul> |

❖ **ITEM No. 6**

It is resolved that the syllabi for the following new Professional Elective courses under industry vertical (GUVI-HCL) offered to other engineering programmes under Regulations 2025 be approved and passed.

- 25AD2266– Foundations of Machine Learning and Deep Learning for Generative AI
- 25AD2267– Natural Language Processing for Generative AI
- 25AD2268 – Generative AI for Vision
- 25AD2269– Advanced Techniques and Applications of Generative AI

❖ **ITEM No. 7**

It is resolved that the syllabi for the following new Open Elective courses under Regulations 2025 be approved and passed.

- 25AD2259 — Vibe Coding

❖ **ITEM No. 8**

It is resolved that the syllabi for the following new Multidisciplinary Minor courses (MMC) under Regulations 2025 be approved and passed.

- 25AD2261— AI for Civil Engineering
- 25AD2262 — AI for Instrumentation Engineers
- 25AD2263 — Data Analytics for Intelligent Robotic Systems

❖ **ITEM No. 9**

It is resolved that the syllabi for the following new Skill Enhancement courses (SEC) under Regulations 2025 be approved and passed.

- 25AD2283- Data Visualization

❖ **ITEM No. 10**

It is resolved that the syllabi for the following new Value Added courses (VAC)) under Regulations 2025 be approved and passed.

- 25AD2130 – AI for Sustainability



❖ **ITEM No. 11**

It is resolved that the following new one credit courses will be included under (Revised) Regulations 2020 for B.Tech Artificial Intelligence and Data Science program.

➤ 20ADI008 - SAP Flori and UI5 Professional Development

❖ **ITEM No. 12**

It is resolved that the following NPTEL courses are approved for credit transfer during Apr / May 2026.

| S.No                         | Course Code | Course Title                        | Credits | Course Duration | Equivalent Professional / Open Elective in SREC curriculum |
|------------------------------|-------------|-------------------------------------|---------|-----------------|------------------------------------------------------------|
| <b>Professional Elective</b> |             |                                     |         |                 |                                                            |
| 1.                           | noc26-cs81  | Reinforcement Learning              | 3       | 12 Weeks        | 20AD2E12 - Reinforcement Learning                          |
| 2.                           | noc26-cs61  | Affective Computing                 | 3       | 12 Weeks        | 20AD2E22 - Affective Computing                             |
| 3.                           | noc26-ch37  | Applied Time Series Analysis        | 3       | 12 Weeks        | 20AD2E01 -Time Series Analysis and Forecasting             |
| 4.                           | noc26-ec06  | Foundations of Accounting & Finance | 3       | 12 Weeks        | 20AD2E18 - Business Economics and Finance                  |

❖ **ITEM No. 13**

It is resolved that the Result Analysis for the Academic Year 2025 — 2026 (Semesters VII/ V/ III) are approved and passed.

| <b>Academic Year : 2025 – 2026 (Odd)</b> |                                           |                                         |                                       |                           |
|------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------|---------------------------|
| Semester                                 | No. of students registered in all courses | No. of Students appeared in all courses | No. of Students passed in all courses | Overall Pass Percentage % |
| <b>III</b>                               | 72                                        | 70                                      | 52                                    | 74.29                     |
| <b>V</b>                                 | 70                                        | 68                                      | 59                                    | 86.76                     |
| <b>VII</b>                               | 63                                        | 63                                      | 60                                    | 95.24                     |

❖ **ITEM No. 14**

It is resolved that the following Honors/Minor courses are offered during the odd semester of Academic Year 2025 — 2026 and the following eligible students of RR2020 be approved for the Honors / minor in B.Tech Artificial Intelligence and Data Science program.

| SPECIALIZATION                              | COURSE CODE &<br>TITLE                | REGISTER<br>NUMBER | NAME        | CGPA |
|---------------------------------------------|---------------------------------------|--------------------|-------------|------|
| <b>INTELLIGENT<br/>SYSTEMS<br/>(RBG.AI)</b> | 20AD2E23 – MLOps<br>for Deep Learning | 71812311012        | Chandru R   | 8.5  |
|                                             | 20AD2E24 – Large<br>Language Models   | 71812311032        | Megavathi A | 8.28 |

❖ **ITEM No. 15**

It is resolved that the following Mandatory courses be approved for the student in B.Tech Artificial Intelligence and Data Science program.

**Batch: 2022 - 2026**

| S.No | Mandatory Course                              | Course Code | No. of Students Completed |
|------|-----------------------------------------------|-------------|---------------------------|
| 1.   | Artificial Intelligence in<br>Virtual Reality | 20ADI002    | 71                        |

**Batch: 2023 – 2027**

| S.No | Mandatory Course             | Course Code | No. of Students Completed |
|------|------------------------------|-------------|---------------------------|
| 1.   | Chatbots with Text Analytics | 20ADI007    | 71                        |

**Batch: 2024 – 2028**

| S.No | Mandatory Course                              | Course Code | No. of Students Completed |
|------|-----------------------------------------------|-------------|---------------------------|
| 1.   | Artificial Intelligence in<br>Virtual Reality | 20ADI002    | 68                        |

❖ **ITEM No. 16**

It is resolved that the following students had completed 4/6 weeks of internship/in-plant training be approved for the student in B.Tech Artificial Intelligence and Data Science program.

| S.No                      | Industry                                                                 | No. of students |
|---------------------------|--------------------------------------------------------------------------|-----------------|
| <b>Batch: 2022 - 2026</b> |                                                                          |                 |
| 12.                       | Aegiiz Technologies, Coimbatore                                          | 5               |
| 13.                       | RBG AI, Coimbatore                                                       | 1               |
| 14.                       | RBG AI, Coimbatore & OxyHer, Coimbatore                                  | 2               |
| 15.                       | OxyHer, Coimbatore                                                       | 1               |
| 16.                       | OxyHer, Coimbatore & Sri Ethiraja Technologies, Coimbatore               | 1               |
| 17.                       | Ether Infotech, Coimbatore                                               | 12              |
| 18.                       | Sri Ethiraja Technologies, Coimbatore                                    | 8               |
| 19.                       | Artispec Technologies Pvt.Ltd, Coimbatore                                | 2               |
| 20.                       | Peopleclick Techno solutions Pvt.Ltd, Coimbatore                         | 1               |
| 21.                       | Emglitz Technologies, Coimbatore                                         | 8               |
| 22.                       | QbrainX, Coimbatore                                                      | 3               |
| 23.                       | Vume Interactive Pvt Ltd, Coimbatore                                     | 1               |
| 24.                       | Protowiz private limited, Coimbatore                                     | 1               |
| 25.                       | Pinnacle Systems, Coimbatore                                             | 2               |
| 26.                       | i2 Software Solutions Pvt Ltd, Coimbatore                                | 1               |
| 27.                       | Aaludra Technology Solutions, Coimbatore                                 | 2               |
| 28.                       | uSiS Technologies Pvt Ltd, Coimbatore                                    | 2               |
| 29.                       | Mindnotix Software Solutions, Coimbatore &<br>Hyperhawk Technologies LLP | 1               |
| 30.                       | CAP Digisoft, Coimbatore                                                 | 1               |
| 31.                       | Uitoux Solutions, Coimbatore                                             | 1               |



|              |                                          |           |
|--------------|------------------------------------------|-----------|
| 32.          | Brainbric innovation Pvt Ltd, Coimbatore | 1         |
| 33.          | Qwat innovation private limited          | 4         |
| 34.          | Hyperhawk Technologies LLP               | 2         |
| 35.          | Nxtlogic Software Solutions, Coimbatore  | 2         |
| 36.          | Sysres Technologies, Chennai             | 1         |
| <b>Total</b> |                                          | <b>66</b> |

| S.No                      | Industry                                                                                 | No. of students |
|---------------------------|------------------------------------------------------------------------------------------|-----------------|
| <b>Batch: 2023 - 2027</b> |                                                                                          |                 |
| 1.                        | AiROBOSOFT products and services LLP & Privacyweave, Coimbatore                          | 7               |
| 2.                        | TechCiti Software Pvt Ltd, Bangalore                                                     | 4               |
| 3.                        | Nimesa Technologies Pvt Ltd, Bangalore                                                   | 7               |
| 4.                        | Satish Dawan Space Centre, ISRO                                                          | 1               |
| 5.                        | RBG.AI                                                                                   | 2               |
| 6.                        | IITM Research Park (Pravartak Technology Innovation Hub of IIT Madras)                   | 1               |
| 7.                        | TechCiti Software Pvt Ltd, Bangalore & Webgen Tech Solution Pvt. Ltd, Coimbatore         | 1               |
| 8.                        | Ardhas Technology Pvt. Ltd, Coimbatore & Emglitz technologies, Coimbatore                | 6               |
| 9.                        | Webgen Tech Solution Pvt. Ltd, Coimbatore & Techpro Solutions, Coimbatore                | 6               |
| 10.                       | Webgen Tech Solution Pvt. Ltd, Coimbatore & Softyuga, Coimbatore                         | 5               |
| 11.                       | Hackup Technology, Coimbatore & Emglitz technologies, Coimbatore                         | 1               |
| 12.                       | Vibrace Technologies, Coimbatore & Softyuga, Coimbatore                                  | 5               |
| 13.                       | Vibrace Technologies, Coimbatore & Privacyweave, Coimbatore                              | 1               |
| 14.                       | Sparkout Tech solutions Pvt. Ltd, Coimbatore & Artispec Technologies Pvt Ltd, Coimbatore | 2               |

|              |                                                                                  |           |
|--------------|----------------------------------------------------------------------------------|-----------|
| 15.          | Sparkout Tech solutions Pvt. Ltd, Coimbatore & Emglitz technologies, Coimbatore  | 5         |
| 16.          | Sparkout Tech solutions Pvt. Ltd, Coimbatore & Bravery Infotech Pvt Ltd, Chennai | 1         |
| 17.          | Mindnotix software solutions, Coimbatore & Emglitz technologies, Coimbatore      | 1         |
| 18.          | Nxtlogic Pvt limited, Coimbatore & Techpro Solutions, Coimbatore                 | 1         |
| 19.          | Syslatech Pvt Ltd, Bangalore                                                     | 1         |
| 20.          | Adhoc Softwares Pvt Ltd, Coimbatore                                              | 1         |
| 21.          | Techpro Solutions, Coimbatore & Airobosoft products and services llp             | 1         |
| 22.          | Frontline technologies, karur                                                    | 1         |
| 23.          | Ardhas Technology Pvt. Ltd, Coimbatore & Adhoc Softwares Pvt Ltd, Coimbatore     | 1         |
| <b>Total</b> |                                                                                  | <b>62</b> |

| S.No                      | Industry                                | No. of students |
|---------------------------|-----------------------------------------|-----------------|
| <b>Batch: 2024 - 2028</b> |                                         |                 |
| 1.                        | LITZ Tech, Coimbatore                   | 4               |
| 2.                        | Virtual Softech Pvt Ltd, Coimbatore     | 5               |
| 3.                        | ZOHO Corporation, Thanjavur             | 1               |
| 4.                        | Cogent Automation & UI Bridge Solutions | 1               |
| <b>Total</b>              |                                         | <b>11</b>       |

❖ **ITEM NO.17**

➤ As per the recommendations from SCM and 23<sup>rd</sup> ACM, the following course titles are changed:

- Data Structures and Algorithms as Data Structures and Algorithms Analysis
- Operating Systems as Operating System Concepts



- Machine Learning as Machine Learning Techniques
- Data Structures and Algorithms Laboratory as Data Structures and Algorithms Analysis Laboratory

❖ **ITEM NO.18**

➤ Suggestions/Comments from External Expert Members and University Nominee:

❖ **Dr. Rajeswari Sridhar**

- Suggested to include the Deep Learning text book by Christopher Bishop instead of the text book by Ian Goodfellow and reorient the syllabus as per the text book contents
- Suggested to offer Big Data Analytics as a professional elective instead of Business analytics
- GPU architecture and Programming in AI / ML vertical can be removed and also course on AI security can be given
- She also suggested to include Responsible and Ethical AI in AI / ML vertical and it was ascertained that it is already included as a separate course in the curriculum during the 7<sup>th</sup> semester.
- Suggested to change the textbook of deep learning for Multi-disciplinary courses – AI for Civil Engineering

❖ **Dr.Valliappan Raman**

- Approved the syllabus passed for 5<sup>th</sup> and 6<sup>th</sup> semester courses of B.Tech AI & DS programme

❖ **Dr.Santhi Thilagam**

- Cloud and Big Data technologies course can be offered as Cloud computing and High Performance Computing as two separate courses
- Computer Networks and Security course and Cyber security course – the course titles can be reconsidered to reflect the contents as it is redundant. Course contents also to be revisited.
- Course title Engineering Secure SDLC can be renamed as Secure Software Development.
- Suggested inclusion of Embedded and IoT course and it was ascertained that it is intended to provide as a Multi-Disciplinary course (MDC) course.



❖ **Dr. Shyam Dhivakar**

- Suggested to include GPU accelerated AI concepts and its usage rather than to give the architectural concepts in GPU architecture and Programming.

❖ **Dr. Hariharan Suresh**

- Suggested to partner with industry (cloud players like AWS, GCP, Microsoft) in framing the curriculum for Cloud computing and provide more practical exposure to students on specialized pathways. He also assured that he will facilitate the industry connects for enabling the same.
- As the technology is evolving rapidly related to MLOps and are into generative AI and Agentic AI workflows, the contents can be revamped to include AIOps, LLMOps, AgenticOps.
- Suggested to incorporate advanced agentic AI frameworks such as LangChain and LangGraph, along with vector database architectures, to cover state-of-the-art approaches in building deep research agents.
- Suggested to include Multimodal RAG concepts in Agentic AI course.
- It was ascertained that the concepts will be included without overlaps in the Generative AI course to be provided in 7<sup>th</sup> semester.
- Suggested that the more Intel based CPU frameworks are covered which support for industry edge applications. Also suggested to include TensorRT for edge Robotics applications in the Edge AI and Embedded Machine Learning course.
- Also suggested to revamp the edge AI frameworks module edge computing acceleration module in the Edge AI and Embedded Machine Learning course. Grouping can be done depending on the type of edge compute considered. Also suggested inclusion of lab exercises to use Jetson Orin and to refer the Jetson AI lab website for reference.
- Suggested to include recent GPU architectures concepts like Blackwell / Ruben instead of Ampere and Hopper. Also suggested to simplify the syllabus to have one architecture dealt in the content
- Open USD concepts can be included in Augmented and Virtual Reality course.

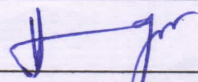
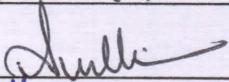
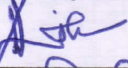
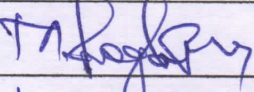
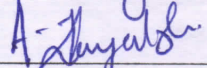
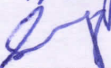
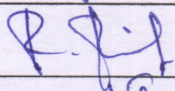
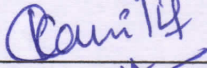
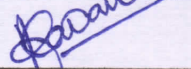
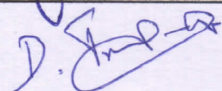
- Suggested to offer DevOps before DevSecOps course
- Suggested to use tools like Cursor / Replit / Gemini for practical exposure in Vibe coding course

❖ **Mr.Dheepak Ganeshamoorthi**

- Suggested to consider inclusion of PromptOps in MLOps course
- Suggested to include Agentic communication protocols like MCP / ACP in Agentic AI course



**BoS Members:**

| Name of the Member        | Designation        | Signature                                                                             |
|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| Dr. V.Karpagam            | Chairperson        |    |
| Dr. Rajeswari Sridhar     | University Nominee | Virtual Presence                                                                      |
| Dr. Valliappan Raman      | University Nominee | Virtual Presence                                                                      |
| Mr. Hariharan Suresh      | Industry Expert    | Virtual Presence                                                                      |
| Dr. P. Santhi Thilagam    | Subject Expert     | Virtual Presence                                                                      |
| Dr. Shyam Dhiwakar        | Subject Expert     | Virtual Presence                                                                      |
| Mr. Dheepak Ganesamoorthi | Alumnus            | Virtual Presence                                                                      |
| Dr.J. Anitha              | Faculty Member     |   |
| Mrs.P.V.Kavitha           | Faculty Member     |  |
| Dr. M. Logaprakash        | Faculty Member     |  |
| Mrs.A.Kayalvizhi          | Faculty Member     |  |
| Mrs.K.Sudha               | Faculty Member     |  |
| Mrs.R.Rampriya            | Faculty Member     |  |
| Mrs.C.Kavitha             | Faculty Member     |  |
| Mrs. V. Gomathi Sankari   | Faculty Member     |  |
| Dr.D. Indhumathy          | Faculty Member     |  |

**CHAIRPERSON****BOARD OF STUDIES****Department of Artificial Intelligence and Data Science**





## **SRI RAMAKRISHNA ENGINEERING COLLEGE**

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### **MINUTES OF THE 9<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG B.TECH ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD ON 3.11.2025 AT 9.30 AM IN CSE BOARD ROOM.**

The following members attended the above meeting.

