

(An Autonomous Institution, Affiliated to Anna University Chennai and Approved by AICTE New Delhi)

# Name of the BodyBoard of StudiesName of the BoardComputer Science and Engineering (Internet of Things)Meeting No.3Date & Time01.06.2024, 10.00 amModeOffline Mode (Board Room)Academic year2023-24

### MINUTES OF THE 3<sup>rd</sup> BOARD OF STUDIES MEETING



(An Autonomous Institution, Affiliated to Anna University Chennai and Approved by AICTE New Delhi)

### NANDHA ENGINEERING COLLEGE, ERODE - 638 052

### (An Autonomous Institution, Affiliated to Anna University Chennai and

### Approved by AICTE New Delhi)

### Minutes of 3rd Board of Studies Meeting (BoS) held on 01.06.2024

The 3<sup>rd</sup> Board of Studies (BoS) meeting was held on 01.06.2024 by 10.00 am at Board room, Nandha Engineering College. The members attended the meeting are given in **Annexure I.** 

**Dr.Vanathi D**, Chairman CSE, CSE (CS) & CSE (IoT) and HoD / CSE, chaired the meeting, welcomed all the members to the  $3^{rd}$  BoS meeting followed by introduction of the members. After the brief introduction, the agenda items listed below were taken up for discussion and the following resolutions were passed.

|           | AGENDA   |  |  |
|-----------|--|--|--|
| Item 3.01 | Welcome address and Introduction of members.                                   |  |  |
| Item 3.02 | Approval of 2 <sup>nd</sup> BOS Meeting Minutes and Action taken report (ATR). |  |  |
| Item 3.03 | Review of the PAC and DAB meeting minutes.                                     |  |  |
| Item 3.04 | Review of Institute Vision & Mission.  |  |  |
| Item 3.05 | Review of Department Vision, Mission, PEOs and PSO'S.                          |  |  |
| Item 3.06 | Review of syllabus from V to VIII semester courses and electives               |  |  |
| Item 3.07 | Review of