- |    |                                                                                                                                                                 |                         |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1. | Dr. V. Karpagam,<br>Professor and Head,<br>Department of Artificial Intelligence and Data Science,<br>Sri Ramakrishna Engineering College,<br>Coimbatore-641022 | Chairperson             |
| 2. | Dr. Rajeswari Sridhar<br>Professor, Department of CSE,<br>National Institute of Technology,<br>Tiruchirappalli.                                                 | University Nominee      |
| 3. | Dr. Valliappan Raman<br>Professor,<br>Department of Artificial Intelligence and Data Science,<br>Coimbatore Institute of Technology, Coimbatore.                | University Nominee      |
| 4. | Dr.P. Santhi Thilagam<br>Professor,<br>Department of Computer Science and Engineering,<br>National Institute of Technology, Surathkal, Karnataka.               | Subject Expert<br>(NIT) |
| 5. | Mr. Dheepak Ganesamoorthi (IT/2011-2015) Batch<br>Product Manager,<br>Gainsight, Bengaluru                                                                      | Alumnus                 |



|     |                                                              |                |
|-----|--------------------------------------------------------------|----------------|
| 6.  | Dr. J. Anitha,<br>Associate Professor/ AI&DS                 | Faculty Member |
| 7.  | Mrs. P. V. Kavitha,<br>Assistant Professor (Sl.Gr)/AI&DS     | Faculty Member |
| 8.  | Dr. M. Logaprakash,<br>Assistant Professor (Sl.Gr)/AI&DS     | Faculty Member |
| 9.  | Mrs.A.Kayalvizhi,<br>Assistant Professor (Sr.Gr)/AI&DS       | Faculty Member |
| 10. | Mrs.K.Sudha,<br>Assistant Professor (Sr.Gr)/AI&DS            | Faculty Member |
| 11. | Mrs. R.Rampriya,<br>Assistant Professor (OG)/AI&DS           | Faculty Member |
| 12. | Mrs.C.Kavitha,<br>Assistant Professor (OG)/AI&DS             | Faculty Member |
| 13. | Mrs. V. Gomathi Sankari ,<br>Assistant Professor (OG)/AI&DS  | Faculty Member |
| 14. | Dr.D. Indhumathy<br>Assistant Professor (Sl.Gr)/ Mathematics | Faculty Member |

Prof Dr. V. Karpagam, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 9<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

### **RR2020**

#### **ITEM No.1**

➤ It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2022, 2023 & 2024.

#### **ITEM No.2**

➤ It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.

- 20AD2E39 – Agentic Artificial Intelligence



**ITEM No.3**

- It is resolved that the following NPTEL courses are approved for credit transfer during Nov/Dec 2025:

| S. No                        | Course Code | Course Title                                | Credits | Course Duration | Equivalent Professional Elective in SREC curriculum |
|------------------------------|-------------|---------------------------------------------|---------|-----------------|-----------------------------------------------------|
| <b>Professional Elective</b> |             |                                             |         |                 |                                                     |
| 1.                           | noc25-cs62  | Reinforcement Learning                      | 3       | 12 Weeks        | 20AD2E12 - Reinforcement Learning                   |
| 2.                           | noc25-cs04  | Affective Computing                         | 3       | 12 Weeks        | 20AD2E22 - Affective Computing                      |
| 3.                           | noc25-cs61  | Quantum Algorithms and Cryptography         | 3       | 12 Weeks        | 20AD2E15 - Quantum Computing and Algorithms         |
| 4.                           | noc25-ch05  | Applied Time Series Analysis                | 3       | 12 Weeks        | 20AD2E01 -Time Series Analysis and Forecasting      |
| 5.                           | noc25-ec02  | Foundations of Accounting & Finance         | 3       | 12 Weeks        | 20AD2E18 - Business Economics and Finance           |
| 6.                           | noc25-cs79  | Privacy and Security in Online social media | 3       | 12 Weeks        | 20AD2E09 - Social Media Analytics                   |

**ITEM No.4**

- It is resolved that the Result Analysis for the Academic Year 2024 – 2025 (Semesters VIII/ VI/ IV) be approved and passed.

| <b>Academic Year : 2024 – 2025 ( Even)</b> |                                           |                                         |                                       |                           |
|--------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------|---------------------------|
| Semester                                   | No. of students registered in all courses | No. of Students appeared in all courses | No. of Students passed in all courses | Overall Pass Percentage % |
| <b>IV</b>                                  | 70                                        | 70                                      | 55                                    | 78.57                     |
| <b>VI</b>                                  | 66                                        | 66                                      | 64                                    | 96.97                     |
| <b>VIII</b>                                | 65                                        | 65                                      | 65                                    | 100                       |



**ITEM No.5**

- It is resolved that the following Honors/Minor courses are offered during the odd semester of Academic Year 2025 – 2026 and the following eligible students be approved for the Honors / minors in B.Tech Artificial Intelligence and Data Science degree programme

| <b>2022-2026 Batch / 2025-2026 (ODD SEMESTER)</b> |                                      |                        |                   |             |
|---------------------------------------------------|--------------------------------------|------------------------|-------------------|-------------|
| <b>SPECIALIZATION</b>                             | <b>COURSE CODE &amp; TITLE</b>       | <b>REGISTER NUMBER</b> | <b>NAME</b>       | <b>CGPA</b> |
| INTELLIGENT SYSTEMS (RBG.AI)                      | • 20AD2E25 – Transformers For Speech | 71812211008            | Athmika R         | 8.86        |
|                                                   |                                      | 71812211011            | Deepak K          | 8.24        |
|                                                   | • 20AD2E26 – Transformers For Vision | 71812211018            | Gangadharan N N   | 8.91        |
|                                                   |                                      | 71812211024            | Hariharan P       | 7.92        |
|                                                   |                                      | 71812211025            | Harshitha Sri P   | 7.99        |
|                                                   |                                      | 71812211031            | Keshava Pandi A S | 8.28        |
|                                                   |                                      | 71812211032            | Kirubakaran S     | 8.09        |
|                                                   |                                      | 71812211033            | Kiruthika K       | 8.23        |
|                                                   |                                      | 71812211039            | Murajit Varun K   | 7.74        |
|                                                   |                                      | 71812211043            | Pavatharani M     | 8.34        |

| <b>2023-2027 Batch / 2025-2026 (ODD SEMESTER)</b> |                                              |                        |             |             |
|---------------------------------------------------|----------------------------------------------|------------------------|-------------|-------------|
| <b>SPECIALIZATION</b>                             | <b>COURSE CODE &amp; TITLE</b>               | <b>REGISTER NUMBER</b> | <b>NAME</b> | <b>CGPA</b> |
| INTELLIGENT SYSTEMS (RBG.AI)                      | • 20AD2E21 – Conventional ML With No Code AI | 71812311012            | Chandru R   | 7.67        |
|                                                   |                                              | 71812311032            | Megavathi A | 8.22        |
|                                                   | • 20AD2E22 – Affective Computing             |                        |             |             |



**ITEM No.6**

- It is resolved that the following Mandatory courses be approved for the students in students in B.Tech Artificial Intelligence and Data Science degree programme:

| Batch: 2022-2026 |                                       |                                                                                  |                           |                           |
|------------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------|---------------------------|
| S.No.            | Mandatory Course                      | Course Code                                                                      | No. of students completed |                           |
| 1.               | Additional Courses                    | Career Development and Placement Division - Employability and Enhancement Course | 66                        |                           |
| Batch: 2023-2027 |                                       |                                                                                  |                           |                           |
| S.No             | Mandatory Course                      | Course Code                                                                      | No. of students completed | No. of students completed |
| 1.               | Personality and Character Development | 20MC209 – English Literary Society                                               | 2                         | 7                         |
|                  |                                       | 20MC218 – Reading Club                                                           | 5                         |                           |
| 2.               | Allied Skills                         | 20MC275- Technical Certification                                                 | 70                        | 70                        |
| Batch: 2024-2028 |                                       |                                                                                  |                           |                           |
| S.No             | Mandatory Course                      | Course Code                                                                      | No. of students completed |                           |
| 1.               | Personality and Character Development | 20MC204 – National Service Scheme                                                | 10                        |                           |
| 2.               |                                       | 20MC218 – Reading Club                                                           | 7                         |                           |
| 3.               |                                       | 20MC201-Sports and Games                                                         | 8                         |                           |
| 4.               |                                       | 20MC219 - Red Ribbon Club (RRC)                                                  | 9                         |                           |
| 5.               |                                       | 20MC202 - Yoga & Meditation Club                                                 | 2                         |                           |
| 6.               |                                       | 20MC217- Fine Arts Club                                                          | 4                         |                           |
| 7.               |                                       | 20MC205-Youth Red Cross                                                          | 3                         |                           |
| 8.               |                                       | 20MC216 – Quiz Club                                                              | 3                         |                           |
| 9.               |                                       | 20MC212-Tamil Mandram                                                            | 4                         |                           |
| 10.              |                                       | 20MC209 – English Literary Society                                               | 3                         |                           |
| 11.              |                                       | 20MC208 – Soft Skills                                                            | 9                         |                           |
| 12.              |                                       | 20MC214-Philatelic Club                                                          | 1                         |                           |
| 13.              |                                       | 20MC210 – Science Association                                                    | 2                         |                           |
| 14.              |                                       | 20MC215-Phorartz Club                                                            | 3                         |                           |



**ITEM No.7:**

- It is resolved that the following students had completed 4/6 weeks of Internship/Inplant training be approved for the student in in B.Tech Artificial Intelligence and Data Science degree programme.

| S.No                      | Industry                                                   | No. of students |
|---------------------------|------------------------------------------------------------|-----------------|
| <b>Batch: 2022 - 2026</b> |                                                            |                 |
| 1.                        | Aegiiz Technologies, Coimbatore                            | 5               |
| 2.                        | RBG AI, Coimbatore                                         | 1               |
| 3.                        | RBG AI, Coimbatore & OxyHer, Coimbatore                    | 2               |
| 4.                        | OxyHer, Coimbatore                                         | 1               |
| 5.                        | OxyHer, Coimbatore & Sri Ethiraja Technologies, Coimbatore | 1               |
| 6.                        | Ether Infotech, Coimbatore                                 | 12              |
| 7.                        | Sri Ethiraja Technologies, Coimbatore                      | 8               |
| 8.                        | Artispec Technologies Pvt.Ltd, Coimbatore                  | 2               |
| 9.                        | Peopleclick Techno solutions Pvt.Ltd, Coimbatore           | 1               |
| 10.                       | Emglitz Technologies, Coimbatore                           | 8               |
| 11.                       | QbrainX, Coimbatore                                        | 3               |
| 12.                       | Vume Interactive Pvt Ltd, Coimbatore                       | 1               |
| 13.                       | Protowiz private limited, Coimbatore                       | 1               |
| 14.                       | Pinnacle Systems, Coimbatore                               | 2               |
| 15.                       | i2 Software Solutions Pvt Ltd, Coimbatore                  | 1               |
| 16.                       | Aaludra Technology Solutions, Coimbatore                   | 2               |
| 17.                       | uSiS Technologies Pvt Ltd, Coimbatore                      | 2               |
| 18.                       | Mindnotix Software Solutions, Coimbatore                   | 2               |
| 19.                       | CAP Digisoft, Coimbatore                                   | 1               |
| 20.                       | Uitoux Solutions, Coimbatore                               | 1               |
| 21.                       | Brainbric innovation Pvt Ltd, Coimbatore                   | 1               |
| <b>Total</b>              |                                                            | <b>58</b>       |



| Batch: 2023 - 2027 |                                                                                  |    |
|--------------------|----------------------------------------------------------------------------------|----|
| 1                  | Airobosoft products and services LLP & Privacyweave, Coimbatore                  | 7  |
| 2                  | TechCiti Software Pvt Ltd, Bangalore                                             | 4  |
| 3                  | Nimesa Technologies Pvt Ltd, Bangalore                                           | 7  |
| 4                  | Satish Dawan Space Centre, ISRO                                                  | 1  |
| 5                  | RBG.AI, , Coimbatore                                                             | 2  |
| 6                  | IITM Research Park (Pravartak Technology Innovation Hub of IIT Madras)           | 1  |
| 7                  | TechCiti Software Pvt Ltd, Bangalore & Webgen Tech Solution Pvt. Ltd, Coimbatore | 1  |
| Total              |                                                                                  | 23 |

❖ ITEM No.8:

**Regulations 2025**

- It is resolved that the Regulations 2025 (Outcome based Curriculum through Choice based Credit System,) will be followed for all B.E./B.Tech/M.Tech(Int). programmes for students admitted in the Academic year 2025 and onwards
- The Curriculum and Syllabi of the following new courses is presented and discussed:

| Semester III                 |             |                                           |          |   |   |   |    |
|------------------------------|-------------|-------------------------------------------|----------|---|---|---|----|
| S.No                         | Course Code | Course Title                              | Category | L | T | P | C  |
| <b>THEORY</b>                |             |                                           |          |   |   |   |    |
| 1.                           | 25MAxxxx    | Probability and Statistical Analysis      | BSC      | 3 | 1 | 0 | 4  |
| 2.                           | 25ADxxxx    | Data Structures and Algorithms            | PCC      | 3 | 0 | 0 | 3  |
| 3.                           | 25ADxxxx    | Principles of Artificial Intelligence     | PCC      | 3 | 0 | 0 | 3  |
| 4.                           |             | Ability Enhancement Course                | AEC      |   |   |   | 2  |
| <b>THEORY CUM LABORATORY</b> |             |                                           |          |   |   |   |    |
| 5.                           | 25ADxxxx    | Foundations of Data Science               | PCC      | 2 | 0 | 2 | 3  |
| 6.                           | 25ADxxxx    | Database Management Systems               | PCC      | 2 | 0 | 2 | 3  |
| <b>PRACTICALS</b>            |             |                                           |          |   |   |   |    |
| 7.                           | 25ADxxxx    | Data Structures and Algorithms Laboratory | PCC      | 0 | 0 | 2 | 1  |
| 8.                           | 25ADxxxx    | Skill Enhancement Course                  | SEC      | 0 | 0 | 4 | 2  |
| Total                        |             |                                           |          |   |   |   | 21 |



| Semester IV                  |             |                                                    |          |   |   |   |           |
|------------------------------|-------------|----------------------------------------------------|----------|---|---|---|-----------|
| S. No                        | Course Code | Course Title                                       | Category | L | T | P | C         |
| <b>THEORY</b>                |             |                                                    |          |   |   |   |           |
| 1.                           | 25MAxxxx    | Optimization Techniques and Evolutionary Algorithm | ESC      | 2 | 1 | 0 | 3         |
| 2.                           | 25ADxxxx    | Machine Learning                                   | PCC      | 3 | 0 | 0 | 3         |
| 3.                           |             | Open Elective I                                    | OEC      | 3 | 0 | 0 | 3         |
| 4.                           |             | Multi-Disciplinary Course                          | MC       |   |   |   | 3         |
| 5.                           |             | Ability Enhancement Course                         | AEC      |   |   |   | 2         |
| 6.                           | 25ADxxxx    | Value Added Course                                 | VAC      |   |   |   | 2         |
| 7.                           | 25ADxxxx    | Liberal Arts Course                                | LAC      |   |   |   | 2         |
| <b>THEORY CUM LABORATORY</b> |             |                                                    |          |   |   |   |           |
| 8.                           | 25ADxxxx    | Operating Systems                                  | PCC      | 2 | 0 | 2 | 3         |
| <b>PRACTICALS</b>            |             |                                                    |          |   |   |   |           |
| 9.                           | 25ADxxxx    | Machine Learning Laboratory                        | PCC      | 0 | 0 | 2 | 1         |
| 10.                          | 25ADxxxx    | Mini Project – I                                   | ELC      | 0 | 0 | 4 | 2         |
| <b>Total</b>                 |             |                                                    |          |   |   |   | <b>24</b> |

**ITEM No.9:**

- It is resolved that the syllabi for the following new Professional Elective course (Guvi Generative AI vertical) under Regulations 2025 be approved and passed.
  - 25ADxxxx - AI Principles and Techniques (ECE/EEE/EIE and RA programmes)

**ITEM No.10:**

- It is resolved that the syllabi for the following new Open Elective courses under Regulations 2025 be approved and passed
  - 25ADxxxx – Exploratory Data Analysis

**ITEM NO.11:**

- It is resolved that the syllabi for the following new Multidisciplinary Elective courses (MDC) under Regulations 2025 be approved and passed.
  - Applied Data Science and Artificial Intelligence ( Aero )



**ITEM NO.12:**

- It is resolved that the syllabi for the following new Skill Enhancement courses (SEC) under Regulations 2025 be approved and passed.
  - 25xxxx - Mobile Application Development
  - 25xxxx - Java Programming
  - 25xxxx - Data Science using R

**ITEM NO.13**

- It is resolved that the syllabi for the following new Liberal Arts courses (LAC)) under Regulations 2025 be approved and passed
  - 25xxxx – AI tools for Engineers

**ITEM NO.14**

- It is resolved that the following club is offered as Mandatory course.
  - 25xxxx- Generative AI Club

**ITEM NO.15**

- An increase in student intake from 60 to 90 was proposed and approved by the management.

Suggestions/Comments from External Expert Members and University Nominee to be recorded

**❖ Dr.Rajeshwari Sridhar**

- Recommended to increase the credits of Professional Core Courses from 50 credits to approximately 40% of total credits.
- Suggested to reduce the credits of Ability Enhancement Courses (AEC), Skill Enhancement Courses (SEC) and Value Added Course (VAC) to 8 credits and increase the credits of core courses.
- Recommended to provide Principles of Artificial Intelligence as a Theory Cum Lab course with exercises in Prolog and LISP, First Order logic, Knowledge representation and ontology concepts.
- Responsible AI with Ethics can be combined and offered as Multidisciplinary Elective to other programmes. Explainable AI and federated learning concepts can be included in the syllabus



- Deep learning concepts can be included in Natural Language Syllabus
- In AI Principles and Techniques course, rule based systems and NLP concepts is recommended to be removed in the syllabus.
- Suggested to remove merkle trees, k-dimensional trees and splay trees concepts in Data Structures and Algorithms course and also the content has to be reorganized. Also suggested to remove Bellman Ford, B tree and B+ trees concepts. Also suggested to include Thomas H. Cormen's Introduction to algorithms book as reference book.
- Recommended to reduce the concepts on normalization till multi-valued dependency in Database Management Systems course
- Suggested to reduce Data warehousing concepts in Database Management Systems course
- Suggested to remove 3<sup>rd</sup> and 4<sup>th</sup> module in Principles of Artificial Intelligence course.
- Exercises in Leetcode to be practiced as part of Data Structures and Algorithms laboratory
- Artificial Neural networks concepts can be introduced in Machine learning course.
- Big data analytics course can be included in the curriculum.

❖ **Dr.Valliappan Raman**

- Suggested to include introduction of Large Language Models, Retrieval Augmented Generation concepts in Agentic Artificial Intelligence Professional Elective course and also suggested to use PineCone, Chroma Vector DBs for lab component.
- Suggested to reduce the credits of Ability Enhancement Courses (AEC), Skill Enhancement Courses (SEC), Value Added Course (VAC) as one credit courses
- Recommended to ensure the balance between Artificial Intelligence and Data Science Courses.
- Title can be changed for Foundations of Machine Learning and Deep learning course
- Foundations of Data Science offered to other departments as open elective can be renamed as Exploratory Data Analysis
- Liberal Arts course on Generative AI can be renamed as "AI tools for engineers"



❖ **Dr.Santhi Thilagam**

- Suggested to include machine learning in 3<sup>rd</sup> semester and AI in 4<sup>th</sup> semester and it is resolved that machine learning course will be taught in 4<sup>th</sup> semester and Principles of Artificial foundations in 3<sup>rd</sup> semester as it provides a broader context.
- Suggested to include High Performance Computing course instead of Cloud computing course in the curriculum. It is resolved that High Performance Computing course will be offered as an elective.
- Recommended to rephrase the Program Educational Objectives (PEOs) and PSOs.
- The Program Educational Objectives (PEOs) are rephrased as follows so as to align with the vision and mission of the department.
  - **PEO 1:** Demonstrate professional and research competence using combined knowledge in Mathematics, Computing, Artificial Intelligence and Data Science
  - **PEO 2:** Apply knowledge and skills in Artificial Intelligence and Data Science to develop innovative, sustainable and ethically responsible solutions to complex, multidisciplinary problems
  - **PEO 3:** Engage in constructive research, professional growth and lifelong learning by effectively applying emerging technological expertise
- The Program Specific Outcomes (PSOs) are rephrased as follows so as to align with the vision and mission of the department.
  - **PSO1:** Analyze, design and develop sustainable intelligent solutions to address complex challenges posed by industry and society.
  - **PSO2:** Demonstrate data analysis skills to achieve effective insights and decision making to solve real-life problems.
  - **PSO3:** Apply mathematical and statistical techniques to model real-world problems using appropriate AI algorithms.

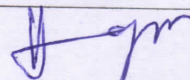
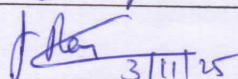
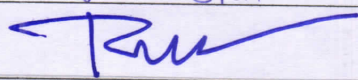
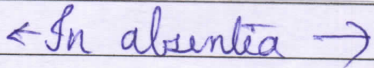
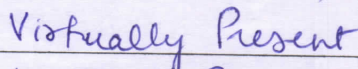
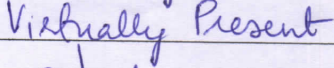
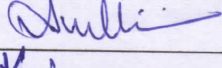
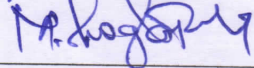
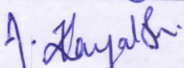
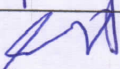
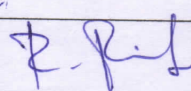
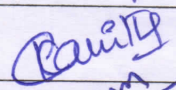
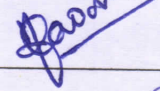
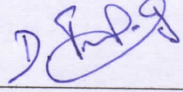


❖ **Mr.Dheepak Ganesha Moorthi**

- Suggested to include “Introduction to Vector database” concepts in Database Management Systems course
- Also suggested to include , Retrieval Augmented Generation concepts in Agentic Artificial Intelligence Professional Elective course



**BoS Members:**

| Name of the Member        | Designation        | Signature                                                                             |
|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| Dr. V.Karpagam            | Chairperson        |    |
| Dr. Rajeswari Sridhar     | University Nominee |    |
| Dr. Valliappan Raman      | University Nominee |     |
| Mr. Hariharan Suresh      | Industry Expert    |     |
| Dr. P. Santhi Thilagam    | Subject Expert     |    |
| Mr. Dheepak Ganesamoorthi | Alumnus            |    |
| Dr.J. Anitha              | Faculty Member     |    |
| Mrs.P.V.Kavitha           | Faculty Member     |    |
| Mr. M. Logaprakash        | Faculty Member     |   |
| Mrs.A.Kayalvizhi          | Faculty Member     |  |
| Mrs.K.Sudha               | Faculty Member     |  |
| Mrs.R.Rampriya            | Faculty Member     |  |
| Mrs.C.Kavitha             | Faculty Member     |   |
| Mrs. V. Gomathi Sankari   | Faculty Member     |  |
| Dr.D. Indhumathy          | Faculty Member     |  |

  
**CHAIRPERSON**

**BOARD OF STUDIES****Department of Artificial Intelligence and Data Science****Dr. V. KARPAGAM**

Professor and Head

Artificial intelligence and Data Science ;

Sri Ramakrishna Engineering College ;

Coimbatore - 641 022



## SRI RAMAKRISHNA ENGINEERING COLLEGE

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[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

VATTAMALAIPALAYAM, N.G.G.O. COLONY POST, COIMBATORE – 641 022.



### MINUTES OF THE 8<sup>th</sup> BOARD OF STUDIES MEETING FOR THE B.TECH ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD ON 27.03.2025 AT 2.30 PM IN AI & DS SEMINAR HALL.

The following members attended the above meeting.

- |    |                                                                                                                                                                 |                              |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 1. | Dr. V. Karpagam,<br>Professor and Head,<br>Department of Artificial Intelligence and Data Science,<br>Sri Ramakrishna Engineering College,<br>Coimbatore-641022 | Chairperson                  |
| 2. | Dr. Rajeswari Sridhar<br>Associate Professor and Head, Department of CSE,<br>National Institute of Technology,<br>Tiruchirappalli.                              | University Nominee           |
| 3. | Dr. Valliappan Raman<br>Professor,<br>Department of Artificial Intelligence and Data Science,<br>Coimbatore Institute of Technology, Coimbatore.                | University Nominee           |
| 4. | Mr. Hariharan Suresh<br>Senior Developer Relations Manager,<br>NVIDIA, Singapore.                                                                               | Subject Expert<br>(Industry) |
| 5. | Dr.P. Santhi Thilagam<br>Professor,<br>Department of Computer Science and Engineering,<br>National Institute of Technology, Surathkal, Karnataka.               | Subject Expert<br>(NIT)      |
| 6. | Mr. Dheepak Ganesamoorthi (IT/2011-2015) Batch<br>Product Manager,<br>Gainsight, Bengaluru                                                                      | Alumnus                      |
| 7. | Dr. J. Anitha,<br>Associate Professor/ AI&DS                                                                                                                    | Faculty Member               |
| 8. | Mrs. P. V. Kavitha,<br>Assistant Professor (Sl.Gr)/AI&DS                                                                                                        | Faculty Member               |



|     |                                                              |                |
|-----|--------------------------------------------------------------|----------------|
| 9.  | Mr. M. Logaprakash,<br>Assistant Professor (Sr.Gr)/AI&DS     | Faculty Member |
| 10. | Mrs.B.Suganya,<br>Assistant Professor (OG)/AI&DS             | Faculty Member |
| 11. | Ms. K. Archana,<br>Assistant Professor (OG)/AI&DS            | Faculty Member |
| 12. | Mrs. R.Rampriya,<br>Assistant Professor (OG)/AI&DS           | Faculty Member |
| 13. | Dr.D. Indhumathy<br>Assistant Professor (Sl.Gr)/ Mathematics | Faculty Member |

Prof Dr. V.Karpagam, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 8<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

#### **ITEM No.1**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2022, 2023 & 2024.

#### **ITEM No.2**

- It is resolved that the following new one credit course will be included under (Revised) Regulations 2020 for Artificial Intelligence and Data Science Programme:
  - 20AD2I007 - Chatbots with Text Analytics

#### **ITEM No.3**

- It is resolved that the following NPTEL courses are approved for credit transfer during April/May 2025:

| Sl.No                        | Course Code | Course Title                                | Credits | Course Duration | Equivalent Professional / Open Elective in SREC curriculum |
|------------------------------|-------------|---------------------------------------------|---------|-----------------|------------------------------------------------------------|
| <b>Professional Elective</b> |             |                                             |         |                 |                                                            |
| 1.                           | noc24-cs102 | Reinforcement Learning                      | 3       | 12 Weeks        | 20AD2E12 - Reinforcement Learning                          |
| 2.                           | noc24-ee96  | Cognition and its Computation               | 3       | 12 Weeks        | 20AD2E16 – Cognitive Computing and Analytics               |
| 3.                           | noc24-cs132 | Responsible & Safe AI System                | 3       | 12 Weeks        | 20AD2E29 Responsible AI                                    |
| 4.                           | noc24-cs52  | Foundation of Accounting & Finance          | 3       | 12 Weeks        | 20AD2E18- Business Economics and Finance                   |
| 5.                           | noc24-cs12  | Affective Computing                         | 3       | 12 Weeks        | 20AD2E22- Affective Computing                              |
| 6.                           | noc22-cs37  | Online Privacy                              | 3       | 12 Weeks        | 20AD2E30- Data Security and Privacy                        |
| 7.                           | noc20-cs52  | Modern Application Development              | 3       | 12 Weeks        | 20AD2E33-Full Stack Development                            |
| 8.                           | noc24-cs04  | Privacy and Security in Online Social Media | 3       | 12 Weeks        | 20AD2E08- Social Media Analytics                           |
| 9.                           | noc23-cs04  | Quantum Algorithms and Cryptography         | 3       | 12 Weeks        | 20AD2E15-Quantum Computing and Algorithms                  |
| 10.                          | noc21-ch28  | Applied Time-Series Analysis                | 3       | 12 Weeks        | 20AD2E01 – Time Series Analysis and Forecasting            |
| 11.                          | noc24-cs91  | Software Testing                            | 3       | 12 Weeks        | 20IT2E22 – Software Testing                                |

#### ITEM No.4

- It is resolved that the Result Analysis for the Academic Year 2024 – 2025 (Semesters VII / V/ III) are approved and passed.



| Academic Year : 2024 – 2025 ( Odd) |                                           |                                         |                                       |                           |
|------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------|---------------------------|
| Semester                           | No. of students registered in all courses | No. of Students appeared in all courses | No. of Students passed in all courses | Overall Pass Percentage % |
| III                                | 68                                        | 67                                      | 48                                    | 71.64                     |
| V                                  | 67                                        | 57                                      | 57                                    | 86.36                     |
| VII                                | 65                                        | 62                                      | 62                                    | 95.38                     |

#### ITEM No.5

- The following specialization courses are offered during the even semester of Academic Year 2024 – 2025 and the following eligible students be approved for the Honors Specialization in B.Tech Artificial Intelligence and Data Science degree Programme.

| Specialization / Minor Course Details | Course Code and Title                | Register No. of the Candidate | Name of the Student | CGPA | BATCH     |
|---------------------------------------|--------------------------------------|-------------------------------|---------------------|------|-----------|
| Intelligent Systems ( Specialization) | • 20AD2E23 - MLOps for Deep Learning | 71812211008                   | Athmika R           | 8.9  | 2022-2026 |
|                                       |                                      | 71812211011                   | Deepak K            | 8.24 |           |
|                                       |                                      | 71812211018                   | Gangadharan N.N     | 8.93 |           |
|                                       |                                      | 71812211024                   | Hariharan P         | 7.91 |           |
|                                       |                                      | 71812211025                   | Harshitha Sri P     | 8.02 |           |
|                                       | • 20AD2E24 - Large Language Models   | 71812211031                   | Keshavapandi A S    | 8.33 |           |
|                                       |                                      | 71812211032                   | Kirubakaran K       | 8.22 |           |
|                                       |                                      | 71812211033                   | Kiruthika K         | 8.19 |           |
|                                       |                                      | 71812211039                   | Murajit Varun K     | 7.72 |           |
|                                       |                                      | 71812211043                   | Pavatharani M       | 8.31 |           |

#### ITEM No. 6

- It is resolved that the following Mandatory courses be approved for the students in B.Tech Artificial Intelligence and Data Science degree programme.

| Batch: 2021-2025 |                    |                                                                                  |                           |
|------------------|--------------------|----------------------------------------------------------------------------------|---------------------------|
| S.No.            | Mandatory Course   | Course Code                                                                      | No. of students completed |
| 1.               | Additional Courses | Career Development and Placement Division - Employability and Enhancement Course | 65                        |

| Batch: 2022-2026 |                                       |                                  |                           |                           |
|------------------|---------------------------------------|----------------------------------|---------------------------|---------------------------|
| S.No.            | Mandatory Course                      | Course Code                      | No. of students completed | No. of students completed |
| 1.               | Personality and Character Development | 20MC208 – Soft Skills            | 63                        | 69                        |
|                  |                                       | 20MC216 – Quiz Club              | 06                        |                           |
| 2.               | Allied Skills                         | 20MC275- Technical Certification | 69                        | 69                        |

| Batch: 2023-2027 |                                       |                                    |                           |                           |
|------------------|---------------------------------------|------------------------------------|---------------------------|---------------------------|
| S.No.            | Mandatory Course                      | Course Code                        | No. of students completed | No. of students completed |
| 1.               | Personality and Character Development | 20MC217- Fine Arts Club            | 04                        | 61                        |
|                  |                                       | 20MC209 – English Literary Society | 02                        |                           |
|                  |                                       | 20MC218 – Reading Club             | 05                        |                           |
|                  |                                       | 20MC210 – Science Association      | 02                        |                           |
|                  |                                       | 20MC204 – National Service Scheme  | 06                        |                           |
|                  |                                       | 20MC216 – Quiz Club                | 06                        |                           |
|                  |                                       | 20MC214-Philatelic Club            | 02                        |                           |
|                  |                                       | 20MC212-Tamil Mandram              | 04                        |                           |
|                  |                                       | 20MC222-Yi YUVA                    | 19                        |                           |
|                  |                                       | 20MC215-Phorartz Club              | 03                        |                           |
|                  |                                       | 20MC205-Youth Red Cross            | 01                        |                           |
|                  |                                       | 20MC201-Sports and Games           | 03                        |                           |
|                  |                                       | 20MC221-Uyir Club                  | 04                        |                           |



**ITEM NO. 7**

- It is resolved that the following students had completed 4/6 weeks of Internship/In-plant training be approved for the student in B.Tech Artificial Intelligence and Data Science degree programme:

| S.No                      | Industry                                                                                                       | No. of students |
|---------------------------|----------------------------------------------------------------------------------------------------------------|-----------------|
| <b>Batch: 2021 - 2025</b> |                                                                                                                |                 |
| 1.                        | Maiyyam, Coimbatore                                                                                            | 1               |
| 2.                        | Hackup Technology Pvt Ltd, Coimbatore                                                                          | 8               |
| 3.                        | BrainbriC Innovations Pvt Ltd, Coimbatore                                                                      | 2               |
| 4.                        | BrainbriC Innovations Pvt Ltd, Coimbatore & Cognizant Technology Solutions, Chennai                            | 1               |
| 5.                        | Gateway software solutions, Coimbatore                                                                         | 3               |
| 6.                        | Webgen Technology, Coimbatore                                                                                  | 2               |
| 7.                        | KT Telematic Solutions Pvt Ltd, Salem                                                                          | 1               |
| 8.                        | Daily day solutions, Coimbatore                                                                                | 1               |
| 9.                        | RBG.AI, Coimbatore                                                                                             | 6               |
| 10.                       | RBG.AI, Coimbatore & Cognizant Technology Solutions, Chennai                                                   | 1               |
| 11.                       | NSIC, Chennai                                                                                                  | 2               |
| 12.                       | AcmeGrade Pvt Ltd, Bengaluru, & Focus Foc, Coimbatore                                                          | 1               |
| 13.                       | Innovalley Works, Coimbatore & Stepping Edge Technologies Pvt Ltd, Coimbatore                                  | 1               |
| 14.                       | Stepping Edge Technologies Pvt Ltd, Coimbatore                                                                 | 2               |
| 15.                       | Artispec Technologies Pvt Ltd, Coimbatore                                                                      | 1               |
| 16.                       | Bimetal Bearings Limited, Coimbatore                                                                           | 2               |
| 17.                       | International Aerospace Manufacturing Pvt Ltd, Bengaluru                                                       | 1               |
| 18.                       | Omega InfoTech, Chennai & Cognizant Technology Solutions, Chennai                                              | 1               |
| 19.                       | Essel Synerg Tech Pvt.Ltd, Bangalore                                                                           | 1               |
| 20.                       | Velocityverse Pvt.Ltd, Dharmapuri                                                                              | 1               |
| 21.                       | Capus Technology Solutions, Coimbatore                                                                         | 3               |
| 22.                       | Roots Industries India Private Ltd, Coimbatore & Maiyyam, Coimbatore & Cognizant Technology Solutions, Chennai | 1               |
| 23.                       | Aegiis technologies, Coimbatore & Webgen Technology, Coimbatore                                                | 2               |

|              |                                                                                         |           |
|--------------|-----------------------------------------------------------------------------------------|-----------|
| 24.          | Yaane Technologies, Coimbatore                                                          | 1         |
| 25.          | Janatics India Pvt Ltd, Coimbatore                                                      | 1         |
| 26.          | Dbotics Technology and Solutions Pvt Ltd, Chennai                                       | 1         |
| 27.          | Yarncoms India Pvt Ltd, Coimbatore & Cognizant Technology Solutions, Chennai            | 1         |
| 28.          | Ettiksoft Technologies Pvt. Ltd, Namakkal                                               | 1         |
| 29.          | Titan Company Ltd, Bengaluru                                                            | 1         |
| 30.          | Prompt Infotech, Coimbatore                                                             | 1         |
| 31.          | Zidio Development, Coimbatore                                                           | 2         |
| 32.          | NSIC, Chennai & Zidio Development, Coimbatore                                           | 1         |
| 33.          | NSIC, Chennai & DL Masters, Coimbatore                                                  | 2         |
| 34.          | NSIC, Chennai & DL Masters, Coimbatore & Cognizant Technology Solutions, Chennai        | 1         |
| 35.          | NSIC, Chennai & Stepping Edge Technologies Pvt Ltd, Coimbatore                          | 2         |
| 36.          | NSIC, Chennai & Acmegrade Pvt Ltd, Bengaluru                                            | 1         |
| 37.          | Focus Foc, Coimbatore                                                                   | 1         |
| 38.          | NSIC, Chennai & Hackup Technology Pvt Ltd, Coimbatore                                   | 1         |
| 39.          | Sanmina Tech Services India Pvt. Ltd, Chennai & Cognizant Technology Solutions, Chennai | 1         |
| 40.          | Hakup Technology Pvt Ltd, Coimbatore & Ddata technologies, Coimbatore                   | 1         |
| <b>Total</b> |                                                                                         | <b>65</b> |

| S.No                      | Industry                                                   | No. of students |
|---------------------------|------------------------------------------------------------|-----------------|
| <b>Batch: 2022 - 2026</b> |                                                            |                 |
| 1.                        | Aegiiz Technologies, Coimbatore                            | 5               |
| 2.                        | RBG AI, Coimbatore                                         | 3               |
| 3.                        | OxyHer, Coimbatore & Sri Ethiraja Technologies, Coimbatore | 4               |
| 4.                        | Ether Infotech, Coimbatore                                 | 12              |
| 5.                        | Sri Ethiraja Technologies, Coimbatore                      | 5               |
| 6.                        | Artispec Technologies Pvt.Ltd, Coimbatore                  | 2               |



|              |                                                  |           |
|--------------|--------------------------------------------------|-----------|
| 7.           | Peopleclick Techno solutions Pvt.Ltd, Coimbatore | 1         |
| 8.           | Emglitz Technologies, Coimbatore                 | 8         |
| 9.           | QbrainX, Coimbatore                              | 3         |
| 10.          | Vume Interactive Pvt Ltd, Coimbatore             | 1         |
| 11.          | Protowiz private limited, Coimbatore             | 1         |
| 12.          | Pinnacle Systems, Coimbatore                     | 2         |
| 13.          | i2 Software Solutions Pvt Ltd, Coimbatore        | 1         |
| 14.          | Aaludra Technology Solutions, Coimbatore         | 2         |
| 15.          | uSiS Technologies Pvt Ltd, Coimbatore            | 2         |
| 16.          | Mindnotix Software Solutions, Coimbatore         | 2         |
| 17.          | CAP Digisoft, Coimbatore                         | 1         |
| 18.          | Uitoux Solutions, Coimbatore                     | 1         |
| <b>Total</b> |                                                  | <b>56</b> |

#### ITEM NO. 8

- The following students are readmitted to II B.Tech AI & DS (IV Semester) in the Academic Year 2024-2025 as per the Revised Regulations 2020:

| S.No | Roll Number | Name of the Student |
|------|-------------|---------------------|
| 1.   | 71812211007 | ANTRO SHABIN.B      |
| 2.   | 71812211042 | NITHIN.S            |

#### ITEM NO.9

- The Proposed Regulations 2025 (Outcome based Curriculum through Choice based Credit System) be approved and passed.
- The Regulations 2025 (Outcome based Curriculum through Choice based Credit System,) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2025 and onwards.

Suggestions/Comments from External Expert Members and University Nominees:

❖ **Dr.Rajeswari Sridhar**

- Suggested that as the multidisciplinary mandatory courses and open elective courses are similar in Regulation 2025, so the credits for Multidisciplinary Mandatory Courses (MMC) can range from 3 to 9 and for Professional elective courses, the credits can range from 18 to 24 credits.
- Suggested to change the title of Liberal arts course category as Arts and Science courses / Arts course / Heritage courses
- Suggested to state explicitly that students who have arrears can register for maximum of 36 credits per semester, in Regulation 2025.
- GIAN courses of 2 weeks duration can be considered for credit transfer for 3 credits
- Mandating multidisciplinary mini project for 3<sup>rd</sup> year students may be challenging, so societal projects may also be considered.
- Suggested to provide leave exemption limited to 10% of attendance requirement for on duty / medical reasons
- Suggested to provide Agile software development course instead of Software engineering course.
- Suggested to include Computer Networks course only and security can be given as Professional elective course
- Suggested to remove mathematics component in 3<sup>rd</sup> module and the syllabus can be simplified in Quantum Physics course. Also suggested to simplify the experiment in Quantum Physics Laboratory.
- Web design course to include laboratory component and can be offered as mandatory elective course.
- Suggested to change lab hours to 15 hours for disruptive technologies course
- The modules in C programming course can be reorganized. get() and put() functions can be introduced in module I and functions can be moved to module II. The concepts can be reorganized as Arrays-> functions->pointers->String



operations and malloc() functions. Concepts on structures, union, enumeration, file operations can be moved to module III.

- Computer Architecture course can be moved to 2<sup>nd</sup> semester and Introduction to Artificial Intelligence can be moved to 3<sup>rd</sup> semester

❖ **Dr. Valliappan Raman**

- Suggested to have a balance of Data Science and AI courses in the curriculum.
- Suggested to include Data Science fundamentals and Data Visualization course in the Professional core courses. Concepts on Data visualization tools like PowerBI, Tableau can be included in the data visualization course.
- Responsible AI course can be included as part of Ethical AI course
- Suggested to combine LLM and Generative AI courses
- Suggested to include principles of AI concepts including knowledge representation and reasoning, uncertainty theory, search techniques in Introduction to Artificial Intelligence syllabus and also recommended to move to 3<sup>rd</sup> semester
- Opined that MATLAB experiment may be difficult for I year students

❖ **Mr. Hariharan Suresh**

- Suggested to include DevSecOps course instead of Devops course.
- Suggested to use AWS/Azure cloud and explore opportunities using free credits
- Suggested to expand the lab experiments in Digital Logic Circuits course. It is recommended to have at least 8-10 experiments.
- The content of Web design and neuro science courses has to be enriched with advanced concepts

❖ **Dr.P. Santhi Thilagam**

- Suggested to move Software engineering course to 5<sup>th</sup> semester instead of 3<sup>rd</sup> semester
- Suggested to move Operating Systems to fourth semester instead of 5<sup>th</sup> semester. She also suggested providing open elective course in 5<sup>th</sup> semester.
- She suggested to include Computer Architecture in 3<sup>rd</sup> semester instead of Software Engineering course

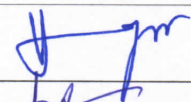
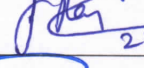
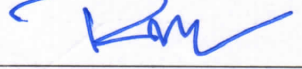
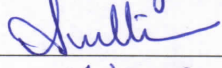
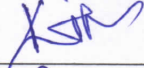
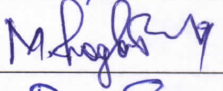
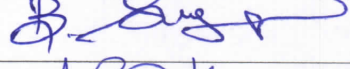
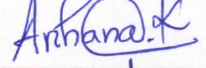
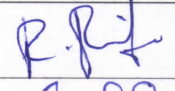
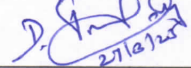
- Embedded System and IOT course needs to be shifted to 5<sup>th</sup> semester or later.
- Suggested to reorganize the curriculum structure from 3<sup>rd</sup> to 7<sup>th</sup> semester.

❖ **Mr. Dheepak Ganesamoorthi**

- Web design course – introduce frameworks like ReactJS, responsive web design concepts



**BoS Members:**

| Name of the Member        | Designation        | Signature                                                                                          |
|---------------------------|--------------------|----------------------------------------------------------------------------------------------------|
| Dr. V.Karpagam            | Chairperson        |                 |
| Dr. Rajeswari Sridhar     | University Nominee | <br>27/3/2025   |
| Dr. Valliappan Raman      | University Nominee |                  |
| Mr. Hariharan Suresh      | Industry Expert    | Virtually Present                                                                                  |
| Dr. P. Santhi Thilagam    | Subject Expert     | Virtually Present                                                                                  |
| Mr. Dheepak Ganesamoorthi | Alumnus            | Virtually Present                                                                                  |
| Dr.J. Anitha              | Faculty Member     |                 |
| Mrs.P.V.Kavitha           | Faculty Member     |                 |
| Mr. M. Logaprakash        | Faculty Member     |                |
| Mrs. B.Suganya            | Faculty Member     |               |
| Ms. K. Archana            | Faculty Member     |               |
| Mrs.R.Rampriya            | Faculty Member     |               |
| Dr.D. Indhumathy          | Faculty Member     | <br>27/3/2025 |


**CHAIRPERSON****BOARD OF STUDIES****Department of Artificial Intelligence and Data Science****Dr. V. KARPAGAM**

Professor and Head  
Artificial intelligence and Data Science  
Sri Ramakrishna Engineering College  
Coimbatore - 641 022.



**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service : SNR Sons Charitable Trust]

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[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 7<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG  
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD ON  
8.11.2024 AT 3.00 PM-IN ONLINE MODE.**

The following members attended the above meeting.

- |    |                                                                                                                                                                 |                              |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 1. | Dr. V. Karpagam,<br>Professor and Head,<br>Department of Artificial Intelligence and Data Science,<br>Sri Ramakrishna Engineering College,<br>Coimbatore-641022 | Chairperson                  |
| 2. | Dr. Rajeswari Sridhar<br>Associate Professor and Head, Department of CSE,<br>National Institute of Technology,<br>Tiruchirappalli.                              | University Nominee           |
| 3. | Dr. Valliappan Raman<br>Professor,<br>Department of Artificial Intelligence and Data Science,<br>Coimbatore Institute of Technology, Coimbatore.                | University Nominee           |
| 4. | Mr. Hariharan Suresh<br>Senior Developer Relations Manager,<br>NVIDIA, Singapore.                                                                               | Subject Expert<br>(Industry) |
| 5. | Dr.P. Santhi Thilagam<br>Professor,<br>Department of Computer Science and Engineering,<br>National Institute of Technology, Surathkal, Karnataka.               | Subject Expert<br>(NIT)      |



|     |                                                                       |                |
|-----|-----------------------------------------------------------------------|----------------|
| 6.  | Mr. Dheepak Ganesamoorthi<br>Product Manager,<br>Gainsight, Bengaluru | Alumnus        |
| 7.  | Dr. J. Anitha,<br>Associate Professor/ AI&DS                          | Faculty Member |
| 8.  | Mrs. P. V. Kavitha,<br>Assistant Professor (Sl.Gr)/AI&DS              | Faculty Member |
| 9.  | Mr. M. Logaprakash,<br>Assistant Professor (Sr.Gr)/AI&DS              | Faculty Member |
| 10. | Mrs.B.Suganya,<br>Assistant Professor (OG)/AI&DS                      | Faculty Member |
| 11. | Ms. K. Archana,<br>Assistant Professor (OG)/AI&DS                     | Faculty Member |
| 12. | Mrs. R.Rampriya,<br>Assistant Professor (OG)/AI&DS                    | Faculty Member |
| 13. | Dr.D. Indhumathy<br>Assistant Professor (Sl.Gr)/ Mathematics          | Faculty Member |

Prof. Dr. V. Karpagam, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 7<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed, were taken up for discussion and the following resolutions were passed.

#### ITEM No. 1

- The revised Vision and Mission of the institution was presented to the members for suggestions and feedback. Dr.Rajeswari Sridhar suggested replacing the managerial skills component in the mission of the institution. She also suggested to include responsible AI component in the mission of the department.

#### ITEM No. 2

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021 & onwards.

#### ITEM No. 3

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.
  - 20AD2E37 - Game Theory and Applications

- 20AD2E38 - Penetration Testing

#### ITEM No. 4

- It is resolved that the following NPTEL courses are approved for credit transfer during Nov/Dec 2024.

| S.No                          | Course Code | Course Title                  | Credits | Course Duration | Equivalent Professional / Open Elective in SREC curriculum |
|-------------------------------|-------------|-------------------------------|---------|-----------------|------------------------------------------------------------|
| <b>Professional Electives</b> |             |                               |         |                 |                                                            |
| 1.                            | noc24-cs102 | Reinforcement Learning        | 3       | 12 Weeks        | 20AD2E12 - Reinforcement Learning                          |
| 2.                            | noc24-ee96  | Cognition and its Computation | 3       | 12 Weeks        | 20AD2E16 – Cognitive Computing and Analytics               |
| 3.                            | noc24-cs91  | Software Testing              | 3       | 12 Weeks        | 20IT2E22 – Software Testing                                |

#### ITEM No. 5

- It is resolved that the Result Analysis for the Academic Year 2023 – 2024 (Semesters VIII / VI/ IV) are approved and passed.

| <b>Academic Year : 2023 – 2024 (Even)</b> |                                           |                                         |                                       |                           |
|-------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------|---------------------------|
| Semester                                  | No. of students registered in all courses | No. of Students appeared in all courses | No. of Students passed in all courses | Overall Pass Percentage % |
| IV                                        | 67                                        | 66                                      | 53                                    | 80.3                      |
| VI                                        | 65                                        | 63                                      | 59                                    | 95.16                     |
| VIII                                      | 61                                        | 61                                      | 61                                    | 100                       |

#### ITEM No. 6

- The following candidates who have registered for additional credits during Nov/Dec 2024 examination under the Specialization/Minor courses category Verticals shall be approved according to the communication from Anna University, Chennai via Letter No. 5749/AU/CAC/Honors/2022 dated 16.11.2022.



| Specialization / Minor Course Details | Course Code and Title                                                                                                                                                                                   | Register No. of the Candidate | Name of the Student | CGPA | BATCH     |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------|------|-----------|
| Intelligent Systems ( Specialization) | <ul style="list-style-type: none"> <li>20AD2E21 - Conventional ML with No Code AI</li> <li>20AD2E22 - Affective Computing</li> </ul>                                                                    | 71812211008                   | Athmika R           | 8.32 | 2022-2026 |
|                                       |                                                                                                                                                                                                         | 71812211011                   | Deepak K            | 8.14 |           |
|                                       |                                                                                                                                                                                                         | 71812211018                   | Gangadharan N.N     | 8.87 |           |
|                                       |                                                                                                                                                                                                         | 71812211024                   | Hariharan P         | 7.84 |           |
|                                       |                                                                                                                                                                                                         | 71812211025                   | Harshitha Sri P     | 7.96 |           |
|                                       |                                                                                                                                                                                                         | 71812211031                   | Keshavapandi A S    | 8.78 |           |
|                                       |                                                                                                                                                                                                         | 71812211032                   | Kirubakaran K       | 8.27 |           |
|                                       |                                                                                                                                                                                                         | 71812211033                   | Kiruthika K         | 7.98 |           |
|                                       |                                                                                                                                                                                                         | 71812211039                   | Murajit Varun K     | 7.68 |           |
|                                       |                                                                                                                                                                                                         | 71812211043                   | Pavatharani M       | 8.28 |           |
| Intelligent Systems ( Specialization) | <ul style="list-style-type: none"> <li>20AD2E25 &amp; Transformers for Speech</li> <li>20AD2E26 &amp; Transformers for Vision</li> </ul>                                                                | 71812111004                   | Anthony Vijay       | 7.04 | 2021-2025 |
|                                       |                                                                                                                                                                                                         | 71812111018                   | Hariharan R         | 7.11 |           |
| Cyber Security ( Specialization)      | <ul style="list-style-type: none"> <li>20IT2E61 Computational Roots of cyber Security</li> <li>20IT2E62 Security Architecture, Engineering and Operations</li> </ul>                                    | 71812211004                   | Akash M             | 8.02 | 2022-2026 |
|                                       | <ul style="list-style-type: none"> <li>Noc24_cs85-Practical Cyber Security for Cyber Security Practitioners</li> <li>Noc24_ge65 Cyber Security, Tools, Techniques and Counter Measures</li> </ul>       | 71812111055                   | Vikram S            | 7.83 | 2021-2025 |
| AR/VR ( Minor)                        | <ul style="list-style-type: none"> <li>20CS2E73&amp;Virtual Reality/Augmented Reality /Mixed Reality/ Extended Reality</li> <li>20CS2E75&amp; UI/UX Desgin for Augmented and Virtual Reality</li> </ul> | 71812211005                   | Akash S             | 8.66 | 2022-2026 |
|                                       | <ul style="list-style-type: none"> <li>20CS2E74&amp; Game Programming</li> <li>20CS2E77 &amp;3D Virtual Environment</li> </ul>                                                                          | 71812111014                   | Dharun V            | 7.72 | 2021-2025 |

Suggestions/Comments from University Nominees and External Expert Members:

❖ Dr. Rajeswari Sridhar

- Topics related to Reinforcement learning can be removed in Game theory course.
- Web penetration testing course can be offered as a professional elective for 3 credits with additional modules added.

❖ Dr. Valliappan Raman

- Topics on games with complete and incomplete information to be included in Game theory course and a generic syllabus can be framed.

❖ Mr. Hariharan Suresh

- Topics on open source tools like OWASP to identify the vulnerabilities can be included in the Web penetration-testing course and it can be given as a 3-credit course.
- He also appreciated the inclusion of open source tools like Wireshark, Nmap in the course

❖ Dr.P. Santhi Thilagam

- The course title for Web penetration testing may be renamed as Penetration Testing
- The syllabus should cover in-depth methodologies, techniques, and tools to identify vulnerabilities, exploit, and assess security risk to networks, operating systems, and applications.
- The content covered in Game theory and applications syllabus is sufficient.

❖ Mr. Dheepak Ganesamoorthi

- Appreciated the inclusion of Web penetration testing course in the curriculum.
- He also appreciated the inclusion of game theory concepts related to AI in game theory course.





## Welcome to the Members



| S. No | Role in Committee                          | Name of the members                                                  |
|-------|--------------------------------------------|----------------------------------------------------------------------|
| 7.    | Alumni Member                              | Mr. Dheepak Ganesamurthi<br>Product Manager, Gainsight,<br>Bengaluru |
| 8.    | Subject expert from Mathematics Department | Dr.D. Indhumathy / Assistant Professor (SL.Gr) / AI & DS             |
| 9.    | Member                                     | Dr.J.Arutha, Associate Professor / AI & DS                           |
| 10.   | Member                                     | Mrs.P.V.Kavitha, Assistant Professor (SL.Gr) / AI & DS               |
| 11.   | Member                                     | Dr. M. Logaprakash, Assistant Professor (SL.Gr) / AI & DS            |
| 12.   | Member                                     | Dr. B.Suganya, Assistant Professor/ AI & DS                          |
| 13.   | Member                                     | Ms. K. Archana, Assistant Professor / AI & DS                        |



Head AI&DS

social choice

CO6: Evaluate ethical implications of strategic interactions in AI systems

**FUNDAMENTALS OF GAME THEORY** 15

Introduction to Game Theory: Definitions and types of games (cooperative, non-cooperative, zero-sum, and non-zero-sum games); Payoffs, strategies, profiles, and equilibria-Nash Equilibrium; Definition, examples, and applications Dominant and dominated strategies, mixed strategies, and Pareto efficiency-Extensive and strategic form representations of games.

**GAME THEORETIC CONCEPTS AND MULTI-AGENT SYSTEMS IN AI** 15

Mechanism Design: Designing systems for desired outcomes and incentive alignment-Auctions and Bidding Strategies: First-price, second-price, and other auction formats-Repeated Games and Folk Theorem: Strategies in iterated interactions-Cooperative Games and Coalition Formation: Concepts of bargaining and stability transfer in AI-Introduction to Multi-Agent Systems: Strategic behaviour in agent-based models and AI settings.

**GAME THEORY IN AI APPLICATIONS** 15

Game Theory in Reinforcement Learning: Multi-agent reinforcement learning (MARL), competitive and cooperative strategies-Adversarial Learning and Robustness in AI: Application of game-theoretic strategies in adversarial machine learning- Social Choice Theory and Voting Mechanisms in AI: Aggregating preferences and decision-making- Ethics and Fairness: Game-theoretic approaches to fairness and bias in AI systems- Case Studies: Applications in autonomous vehicles, recommendation systems, and security.

**Total Hours: 45**

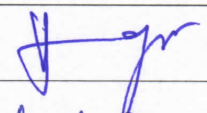
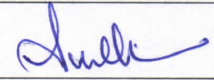
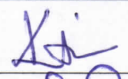
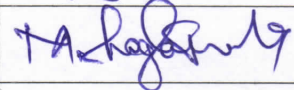
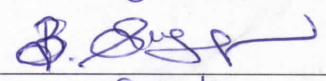
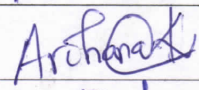
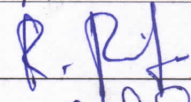
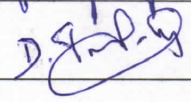
**TEXTBOOKS**

1. Steven Tadelis, "Game Theory: An Introduction", Princeton University Press, 1<sup>st</sup> Edition, 2021.
2. Yoav Shoham and Kevin Leyton-Brown, "Multiagent Systems: Algorithmic, Game-Theoretic, and Logical Foundations", Cambridge University Press, 1<sup>st</sup> Edition, 2021.



Rajeshwari Sridhar

**BoS Members:**

| Name of the Member        | Designation        | Signature                                                                             |
|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| Dr. V.Karpagam            | Chairperson        |    |
| Dr. Rajeswari Sridhar     | University Nominee | Virtual Presence                                                                      |
| Dr. Valliappan Raman      | University Nominee | Virtual Presence                                                                      |
| Mr. Hariharan Suresh      | Industry Expert    | Virtual Presence                                                                      |
| Dr. P. Santhi Thilagam    | Subject Expert     | Virtual Presence                                                                      |
| Mr. Dheepak Ganesamoorthi | Alumnus            | Virtual Presence                                                                      |
| Dr.J. Anitha              | Faculty Member     |    |
| Mrs.P.V.Kavitha           | Faculty Member     |   |
| Mr. M. Logaprakash        | Faculty Member     |   |
| Mrs. B.Suganya            | Faculty Member     |  |
| Ms. K. Archana            | Faculty Member     |  |
| Mrs.R.Rampriya            | Faculty Member     |  |
| Dr.D. Indhumathy          | Faculty Member     |  |


**CHAIRPERSON****BOARD OF STUDIES****Department of Artificial Intelligence and Data Science****Dr. V. KARPAGAM**

Professor and Head

Artificial intelligence and Data Science

Sri Ramakrishna Engineering College

Coimbatore - 641 022.





**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service : SNR Sons Charitable Trust]

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[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 6<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG  
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD  
ON 22.3.2024 AT 11:00 AM IN CSE BOARD ROOM.**

The following members attended the above meeting.

- |    |                                                                                                                                                                    |                                      |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| 1. | Dr. V. Karpagam,<br>Professor and Head,<br>Department of Artificial Intelligence and Data<br>Science,<br>Sri Ramakrishna Engineering College,<br>Coimbatore-641022 | Chairperson                          |
| 2. | Dr. M. K. Kavitha Devi,<br>Professor,<br>Department of Computer Science and Engineering,<br>Thiagarajar College of Engineering,<br>Madurai - 625015                | University Nominee                   |
| 3. | Dr. Ramakrishna Pasumarthy,<br>Associate Professor,<br>Department of Electrical Engineering,<br>Indian Institute of Technology,<br>Chennai – 600036                | Subject Expert<br>(IIT)              |
| 4. | Dr. Deepak Garg<br>Vice Chancellor,<br>SR University, Ananthasagar,<br>Hanumakonda – 506371, Telangana                                                             | Subject Expert<br>(other university) |
| 5. | Dr. J. Anitha,<br>Associate Professor/ AI&DS                                                                                                                       | Faculty Member                       |

|     |                                                                 |                |
|-----|-----------------------------------------------------------------|----------------|
| 6.  | Mrs. P. V. Kavitha,<br>Assistant Professor (Sl.Gr)/AI&DS        | Faculty Member |
| 7.  | Mr. M. Logaprakash,<br>Assistant Professor (Sr.Gr)/AI&DS        | Faculty Member |
| 8.  | Mrs.B.Suganya,<br>Assistant Professor (OG)/AI&DS                | Faculty Member |
| 9.  | Ms. K. Archana,<br>Assistant Professor (OG)/AI&DS               | Faculty Member |
| 10. | Mr. P. Jayaprakash,<br>Assistant Professor (Sl.Gr)/ Mathematics | Faculty Member |

Prof. Dr. V. Karpagam, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 6<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

#### **ITEM No.1**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021 & onwards.

#### **ITEM No.2**

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.
  - 20AD2E33 Federated Machine Learning
  - 20AD2E34 Malware Analysis
  - 20AD2E35 Stream Processing
  - 20AD2E36 Security and Privacy in Cloud

#### **ITEM No. 3**

- It is resolved that the following NPTEL courses are approved for credit transfer during April/May 2024.



| S.No                          | Course Code | Course Title                        | Credits | Course Duration | Equivalent Professional Elective in SREC curriculum  |
|-------------------------------|-------------|-------------------------------------|---------|-----------------|------------------------------------------------------|
| <b>Professional Electives</b> |             |                                     |         |                 |                                                      |
| 1.                            | noc24-ec01  | Foundations of Accounting & Finance | 3       | 12 Weeks        | 20AD2E18 – Business Economics and Financial Analysis |
| 2.                            | noc24-es52  | Reinforcement Learning              | 3       | 12 Weeks        | 20AD2E12 – Reinforcement Learning                    |
| 3.                            | noc24-cs12  | Affective Computing                 | 3       | 12 weeks        | 20AD2E22 - Affective Computing(Specialization)       |

#### ITEM No. 4

- It is resolved that the Result Analysis for the Academic Year 2023 – 2024 (Semesters VII / V/ III) are approved and passed.

| <b>Academic Year 2023-2024 (Odd)</b> |                                           |                                         |                                       |                           |
|--------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------|---------------------------|
| Semester                             | No. of students registered in all courses | No. of Students appeared in all courses | No. of Students passed in all courses | Overall Pass Percentage % |
| III                                  | 69                                        | 65                                      | 44                                    | 67.69                     |
| V                                    | 66                                        | 66                                      | 41                                    | 62.12                     |
| VII                                  | 61                                        | 61                                      | 59                                    | 96.72                     |

#### ITEM No. 5

- It is resolved that the following Mandatory courses be approved for the students in B.Tech Artificial Intelligence and Data Science degree programme

**Batch: 2020-2024**

| S.No. | Mandatory Course                      | Course Code                                                                    | No. of students completed | Total |
|-------|---------------------------------------|--------------------------------------------------------------------------------|---------------------------|-------|
| 1.    | Personality and Character Development | 20MC204 – National Service Scheme                                              | 3                         | 61    |
|       |                                       | 20MC208 – Soft Skills                                                          | 48                        |       |
|       |                                       | 20MC202- Empowerment through Yoga                                              | 3                         |       |
|       |                                       | 20MC201 – Sports and Games                                                     | 1                         |       |
|       |                                       | 20MC222-Yi YUVA                                                                | 6                         |       |
| 2.    | Additional Courses                    | Career Development and Placement Division Employability and Enhancement Course | 58                        | 58    |

**Batch: 2021-2025**

| S.No. | Mandatory Course                      | Course Code                                            | No. of students completed | Total |
|-------|---------------------------------------|--------------------------------------------------------|---------------------------|-------|
| 1.    | Personality and Character Development | 20MC202- Empowerment through Yoga                      | 25                        | 66    |
|       |                                       | 20MC051 - Information Technology Engineers Association | 5                         |       |
|       |                                       | 20MC218 – Reading Club                                 | 2                         |       |
|       |                                       | 20MC208 – Soft Skills                                  | 1                         |       |
|       |                                       | 20MC204 – National Service Scheme                      | 1                         |       |
|       |                                       | 20MC216 – Quiz Club                                    | 5                         |       |
|       |                                       | 20MC214-Philatelic Club                                | 3                         |       |
|       |                                       | 20MC212-Tamil Mandram                                  | 7                         |       |
|       |                                       | 20MC222-YI YUVA                                        | 11                        |       |
|       |                                       | 20MC215-Phorartz Club                                  | 3                         |       |
|       |                                       | 20MC205-YOUTH RED CROSS                                | 1                         |       |
|       |                                       | 20MC201-Sports and Games                               | 2                         |       |
| 2.    | Allied Skills                         | 20MC275- Technical Certification                       | 66                        | 66    |

**ITEM No. 6**

- It is resolved that the following students had completed 4/6 weeks of internship/ in-plant training be approved for the student in B.Tech Artificial Intelligence and Data Science degree programme



| S.No                      | Industry                                                                       | No. of students |
|---------------------------|--------------------------------------------------------------------------------|-----------------|
| <b>Batch: 2020 - 2024</b> |                                                                                |                 |
| 1.                        | Aegiis Technologies, Coimbatore                                                | 21              |
| 2.                        | Gateway Software Solutions, Coimbatore                                         | 1               |
| 3.                        | Rane Madras Limited, Chennai                                                   | 2               |
| 4.                        | Blueocean Digital India Private Limited, Bengaluru                             | 1               |
| 5.                        | Resilience Business Grids (RBG.AI), Coimbatore                                 | 6               |
| 6.                        | Dhyan Networks And Technologies Pvt, Ltd, Chennai                              | 1               |
| 7.                        | Craftsman Automation Ltd, Coimbatore                                           | 1               |
| 8.                        | Edsols Innovations Private Limited, Bengaluru                                  | 4               |
| 9.                        | Moog India Technology Center Pvt. Ltd, Bengaluru                               | 2               |
| 10.                       | Skillbag India, Lucknow                                                        | 1               |
| 11.                       | Pinstra Technologies, Coimbatore                                               | 1               |
| 12.                       | Ether Services, Coimbatore                                                     | 1               |
| 13.                       | Neowep Sanmina Tech Services India Pvt Ltd, Chennai                            | 1               |
| 14.                       | Bosch Global Software Technologies Private Limited, Bengaluru                  | 2               |
| 15.                       | Shlok Information Systems Pvt Ltd, Coimbatore                                  | 1               |
| 16.                       | Memstech, Coimbatore                                                           | 1               |
| 17.                       | Zephyr Technology, Coimbatore                                                  | 1               |
| 18.                       | Gramophone Media Lab, Coimbatore                                               | 1               |
| 19.                       | Satyam Venture Engineering Services Pvt Ltd, Secunderabad                      | 1               |
| 20.                       | Valuemomentum, Coimbatore                                                      | 1               |
| 21.                       | Mandy Technologies Private Limited, Coimbatore                                 | 1               |
| 22.                       | Rezilyens Systems Software India Pvt Limited, Coimbatore                       | 1               |
| 23.                       | Acic-Kalasalingam Innovation Foundation, Srivilliputhur                        | 1               |
| 24.                       | National Small Industries Corporation Ltd – Technical Services Centre, Chennai | 1               |
| 25.                       | ABM IT Support, Trichy                                                         | 1               |
| 26.                       | L&T Technology Services, Bengaluru                                             | 4               |

**ITEM No. 7**

➤ Suggestions/Comments from External Expert Members and University Nominee :

**Dr. M. K. Kavitha Devi**

- Verified that the pre-requisite courses are included in the curriculum and suggested to add case studies in Federated Machine Learning course

**Dr. Deepak Garg**

- Suggested to change the course title of Stream Processing course as Real time Data Processing as it is very generic
- Enquired about the assignment of grades for NPTEL credit transfer courses.

**Dr. Ramakrishna Pasumarthu**

- Suggested to ensure that the faculty members are upskilled to handle the Federated Machine Learning course



## Screenshots:

Board of Studies Meeting- AI & DS -SREC (2024-03-22 11:25 GMT+5:30)



### Welcome to the Members

| S. No | Role in Committee    | Name of the members                                                                                                                 |
|-------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | Chairperson          | Dr. V.Karpagam, Prof & Head / AI & DS                                                                                               |
| 2.    | University Nominee   | Dr.M.K.Kavitha Devi<br>Professor<br>Department of Computer Science and Engineering<br>Thiagarajar College of Engineering, Madurai   |
| 3.    | Expert from Industry | Mr.Arvind Devarajan<br>Technical Expert<br>Robert Bosch Engineering and Business Solutions Ltd, Coimbatore                          |
| 4.    | Subject Expert       | Dr.Ramakrishna Pasumarthy<br>Associate Professor<br>Department of Electrical Engineering<br>Indian Institute of Technology, Chennai |
| 5.    | Subject Expert       | Dr.Deepak Garg<br>Vice Chancellor<br>SR University, Anantbasagar, Hanumanakonda<br>Telangana - 506371                               |



Dr. Deepak Garg



## Agenda

- ❖ Inclusion of new courses in (Revised) Regulations 2020
  - Professional Electives
  - NPTEL Credit transfer courses
- ❖ Result Analysis (Academic Year 2023 - 2024)
- ❖ Mandatory Courses offered
- ❖ Internship / in-plant training undergone by students



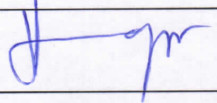
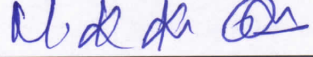
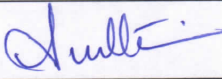
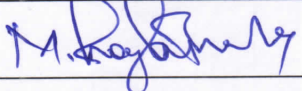
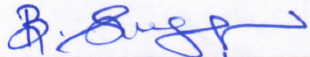
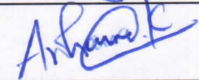
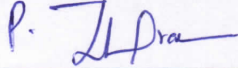
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Board of Studies Meeting- AI & DS -SREC (2024-03-22 11 25 G...

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**BoS Members:**

| Name of the Member        | Designation        | Signature                                                                             |
|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| Dr. V.Karpagam            | Chairperson        |    |
| Dr.M.K.Kavitha Devi       | University Nominee |    |
| Dr.Ramakrishna Pasumarthu | Subject Expert     | Virtual Presence                                                                      |
| Dr.Deepak Garg            | Subject Expert     | Virtual Presence                                                                      |
| Dr.J. Anitha              | Faculty Member     |    |
| Mrs.P.V.Kavitha           | Faculty Member     |    |
| Mr. M. Logaprakash        | Faculty Member     |     |
| Mrs. B.Suganya            | Faculty Member     |    |
| Ms. K. Archana            | Faculty Member     |   |
| Mr.P.Jayaprakash          | Faculty Member     |  |



**CHAIRPERSON  
BOARD OF STUDIES**

**Department of Artificial Intelligence and Data Science**

**Dr. V. KARPAGAM**  
Professor and Head  
Artificial intelligence and Data Science  
Sri Ramakrishna Engineering College  
Coimbatore - 641 022.





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**MINUTES OF THE 5<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG  
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD ON  
17.11.2023 AT 2:00 PM -IN ONLINE MODE.**

The following members attended the above meeting.

- |    |                                                                                                                                                                 |                              |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 1. | Dr. V. Karpagam,<br>Professor and Head,<br>Department of Artificial Intelligence and Data Science,<br>Sri Ramakrishna Engineering College,<br>Coimbatore-641022 | Chairperson                  |
| 2. | Dr. M. K. Kavitha Devi,<br>Professor,<br>Department of Computer Science and Engineering,<br>Thiagarajar College of Engineering,<br>Madurai - 625015             | University Nominee           |
| 3. | Mr.Arvind Devarajan,<br>Technical Expert,<br>Robert Bosch Engineering and Business Solutions Ltd,<br>CHIL SEZ IT Park, Saravanampatti,<br>Coimbatore- 641035    | Subject Expert<br>(industry) |
| 4. | Dr. Ramakrishna Pasumarthy,<br>Associate Professor,<br>Department of Electrical Engineering,<br>Indian Institute of Technology,<br>Chennai – 600036             | Subject Expert<br>(IIT)      |



|     |                                                                                                       |                                      |
|-----|-------------------------------------------------------------------------------------------------------|--------------------------------------|
| 5.  | Dr.Deepak Garg<br>Vice Chancellor,<br>SR University, Ananthasagar,<br>Hanumakonda – 506371, Telangana | Subject Expert<br>(other university) |
| 6.  | Mr. A. Arun Deepak,<br>Product Manager,<br>ValGenesis Private Limited,<br>Chennai – 600113            | Alumnus                              |
| 7.  | Dr. J. Anitha,<br>Associate Professor/ AI&DS                                                          | Faculty Member                       |
| 8.  | Mrs. P. V. Kavitha,<br>Assistant Professor (Sl.Gr)/AI&DS                                              | Faculty Member                       |
| 9.  | Mr. M. Logaprasath,<br>Assistant Professor (Sr.Gr)/AI&DS                                              | Faculty Member                       |
| 10. | Mr. A. Vishnuprasath,<br>Assistant Professor (OG)/AI&DS                                               | Faculty Member                       |
| 11. | Mrs.B.Suganya,<br>Assistant Professor (OG)/AI&DS                                                      | Faculty Member                       |
| 12. | Ms. K. Archana,<br>Assistant Professor (OG)/AI&DS                                                     | Faculty Member                       |
| 13. | Mrs. R.Rampriya,<br>Assistant Professor (OG)/AI&DS                                                    | Faculty Member                       |
| 14. | Mrs. C.Kavitha,<br>Assistant Professor (OG)/AI&DS                                                     | Faculty Member                       |
| 15. | Mr. P. Jayaprakash,<br>Assistant Professor (Sl.Gr)/ Mathematics                                       | Faculty Member                       |

Prof. Dr. V. Karpagam, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 5<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

#### ITEM No.1

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2020.



**ITEM No.2**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021 & onwards.

**ITEM No.3**

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.
- 20AD2E27 -Visual Analytics with Power BI
  - 20AD2E28 - Generative Artificial Intelligence
  - 20AD2E29 – Responsible AI
  - 20AD2E30- Data Security and Privacy
  - 20AD2E31- Micro Services
  - 20AD2E32 - Full Stack Development

**ITEM No. 4**

- It is resolved that the following NPTEL courses are approved for credit transfer during Nov/Dec 2023.

| S.No                          | Course Code | Course Title                                | Credits | Course Duration | Equivalent Professional / Open Elective in SREC curriculum |
|-------------------------------|-------------|---------------------------------------------|---------|-----------------|------------------------------------------------------------|
| <b>Professional Electives</b> |             |                                             |         |                 |                                                            |
| 1.                            | noc22_cs37  | Online Privacy                              | 3       | 12 Weeks        | 20AD2E30-Data Security and Privacy                         |
| 2.                            | noc20_cs52  | Modern Application Development              | 3       | 12 Weeks        | 20AD2E33-Full Stack Development                            |
| 3.                            | noc24-cs12  | Affective Computing                         | 3       | 12 weeks        | 20AD2E22 - Affective Computing(Specialization)             |
| 4.                            | noc24-cs04  | Privacy and Security in Online Social Media | 3       | 12 weeks        | 20AD2E08 - Social Media Analytics                          |



**ITEM No. 5**

- It is resolved that the Result Analysis for the Academic Year 2022 – 2023 (Semesters VI/ IV) are approved and passed.

| <b>Academic Year 2022-2023 (Even)</b> |                                                  |                                                |                                              |                                  |
|---------------------------------------|--------------------------------------------------|------------------------------------------------|----------------------------------------------|----------------------------------|
| <b>Semester</b>                       | <b>No. of students registered in all courses</b> | <b>No. of Students appeared in all courses</b> | <b>No. of Students passed in all courses</b> | <b>Overall Pass Percentage %</b> |
| IV                                    | 66                                               | 66                                             | 57                                           | 86.36                            |
| VI                                    | 62                                               | 61                                             | 52                                           | 85.25                            |

**ITEM No. 6**

- It is resolved that the following candidates who have registered for additional credits during Nov/Dec 2023 examination under the Specialization/Minor courses category Verticals shall be approved according to the communication from Anna University, Chennai via Letter No. 5749/AU/CAC/Honours/2022 dated 16.11.2022

| <b>Specialization / Minor Course Details</b> | <b>Course Code and Title</b>                                                                                                             | <b>Register No. of the Candidate</b> | <b>Name</b>     | <b>CGPA</b> |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------|-------------|
| INTELLIGENT SYSTEMS<br>( Specialization)     | 1. 20AD2E21- Conventional ML with No code AI                                                                                             | 71812111004                          | Anthony Vijay.M | 6.64        |
|                                              | 2. 20AD2E22- Affective Computing                                                                                                         | 71812111018                          | Hariharan.R     | 6.88        |
| CYBER SECURITY<br>( Specialization)          | 1. 20IT2E061-Computational Roots of Cyber Security<br>2. 20IT2E062-Security Architecture, Engineering and Operations                     | 71812111055                          | Vikram.S        | 7.85        |
| AR/VR<br>( Specialization)                   | 1. 20CSS01-Virtual Reality/Augmented Reality/Mixed Reality/Extended Reality<br>2. 20CSS06-UI/UX Design for Augmented and Virtual Reality | 71812111014                          | Dharun.V        | 7.72        |



**ITEM No. 7**

- It is resolved that the new courses and its syllabi be approved for the Honors specialization(Intelligent Systems) in B.Tech Artificial Intelligence and Data Science programme.

| S. No              | Course Code | Course Title            | Credits | Mode of Delivery | Offered by      |
|--------------------|-------------|-------------------------|---------|------------------|-----------------|
| <b>Semester V</b>  |             |                         |         |                  |                 |
| 1.                 | 20AD2E23    | MLOps for Deep Learning | 3       | Class            | SREC / Industry |
| 2.                 | 20AD2E24    | Large Language Models   | 3       | Class            | SREC / Industry |
| 3.                 | 20AD281     | Project work            | 2       | Class            | SREC / Industry |
| <b>Semester VI</b> |             |                         |         |                  |                 |
| 4.                 | 20AD2E25    | Transformers for Speech | 3       | Class            | SREC / Industry |
| 5.                 | 20AD2E26    | Transformers for Vision | 3       | Class            | SREC / Industry |

**ITEM No. 8**

- Suggestions/Comments from External Expert Members and University Nominee :

**Dr. M. K. Kavitha Devi**

- Recommended to include practical components in Generative Artificial Intelligence course and include topics like analysis of GANs which will benefit the students
- Suggested to align the elective courses with course outcomes and program outcomes for AI & DS programme. It was asserted that some electives on software development were added from the placement perspective.

**Mr.Arvind Devarajan**

- Appreciated that in industry perspective, the professional electives proposed are in line with the recent trends in industry
- Asked to ensure that the students understand and learn the concepts in depth and the course in niche areas inculcates research skills when exploring the domain.

**Dr. Ramakrishna Pasumarthy**

- Suggested to ensure that Ethics of Artificial Intelligence can be replaced with title as Responsible AI, if the concepts are in line with it.



- He also affirmed that since Ethics of AI is an emerging topic and it has emerging guidelines and standards, requested to ensure the reference materials are standard.
- Suggested to include topics including techniques, tools and algorithms for applied time series analysis using AI, causality, predictive maintenance, applications of digital twin etc.,. It is resolved that the digital twin concepts will be delivered through seminars / workshops.

#### **Dr. Deepak Garg**

- The course title Deep Learning with No Code AI can be replaced with a generic title and can include no code AI applications
- Suggested to ensure that the faculty possess upskills for delivering the micro services course with industry grade certifications
- Suggested to replace the text books and reference books for digital twin course and enrich the syllabus with technology, tool usage and experimentation in labs etc.

#### **Mr. Arun Deepak**

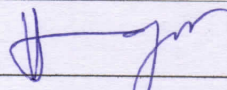
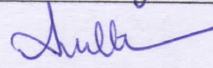
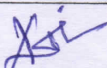
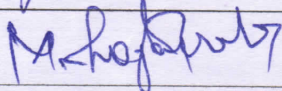
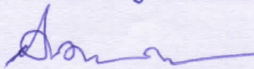
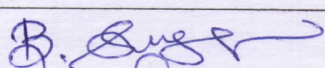
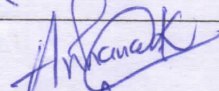
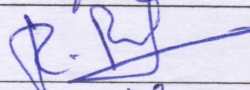
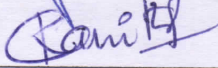
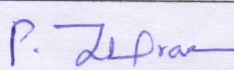
- Suggested to include practical component and case studies in the professional electives and appreciated that all the elective courses proposed are in niche domains and caters to the recent trends in the industry.







**BoS Members:**

| Name of the Member       | Designation        | Signature                                                                             |
|--------------------------|--------------------|---------------------------------------------------------------------------------------|
| Dr. V.Karpagam           | Chairperson        |    |
| Dr.M.K.Kavitha Devi      | University Nominee | Virtually Present                                                                     |
| Mr.Arvind Devarajan      | Industry Expert    | Virtually Present                                                                     |
| Dr.Ramakrishna Pasumarth | Subject Expert     | Virtually Present                                                                     |
| Dr.Deepak Garg           | Subject Expert     | Virtually Present                                                                     |
| Mr.A.Arun Deepak         | Alumnus            | Virtually Present                                                                     |
| Dr.J. Anitha             | Faculty Member     |    |
| Mrs.P.V.Kavitha          | Faculty Member     |    |
| Mr. M. Logaprakash       | Faculty Member     |   |
| Mr.A. Vishnuprasath      | Faculty Member     |  |
| Mrs. B.Suganya           | Faculty Member     |  |
| Ms. K. Archana           | Faculty Member     |  |
| Mrs.R.Rampriya           | Faculty Member     |  |
| Mrs. C.Kavitha           | Faculty Member     |  |
| Mr.P.Jayaprakash         | Faculty Member     |  |



**CHAIRPERSON  
BOARD OF STUDIES**

**Department of Artificial Intelligence and Data Science**

**Dr. V. KARPAGAM**

Professor and Head

Artificial intelligence and Data Science

Sri Ramakrishna Engineering College

Coimbatore - 641 022.





**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**  
[Educational Service : SNR Sons Charitable Trust]  
[Autonomous Institution, Reaccredited by NAAC with 'A+' Grade]  
[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]  
[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 4<sup>th</sup> BOARD OF STUDIES MEETING FOR THE UG  
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD ON  
21.4.2023 AT 11.30 AM IN IT SEMINAR HALL.**

The following members attended the above meeting.

The following members attended the above meeting

- |                                                                                                                                                                    |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 1. Dr. V. Karpagam,<br>Professor and Head,<br>Department of Artificial Intelligence and Data Science,<br>Sri Ramakrishna Engineering College,<br>Coimbatore-641022 | Chairperson        |
| 2. Dr. M. K. Kavitha Devi,<br>Professor,<br>Department of Computer Science and Engineering,<br>Thiagarajar College of Engineering,<br>Madurai - 625015             | University Nominee |
| 3. Dr. Ramakrishna Pasumathy,<br>Associate Professor,<br>Department of Electrical Engineering,<br>Indian Institute of Technology,<br>Chennai – 600036              | Subject Expert     |
| 4. Mr. A. Arun Deepak,<br>Product Manager,<br>ValGenesis Private Limited,<br>Chennai – 600113                                                                      | Alumnus            |



- |     |                                                                 |                |
|-----|-----------------------------------------------------------------|----------------|
| 5.  | Dr. J. Anitha,<br>Associate Professor/ AI&DS                    | Faculty Member |
| 6.  | Mrs. P. V. Kavitha,<br>Assistant Professor (Sl.Gr)/AI&DS        | Faculty Member |
| 7.  | Mr. M. Logaprakash,<br>Assistant Professor (Sr.Gr)/AI&DS        | Faculty Member |
| 8.  | Mr. A. Vishnuprasath,<br>Assistant Professor (OG)/AI&DS         | Faculty Member |
| 9.  | Ms. K. Archana,<br>Assistant Professor (OG)/AI&DS               | Faculty Member |
| 10. | Mr. P. Jayaprakash,<br>Assistant Professor (Sl.Gr)/ Mathematics | Faculty Member |

Prof. Dr. V. Karpagam, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 4<sup>th</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

#### **ITEM. No 1**

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2020.

#### **ITEM. No 2**

- It is resolved that (Revised) Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021 & onwards.

#### **ITEM. No 3**

- It is resolved that the syllabi for the following new Professional Elective courses under (Revised) Regulations 2020 be approved and passed.

##### **Professional Elective Course**

- 20AD2E19 - Smart Security
- 20AD2E20 – iOS Development using Swift
- 20IT2E23 – Agile Software Process
- 20IT2E25 – User Interface Technologies
- 20IT2E22 – Software Testing
- 20IT2E31 – Business Analysis for Robotic Process Automation



**ITEM. No 4**

- It is resolved that the following new one credit courses will be included under (Revised) Regulations 2020 for B. Tech Artificial Intelligence and Data Science Programme.
- 20ADI02 - Artificial Intelligence in Virtual Reality
  - 20ADI03 - Augmented Reality Based Data Visualizer App
  - 20ADI04 – Django App with Rest API for Augmented Reality
  - 20ADI05 – Anatomy of Deep Learning
  - 20ADI06 – Docker and Kubernetes

**ITEM. No 5**

- It is resolved that the following liberal arts course will be included under (Revised) Regulations 2020 for B. Tech Artificial Intelligence and Data Science Programme.
- 20AD216 – Generative AI content creation

**ITEM. No 6**

- It is resolved that the following NPTEL Courses are approved for credit transfer during April/ May 2023.
- noc23-cs62 – Foundations of Cyber Physical Systems
  - noc22\_cs61 - Software Testing

**ITEM. No 7**

- It is resolved that the Result Analysis for the academic year 2022-23 (Semester V/III) are approved and passed.

**ITEM. No 8**

- It is resolved that the following Honors Specialization courses on Intelligent Systems is proposed in B. Tech Artificial Intelligence and Data Science Programme.
- The following courses and its syllabi is proposed for Honors Specialization in Degree Programme.
- |            |                                 |
|------------|---------------------------------|
| 1. 20ADS01 | Conventional ML with No-Code AI |
| 2. 20ADS02 | Deep Learning with No-Code AI   |
| 3. 20ADS03 | Large Language Models           |
| 4. 20ADS04 | Text Mining with Python         |
| 5. 20ADS05 | Project work                    |
| 6. 20ADS06 | Transformers for Speech         |
| 7. 20ADS07 | Transformers for Vision         |



**ITEM. No 9**

- It is resolved that one credit industry courses to be included for the completion of 2 credits to be earned under Clause 12 of (Revised) Regulation 2020 for Industrial Training/ Internship under the Employability Enhancement Category.

**ITEM. No 10**

- Choice based credit courses offered by Infosys Springboard is proposed for the completion of 2 credits to be earned under Clause 12 of (Revised) Regulation 2020 for Industrial Training/ Internship under the Employability Enhancement Category.

| S. No | Domain                                   | Course Title                                 | Duration (in weeks) |
|-------|------------------------------------------|----------------------------------------------|---------------------|
| 1.    | Artificial Intelligence and Data Science | Foundational Data Science                    | 12                  |
|       |                                          | Citizen Data Science using Python            | 8                   |
|       |                                          | Artificial Intelligence Primer               | 4                   |
| 2.    | Software Development and Agile           | Agile Software Development using Scrum       | 8                   |
|       |                                          | Agile Software Development using Kanban      | 4                   |
|       |                                          | Continuous Integration and Delivery - DevOps | 4                   |
| 3.    | API & Micro services                     | API & Micro services                         | 12                  |
| 4.    | Cyber Security                           | Foundation of Cyber Security                 | 8                   |
| 5.    | User Interface Technologies              | Angular Developer                            | 8                   |
|       |                                          | React Developer                              | 4                   |
| 6.    | Microsoft Technologies                   | .NET Full Stack Developer                    | 12                  |

**ITEM. No 11**

- It is resolved that the following Tamil courses and its syllabi as recommended by Anna University, Chennai be approved to be included as mandatory courses
  - Heritage of Tamils
  - Tamils and Technology



**ITEM. No 12**

➤ Suggestions/ Comments from University Nominee and External Expert members :

**Dr. M. K. Kavitha Devi**

- Specialization courses are more focused on NLP Domain and suggested to provide courses in wider domains of AI.
- Ensured about the evaluation of project work in Specialization course.
- AI with Cloud concepts based courses can be included in Specialization
- Suggested to invite Professors from Tamil Faculty of other institutions for co-delivery of Tamil courses recommended by Anna University, Chennai.
- Courses on Graph analytics, federated learning can be included as professional electives.

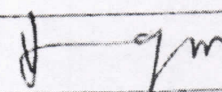
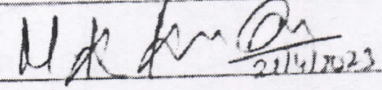
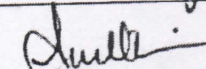
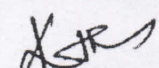
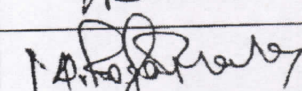
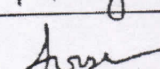
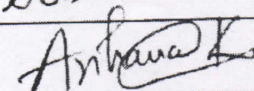
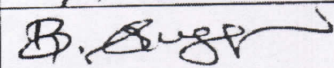
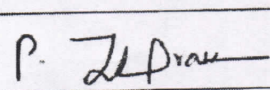
**Dr. Ramakrishna Pasumarthy**

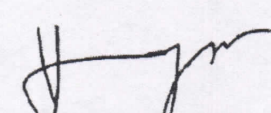
- Course title of Smart Security course can be altered as Cyber Physical Security.
- One credit course on Anatomy of Deep Learning can include advance topics.
- More references for Large Language Models can be added.
- Suggested to ensure that there is no overlap of concepts in Large Language Models and Text Mining with Python.
- Suggested combining the Transformers for speech and Transformers of vision courses.

**Mr. Arun Deepak**

- Suggested to include neuro linguistic concepts in Text Mining with Python and Large Language Models courses.



| Name of the Member        | Designation        | Signature                                                                                     |
|---------------------------|--------------------|-----------------------------------------------------------------------------------------------|
| Dr.V.Karpagam             | Chairperson        |            |
| Dr.M.K.Kavitha Devi       | University Nominee |  21/4/2023 |
| Mr.Arvind Devarajan       | Industry Expert    | In Absentia                                                                                   |
| Dr.Ramakrishna Pasumarthy | Subject Expert     | Virtually Present.                                                                            |
| Dr.Deepak Garg            | Subject Expert     | In Absentia                                                                                   |
| Mr.A.Arun Deepak          | Alumnus            | Virtually Present                                                                             |
| Dr.J. Anitha              | Faculty Member     |            |
| Mrs.P.V.Kavitha           | Faculty Member     |            |
| Mr. M. Logaprakash        | Faculty Member     |           |
| Mr.A. Vishnuprasath       | Faculty Member     |          |
| Ms. K. Archana            | Faculty Member     |          |
| Mrs. B.Suganya            | Faculty Member     |          |
| Mr.P.Jayaprakash,         | Faculty Member     |          |

  
**CHAIRPERSON**  
**BOARD OF STUDIES**  
 Department of Artificial Intelligence and Data Science

**Dr. V. KARPAGAM**  
 Professor and Head  
 Artificial Intelligence and Data Science  
 Sri Ramakrishna Engineering College  
 Coimbatore - 641 022.





**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

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**MINUTES OF THE 3<sup>rd</sup> BOARD OF STUDIES MEETING FOR THE UG B.TECH  
ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME HELD ON  
10.12.2022 AT 9.30 AM IN ONLINE MODE.**

The following members attended the above meeting.

1. Dr. M.Senthamil Selvi,  
Professor & Head,  
Department of Information Technology,  
Sri Ramakrishna Engineering College,  
Coimbatore – 641 022

Chairperson

2. Dr.M.K.Kavitha Devi,  
Professor,  
Department of Computer Science and Engineering,  
Thiagarajar College of Engineering,  
Madurai - 625015

University Nominee

3. Mr.Arvind Devarajan,  
Technical Expert,  
Robert Bosch Engineering and Business Solutions Ltd,  
CHIL SEZ IT Park,  
Saravanampatti,  
Coimbatore- 641035

Industry Expert

4. Dr.Ramakrishna Pasumarthy,  
Associate Professor,  
Department of Electrical Engineering,  
Indian Institute of Technology,  
Chennai – 600036

Subject Expert

- |                                                                                                                                              |                |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 5. Dr.Deepak Garg,<br>Professor and Head,<br>Department of Computer Science and Engineering,<br>Bennett University,<br>Greater Noida -201310 | Subject Expert |
| 6. Dr.J. Anitha,<br>Associate Professor / IT                                                                                                 | Faculty Member |
| 7. Mrs.M.Priyadharsini,<br>Assistant Professor (Sl.G)/IT                                                                                     | Faculty Member |
| 8. Mrs.N.Saranya,<br>Assistant Professor (Sr.G)/IT                                                                                           | Faculty Member |
| 9. Mr. C. Ranjeeth Kumar,<br>Assistant Professor (Sr.G)/IT                                                                                   | Faculty Member |
| 10. Mr. M. Logaprakash,<br>Assistant Professor (Sr.G) / AI & DS                                                                              | Faculty Member |
| 11. Mrs. B.Suganya<br>Assistant Professor/ AI & DS                                                                                           | Faculty Member |
| 12. Ms. C.Kavitha,<br>Assistant Professor/ AI & DS                                                                                           | Faculty Member |
| 13. Mr.P.Jayaprakash,<br>Assistant Professor(Sel.Gr)/Maths                                                                                   | Faculty Member |

Prof.Dr.M.Senthamil Selvi, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 3<sup>rd</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

#### ITEM No.1

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2020.



## **ITEM No.2**

- It is resolved that Revised Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2021 & onwards.

## **ITEM No.3**

- It is resolved that the syllabi for the following new Professional Elective courses under Regulations 2020 be approved and passed.
  - 20AD2E13-Business Intelligence and its Applications
  - 20AD2E14-Text Analytics
  - 20AD2E15-Quantum Computing and Algorithms
  - 20AD2E16-Cognitive Computing and Analytics
  - 20AD2E17-Machine Learning Operations
  - 20AD2E18-Business Economics and Financial Analysis

## **ITEM No.4**

- It is resolved that the syllabi for the following new Open Elective courses under Regulations 2020 be approved and passed.
  - 20AD2E52-Foundations of Web Programming
  - 20AD2E53-Software Development Essentials

## **ITEM No.5**

- It is resolved that the following new one credit courses will be included under Regulations 2020 for B.Tech Artificial Intelligence and Data Science programme
  - 20AD2I01-Edge AI and Robotics

## **ITEM No.6**

- It is resolved that the following new Value Added courses will be included under Regulations 2020 for B.Tech Artificial Intelligence and Data Science programme
  - Data Analytics using KNIME Analytics Platform
  - Data Visualization using Tableau



**ITEM No.7**

- It is resolved that the following NPTEL courses are approved for credit transfer during December 2022

| S.No                          | Course Code | Course Title                            | Credits | Course Duration | Equivalent Professional / Open Elective in SREC curriculum |
|-------------------------------|-------------|-----------------------------------------|---------|-----------------|------------------------------------------------------------|
| <b>Professional Electives</b> |             |                                         |         |                 |                                                            |
| 1.                            | noc23_cs04  | Quantum Algorithms and Cryptography     | 3       | 12              | 20AD2E15 - Quantum Computing and Algorithms                |
| 2.                            | noc22_ee122 | Cognition and its computation           | 3       | 12              | 20AD2E16- Cognitive Computing and Analytics                |
| 3.                            | noc21_ch28  | Applied Time-Series Analysis            | 3       | 12              | 20AD2E01 - Time Series Analysis and Forecasting            |
| <b>Open Electives</b>         |             |                                         |         |                 |                                                            |
| 1.                            | cec20_ge34  | Solid and hazardous Waste Management    | 3       | 12              | 20CE2E51 Waste Management                                  |
| 2.                            | noc20_ph14  | Solar Energy Engineering and Technology | 3       | 12              | 20PH2E03 – Solar , Technology                              |
| 3.                            | noc21_ee112 | Electric Vehicles and Renewable Energy  | 3       | 12              | 20EE2E54 –Electric and Hybrid Vehicles                     |
| 4.                            | cec19_hs20  | Disaster Management                     | 3       | 12              | 20CE2E54 – Disaster Management                             |

**ITEM No.8**

- It is resolved that the Result Analysis for the Academic Year 2021 – 2022 are approved and passed.

**ITEM No.9**

- It is resolved that the Revised Uniform Evaluation Method of Students based on Relative Grading, as per the communications received from Anna University, Chennai be approved and passed.

**ITEM No.10**

It is resolved that Award of UG (Hons) with Specialization, UG with Minor and UG (Hons) be implemented as approved by the Academic Council of Anna University, Chennai for the



UG students who have joined from the Academic Year 2021 – 2022 for all B.E./B.Tech. programmes for students admitted in the Academic year 2020 & onwards.

1. B.E. / B.Tech. (Honours) in the same discipline
2. B.E. / B.Tech. (Minor) in other specialization and
3. B.E. / B.Tech. (Honours)

➤ **Norms for B.E. / B.Tech. (Hons) specialization in the same discipline, B.E. / B.Tech. (Hons) and B.E. / B.Tech. (Minor) in other specialization**

**i) B.E. / B.Tech. (Hons) specialization in the same discipline**

- a) The student should have earned additionally a minimum of 20 credits from a vertical of the same programme
- b) Should have passed all the courses in the first attempt
- c) Should have earned a minimum CGPA of 7.50.

**ii) B.E. / B.Tech. (Hons)**

- a) The student should have earned additional courses (minimum of 20 credits) from more than one vertical of the same programme.
- b) Should have passed all the courses in the first attempt
- c) Should have earned a minimum CGPA of 7.50.

**iii) B.E. / B.Tech. (Minor) in other specialization**

- a) The student should have earned additionally a minimum of 20 credits in any one of the verticals of other B.E./B.Tech programmes.
- Students can earn maximum of 6 credits in online mode (SWAYAM platform) out of these 20 credits as approved by Chairperson of Board of Studies / Academic Council.
- B.E. / B.Tech. (Hons) specialization in the same discipline, B.E. / B.Tech. (Hons) and B.E. / B.Tech. (Minor) in other specialization degree will be optional for students.
- Students will be permitted to register Specialization / Minor courses from 4<sup>th</sup> / 5<sup>th</sup> semester onwards. The eligibility criteria will be the (N-1)th semester performance.



The following specialization / minors are proposed from 2021 – 2022 and onwards.

| S. No | Under Graduate Engineering Programme      | Name of the Specialization / Minor Degree    | Permitted to Offer   |
|-------|-------------------------------------------|----------------------------------------------|----------------------|
| 1     | Mechanical Engineering                    | Robotics                                     | Specialization       |
| 2     | Electrical & Electronics Engineering      | Electric Vehicles                            | Specialization       |
| 3     | Electronics & Communication Engineering   | Internet of Things (IoT)                     | Specialization Minor |
| 4     | Electronics & Instrumentation Engineering | Sensors Technology                           | Specialization Minor |
| 5     | Computer Science & Engineering            | Artificial Intelligence and Machine Learning | Specialization Minor |
|       |                                           | Cyber Security                               | Specialization       |
|       |                                           | Data Science                                 | Minor                |
|       |                                           | Virtual & Augmented Reality                  | Specialization       |
| 6     | Civil Engineering                         | Green Technology                             | Specialization       |

#### CLASSIFICATION OF DEGREE for students who opted for Specialization / Minors

| 1. First Class with Distinction                             |                                                   |                                                 |                                                               |      |               |
|-------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------|------|---------------|
| Degree                                                      | Duration of the Programme                         | Duration Permitted                              | Additional credits above the requirement of curriculum        | CGPA | Pass in       |
| B.E./B.Tech. Regular                                        | 4 years                                           | 5 years                                         | -                                                             | 8.50 | First Attempt |
| B.E./B.Tech. Lateral Entry                                  | 3 years                                           | 4 years                                         | -                                                             | 8.50 | First Attempt |
| B.E. / B.Tech. (Hons) specialization in the same discipline | 3 / 4 years (Lateral Entry/ Regular respectively) | 4/5 years (Lateral Entry/ Regular respectively) | 20 credits from any one vertical of the same programme        | 8.50 | First Attempt |
| B.E. / B.Tech. (Hons)                                       | 3 / 4 years (Lateral Entry/ Regular respectively) | 4/5 years (Lateral Entry/ Regular respectively) | 20 credits from more than one verticals of the same programme | 8.50 | First Attempt |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                   |                                                 |                                                               |      |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------|------|---------------|
| <b>B.E. / B.Tech. (Minor) in other specialization</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3 / 4 years (Lateral Entry/ Regular respectively) | 4/5 years (Lateral Entry/ Regular respectively) | 20 credits from any one vertical of the other programme       | 8.50 | First Attempt |
| <b>2. First Class</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                   |                                                 |                                                               |      |               |
| <b>B.E./B.Tech. Regular</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4 years                                           | 5 years                                         | -                                                             | 6.50 | -             |
| <b>B.E./B.Tech. Lateral Entry</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3 years                                           | 4 years                                         | -                                                             | 6.50 | -             |
| <b>B.E. / B.Tech. (Hons) specialization in the same discipline</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3 / 4 years (Lateral Entry/ Regular respectively) | 4/5 years (Lateral Entry/ Regular respectively) | 20 credits from any one vertical of the same programme        | 7.50 | First Attempt |
| <b>B.E. / B.Tech. (Hons)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3 / 4 years (Lateral Entry/ Regular respectively) | 4/5 years (Lateral Entry/ Regular respectively) | 20 credits from more than one verticals of the same programme | 7.50 | First Attempt |
| <b>B.E. / B.Tech. (Minor) in other specialization</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3 / 4 years (Lateral Entry/ Regular respectively) | 4/5 years (Lateral Entry/ Regular respectively) | 20 credits from any one vertical of the other programme       | 6.50 | -             |
| <b>3. Second Class</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                   |                                                 |                                                               |      |               |
| B.E./B.Tech. Regular / lateral entry and B.E./B.Tech. minor in other specialization degree students (not covered in first class with distinction and first class classification of degree) who qualify for the award of degree shall be declared to have passes examination in second class.                                                                                                                                                                                                                                                                     |                                                   |                                                 |                                                               |      |               |
| <b>4. Others</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                   |                                                 |                                                               |      |               |
| Students earned additional 20 credits but does not satisfy the conditions mentioned in first class with distinction and first class classification of degree shall not be awarded B.E. / B.Tech. Honours. In such cases the mark sheet will show the additional courses studied and those courses shall not be considered for CGPA computation. In such case, if the student becomes eligible for first class, while computing CGPA without taking into account the additional courses studied, the student shall be awarded B.E. / B.Tech. in First Class only. |                                                   |                                                 |                                                               |      |               |



#### ITEM No.11

- The following suggestions/ comments were given by expert members and University Nominee :

➤ **Dr.M.K.Kavitha Devi**

- Suggested to ensure that there is no overlapping concepts in Cognitive computing and Analytics and Machine learning course
- Provide Natural Language Processing course as a pre requisite and add case studies
- Mention of tools explicitly in text analytics course as case study
- Inclusion of reporting tools in Business Intelligence and its applications course

➤ **Dr.Ramakrishna Pasumarthy**

- Suggested to include transformer based techniques in text analytics course
- Inclusion of generic concepts related to text analytics may be given in Module I.of text analytics course
- Suggested to ensure there is no overlapping of concepts in text analytics and Natural Language Processing course

➤ **Mr. Arvind Devarajan**

- Suggested to include version control in Software Development Essentials course
- Appreciate the inclusion of Edge AI and Robotics as one credit course and KNIME Analytics Platform as Value Added Course

➤ **Dr.Deepak Garg**

- Suggested to remove Devops concepts in Machine Learning Operations course



| Name of the Member        | Designation        | Signature          |
|---------------------------|--------------------|--------------------|
| Dr. M.Senthamil Selvi     | Chairperson        | M. Senthamil Selvi |
| Dr.M.K.Kavitha Devi       | University Nominee | Virtual Presence   |
| Mr.Arvind Devarajan       | Industry Expert    | Virtual Presence   |
| Dr.Ramakrishna Pasumarthy | Subject Expert     | Virtual Presence   |
| Dr.Deepak Garg            | Subject Expert     | Virtual Presence   |
| Mr.A.Arun Deepak          | Alumnus            | In Absentia        |
| Dr.J. Anitha              | Faculty Member     | Anitha             |
| Mrs.M.Priyadharsini       | Faculty Member     | 19                 |
| Mrs.N.Saranya             | Faculty Member     | S                  |
| Mr. C. Ranjeeth Kumar     | Faculty Member     | R                  |
| Mr. M. Logaprakash        | Faculty Member     | Logaprakash        |
| Mrs. B.Suganya            | Faculty Member     | B. Suganya         |
| Ms.C.Kavitha              | Faculty Member     | Kavitha            |
| Mr.P.Jayaprakash,         | Faculty Member     | P. Jayaprakash     |

M. Senthamil Selvi

CHAIRPERSON

BOARD OF STUDIES

Artificial Intelligence and Data Science  
Programme





**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

[Educational Service : SNR Sons Charitable Trust]

[Autonomous Institution, Reaccredited by NAAC with 'A+' Grade]

[Approved by AICTE and Permanently Affiliated to Anna University, Chennai]

[ISO 9001:2015 Certified and all eligible programmes Accredited by NBA]

**MINUTES OF THE 2<sup>nd</sup> BOARD OF STUDIES MEETING FOR THE UG  
B.TECH ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME  
HELD ON 26.02.2022 AT 2.30 PM IN IT DEPARTMENT SEMINAR HALL.**

The following members attended the above meeting.

- |                                                                                                                                                                    |                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1. Dr. M.Senthamil Selvi,<br>Professor & Head,<br>Department of Information Technology,<br>Sri Ramakrishna Engineering College,<br>Coimbatore – 641 022            | Chairperson     |
| 2. Dr.M.K.Kavitha Devi,<br>Nominee<br>Professor,<br>Department of Computer Science and Engineering,<br>Thiagarajar College of Engineering,<br>Madurai - 625015     | University      |
| 3. Mr.Arvind Devarajan,<br>Technical Expert,<br>Robert Bosch Engineering and Business Solutions Ltd,<br>CHIL SEZ IT Park,<br>Saravanampatti,<br>Coimbatore- 641035 | Industry Expert |
| 4. Dr.Ramakrishna Pasumarthy,<br>Associate Professor,<br>Department of Electrical Engineering,<br>Indian Institute of Technology,<br>Chennai – 600036              | Subject Expert  |
| 5. Dr.Deepak Garg,<br>Professor and Head,<br>Department of Computer Science and Engineering, Bennett University,<br>Greater Noida -201310                          | Subject Expert  |



6. Mr.A.Arun Deepak,  
Product Manager,  
ValGenesis Private Limited,  
Chennai – 600113

Alumnus

7. Dr.J. Anitha,  
Associate Professor / IT

Faculty Member

8. Mrs.M.Priyadharsini,  
Assistant Professor (Sl.G)/IT

Faculty Member

9. Mrs.N.Saranya,  
Assistant Professor (Sr.G)/IT

Faculty Member

10. Mr. C. Ranjeeth Kumar,  
Assistant Professor (Sr.G)/IT

Faculty Member

11. Mr. M. Logaprakash,  
Assistant Professor (Sr.G) / AI & DS

Faculty Member

12. Ms. N. Janani,  
Assistant Professor/ AI & DS

Faculty Member

13. Ms. P.L. Abinaya,  
Assistant Professor/ AI & DS

Faculty Member

Dr.M.Senthamil Selvi, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 2<sup>nd</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

#### ITEM No.1

It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. Programmes for students admitted in the Academic year 2020 & onwards

#### ITEM No.2

It is resolved that the NPTEL courses are approved for credit transfer during May 2022



| S.No                         | Course Code | Course Title                                                         | Credits | Course Duration | Equivalent Professional / Open Elective in SREC curriculum |
|------------------------------|-------------|----------------------------------------------------------------------|---------|-----------------|------------------------------------------------------------|
| <b>Professional Elective</b> |             |                                                                      |         |                 |                                                            |
| 1.                           | noc22_cs34  | Reinforcement Learning                                               | 3       | 12              | Reinforcement Learning                                     |
| <b>Open Elective</b>         |             |                                                                      |         |                 |                                                            |
| 1.                           | noc22_hs59  | Intellectual Property                                                | 3       | 12              | 20ME2E01 - Intellectual Property Rights                    |
| 2.                           | noc22_ch27  | Renewable Energy Engineering: Solar, Wind and Biomass Energy Systems | 3       | 12              | 20EE2E51 – Renewable Energy                                |

### ITEM No.3

- Amendment to Clause 35 of B.E./B.Tech programmes under Regulations 2020 for the 2020 –2021 admitted students only.
- For mandatory courses every student shall put in the required attendance and training as per the course requirement. However, the successful completion of one course from Personality and Character Development category (OR) one course from Allied Skills category is sufficient in addition to mandatory [EEC] Employment Enhancement Courses / department allied courses as prescribed in the curriculum of the programme concerned for the award of degree.
- This decision are taken as ONE TIME MEASURE and with due approval from the academic council standing committee / competent authority for the 2020 – 2021 admitted students only.

### ITEM No.4

- ❖ It is resolved that the Curriculum and Syllabi for the 5th and 6th Semester courses under Regulations 2020 be approved and passed.
- ❖ The following suggestions/ comments were given by expert members and University Nominee on Regulations, Curriculum, various courses and electives:



❖ **Dr.M.K.Kavitha Devi**

- Suggested to include C programming concepts in Employability Enhancement Course (placement training) as it is not included in curriculum
- Insisted to ensure that the course delivery would be as per the Blooms Taxonomy levels of Course Outcomes mentioned in the syllabus
- Practical components and case studies relevant to the courses should be given and projects from technology domains can be done as part of mini projects course
- Insisted to ensure that the pre-requisites are covered for the Value Added courses

❖ **Mr. Arvind Devarajan**

- Artificial Intelligence and Robotics course can be included as a professional elective or soft core course
- Suggested to include Natural Language Processing as a core course instead of soft core
- Appreciated the inclusion of Edge AI and Robotics course as a Value added Course and suggested to provide the course for students across all branches
- Ensured that Cloud based hand on exercises given as part of Big Data Analytics laboratory
- Suggested to include practical components and case studies in professional elective courses and also insisted to provide it as a lab cum theory course wherever required

❖ **Dr.Deepak Garg**

- Suggested to include practical component and case studies in professional electives and soft core courses to enhance the learning
- Emphasized to have laboratory cum theory courses where practical component is included and recommended to reduce the content (Natural Language Processing – Professional Elective)



❖ **Dr.Ramakrishna Pasumarthy**

- Insisted to ensure all the pre-requisites for the professional elective and soft core courses are covered
- Ensured whether the AI concepts included in geospatial data science course and recommended to give its usage
- Expressed that the curriculum is comprehensive and covers the necessary courses

❖ **Mr.A.Arun Deepak**

- Suggested to include case studies and hands-on component for Professional electives and also expressed that the syllabus is comprehensive and covers the essential courses

**ITEM No.5**

- It is informed that the register number allotted for the students admitted to the various UG/PG programmes from the academic year 2021 – 2022 will be prefixed with the college code 7181. Hence the register number will be as follows:

Register Number: 718121XXYZZ

7181 – College Code

21 - Year of Admission

XX - Branch Code

Y - Section

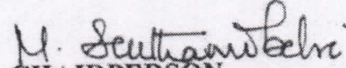
ZZ - Serial number

**ITEM No.6**

- The following decisions are taken as one time measure due to the COVID Pandemic.
  - Classes to be handled online with 5 sessions per day.
  - End semester examination to be conducted online.



| Name of the Member        | Designation        | Signature                         |
|---------------------------|--------------------|-----------------------------------|
| Dr. M.Senthamil Selvi     | Chairperson        | M. Senthamil Selvi                |
| Dr.M.K.Kavitha Devi       | University Nominee | M.K.K. Kavitha Devi<br>26/12/2022 |
| Mr.Arvind Devarajan       | Industry Expert    | Arvind                            |
| Dr.Ramakrishna Pasumarthi | Subject Expert     | Online                            |
| Dr.Deepak Garg            | Subject Expert     | Online                            |
| Mr.A.Arun Deepak          | Alumnus            | Online                            |
| Dr.J. Anitha              | Faculty Member     | Anitha                            |
| Mrs.M.Priyadharsini       | Faculty Member     | Priyadharsini                     |
| Mrs.N.Saranya             | Faculty Member     | Saranya                           |
| Mr. C. Ranjeeth Kumar     | Faculty Member     | Ranjeeth                          |
| Mr.P.Jayaprakash          | Faculty Member     | P. Jayaprakash                    |
| Mr. M. Logaprakash        | Faculty Member     | M. Logaprakash                    |
| Ms. N. Janani             | Faculty Member     | Janani                            |
| Ms. P.L. Abinaya          | Faculty Member     | P.L. Abinaya                      |

  
**M. Senthamil Selvi**  
**CHAIRPERSON**  
**BOARD OF STUDIES**  
**Artificial Intelligence and Data Science**  
**Programme**



**SRI RAMAKRISHNA ENGINEERING COLLEGE, COIMBATORE – 22**

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**MINUTES OF THE 1<sup>st</sup> BOARD OF STUDIES MEETING FOR THE UG  
B. TECH – ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PROGRAMME  
HELD ON 28.04.2021 AT 11:30 AM -IN ONLINE MODE.**

The following members attended the above meeting.

- |                                                                                                                                                                        |                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 1. Dr. M.Senthamil Selvi,<br>Professor & Head,<br>Department of Information Technology,<br>Sri Ramakrishna Engineering College,<br>Coimbatore – 641 022                | Chairperson        |
| 2. Dr. T. Purusothaman,<br>Professor and Head,<br>Department of Electronics and Communication Engineering,<br>Government College of Technology,<br>Coimbatore – 641013 | University Nominee |
| 3. Mr.Arvind Devarajan,<br>Technical Expert,<br>Robert Bosch Engineering and Business Solutions Ltd,<br>CHIL SEZ IT Park,<br>Saravanampatti,<br>Coimbatore- 641035     | Industry Expert    |
| 4. Dr.Ramakrishna Pasumathy,<br>Associate Professor,<br>Department of Electrical Engineering,<br>Indian Institute of Technology,<br>Chennai - 600036                   | Subject Expert     |



- |                                                                                                                                           |                |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 5. Dr.Deepak Garg,<br>Professor and Head,<br>Department of Computer Science and Engineering, Bennett University,<br>Greater Noida -201310 | Subject Expert |
| 6. Mr.A.Arun Deepak,<br>Product Manager,<br>ValGenesis Private Limited,<br>Chennai – 600113                                               | Alumnus        |
| 7. Dr.J. Anitha,<br>Associate Professor / IT                                                                                              |                |
| 8. Mrs.M.Priyadharsini,<br>Assistant Professor (Sl.G)/IT                                                                                  |                |
| 9. Mrs.N.Saranya,<br>Assistant Professor (Sr.G)/IT                                                                                        |                |
| 10. Mr. C. Ranjeeth Kumar,<br>Assistant Professor (Sr.G)/IT                                                                               |                |
| 11. Mr. M. Logaprakash,<br>Assistant Professor (Sr.G) / AI & DS                                                                           |                |
| 12. Ms. N. Janani,<br>Assistant Professor/ AI & DS                                                                                        |                |
| 13. Ms. P.L. Abinaya,<br>Assistant Professor/ AI & DS                                                                                     |                |

Dr.M.Senthamil Selvi, Chairperson, Board of Studies, chaired the meeting and welcomed all the members to the 1<sup>st</sup> BoS meeting. After a brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

**ITEM No. 1**

- It is resolved that Regulation 2020 (Learning Outcome based Curriculum through Choice based Credit) will be followed for all B.E./B.Tech. programmes for students admitted in the Academic year 2020 & onwards
- For candidates admitted under Regulation 2020, the minimum number of credits to be earned for the successful completion of all B.E./B.Tech. programmes for regular candidates is 162 and later entry candidates is 120

## ITEM No.2

- It is resolved that the curriculum and syllabi under Regulations 2020 be approved for the categories of HS/BS/ES/PC/OE and PE of B.Tech Artificial Intelligence and Data Science
- The following suggestions/ comments were given by expert members and University Nominee on Regulations, Curriculum, various courses and electives:

### ❖ Dr. T. Purusothaman

- Suggested to include Software Engineering and Project management as a single course to accommodate other AI courses
- Suggested to have a generic title as Cloud Computing or Cloud Computing & Virtualization
- Recommended to include topics on deployment of models in Cloud and security analysis as a separate course and suggested to include deployment in AWS, Azure etc., in laboratory course

### ❖ Mr. Arvind Devarajan:

- Suggested to include a course to learn research methodology techniques like Entrepreneurship development / Project Management courses, for the benefit of students who aspire to take up research as an academic pursuit.
- Suggested to swap Operating Systems course (in 3<sup>rd</sup> semester) with Software Engineering (in 4<sup>th</sup> semester) so that students could already begin to use concepts of Software Engineering in their mini-project.
- Appreciated the inclusion of Data Analytics course in 3<sup>rd</sup> semester and recommended to introduce newer programming languages used in industry like Julia in the course. The students could also be encouraged to use Python programming for their assignments.
- Suggested to have Data Analytics lab with Julia and Python instead of Operating Systems Lab (in 3<sup>rd</sup> semester).
- Appreciated the inclusion of Mini-project and insisted that proper Software Engineering concepts are followed during this project - Requirement collection, documentation, Design and Architecture, coding, and testing.



- Suggested to introduce a course on Machine Learning system design from 5<sup>th</sup> Semester, in the lines of Software Engineering to enable students to learn the design aspects of an ML system
- Recommended to include topics including Embedded System optimization techniques, small size machine-learning systems (Tiny ML) in High Performance Computing course

❖ **Dr.Deepak Garg**

- Suggested that nomenclature for Mini-project to be renamed as Iterative development project or design project etc.,
- Recommended that Cloud Computing concepts to be generic and not be termed as Cloud Computing for Machine Learning
- Suggested that Artificial Intelligence Foundations could be renamed as it would cover only the basic concepts and recommended to include other concepts in deep learning
- Recommended to include Discrete Structures in 3<sup>rd</sup> semester as it is a prerequisite for Design and Analysis of Algorithms
- Suggested to shift the Software Engineering course to 4<sup>th</sup> semester so that the software engineering principles could be applied in mini project
- In Artificial Intelligence foundations, suggested to include introductory topics on Deep Learning and rename the course title as AI & Deep Learning and recommended to include other advanced topics in Deep Learning in later semesters
- Suggested to remove the securing Machine Learning in the Cloud concepts due to complexity and not recommended for UG course

❖ **Dr.Ramakrishna Pasumarthy**

- Suggested to exclude the module on AI in Robotics due to its complexity and recommended to include as an elective
- Suggested that Cloud Computing concepts can be generic and provide an idea on various applications like IoT, etc.,
- Suggested that securing Machine Learning in the Cloud topic could be removed

❖ **Mr.A.Arun Deepak**

- Emphasized the inclination of Entrepreneurship concepts towards technopreneurship

**ITEM No.3**

- It is resolved that the following Open Electives will be included under Regulations 2020 for Programmes other than B.E(CSE) / B.Tech(IT) / B.Tech AI & DS
  - Python Frameworks for Machine Learning

**ITEM No.4**

- It is resolved that the mandatory courses shall be in the following courses under Regulation 2020

| Category                              | Course Title                                                                                                                                                                                                    |                |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Personality and Character Development | Sports and Games<br>Empowerment through Yoga<br>National Cadet Corps<br>National Service Scheme<br>Youth Red Cross<br>Co-Curricular Activities<br>Extra-Curricular Activities<br>Aptitude/Soft Skills           | Any one Course |
| Allied Skills                         | English Proficiency Certification<br>Foreign / Vernacular Languages<br>Technical Certification Courses                                                                                                          | Any one Course |
| Additional Courses                    | <ul style="list-style-type: none"><li>• Mandatory courses recommended by the Career Development and Placement Division</li><li>• Bureau of Overseas Education</li><li>• Entrepreneur Development Cell</li></ul> | Any one Course |

The candidate has to complete one course in each category to be eligible for the award of the degree.

**ITEM No.5**

- The following discussions are taken as one time measure due to the COVID Pandemic.
  1. Classes to be handled online with 5 sessions per day.



2. End semester examination to be conducted online.
3. Question Pattern - 70 multiple choice for 70 marks and 15 subjective questions (15 x 2) for 30 marks for 2 hours duration

**ITEM No.6**

- It is resolved that the Question paper setting ratio to be increased to 50% for the internal question paper setters for the end semester examination from 2020-2021 onwards.

**ITEM No.7**

- It is resolved that the Valuation Answer Script ratio to be raised to 75% in the end semester examinations from 2020-2021 onwards.

**ITEM No.8**

- It is resolved that the following Question Paper pattern is approved for Continuous Assessment Tests.
- 

| Course Type                             | Question Pattern                                                                                                                                            | Marks                                      | Total Marks | Duration    |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------|-------------|
| <b>3 / 4 / 2<br/>Credit<br/>Courses</b> | 7 Multiple choice Questions<br>3 Fill in the Blanks without Choice<br>5 Short Answers<br>3 Descriptive Answers (2 out of 3)<br>+<br>One Compulsory Question | 7 Marks<br>3 Marks<br>10 Marks<br>30 Marks | 50 Marks    | 120 Minutes |
| <b>Design<br/>Paper</b>                 | 02 Design Questions (Open Book test)                                                                                                                        | 25 Marks Each                              | 50 Marks    | 120 Minutes |

**ITEM No.9**

- It is resolved that the following Question Paper pattern is approved for End Semester Examinations.

| Course Type                                       | Question Pattern                                                                                                                                           | Marks                                          | Total Marks | Duration           |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-------------|--------------------|
| <b>3 or 4 Credit Paper</b>                        | 7 Objective Questions MCQ)<br>3 Fill in the blanks without Choice<br>5 short Answers<br>5 Descriptive answers (4 out of 6)<br>+<br>One Compulsory Question | 7 Marks<br>3 Marks<br><br>15 Marks<br>75 Marks | <b>100</b>  | <b>180 minutes</b> |
| <b>2 Credit Paper &amp; Theory cum Lab papers</b> | 5 Multiple choice Questions<br>5 Short Answers<br>5 Descriptive Answers (4 out of 6)<br>+<br>One Compulsory Question                                       | 5 Marks<br>15 Marks<br>50 Marks                | <b>70</b>   | <b>150 minutes</b> |
| <b>Design Paper</b>                               | 04 Design Questions (4 out of 5)                                                                                                                           | 25 Marks each                                  | <b>100</b>  | <b>180 minutes</b> |

| Name of the Member        | Designation        | Signature                 |
|---------------------------|--------------------|---------------------------|
| Dr. M.Senthamil Selvi     | Chairperson        | <i>M. Senthamil Selvi</i> |
| Dr. T. Purusothaman       | University Nominee | <i>Virtually Present</i>  |
| Mr.Arvind Devarajan       | Industry Expert    | <i>Virtual Present</i>    |
| Dr.Ramakrishna Pasumarthi | Subject Expert     | <i>Virtual Present</i>    |
| Dr.Deepak Garg            | Subject Expert     | <i>Virtual Present</i>    |
| Mr.A.Arun Deepak          | Alumnus            | <i>Virtual Present</i>    |
| Dr.J. Anitha              | Faculty Member     | <i>Anitha</i>             |
| Mrs.M.Priyadharsini       | Faculty Member     | <i>M.P. Priyadharsini</i> |
| Mrs.N.Saranya             | Faculty Member     | <i>N. Saranya</i>         |
| Mr. C. Ranjeeth Kumar     | Faculty Member     | <i>C. Ranjeeth Kumar</i>  |
| Mr. M. Logaprakash        | Faculty Member     | <i>M. Logaprakash</i>     |
| Ms. N. Janani             | Faculty Member     | <i>N. Janani</i>          |
| Ms. P.L. Abinaya          | Faculty Member     | <i>P.L. Abinaya</i>       |

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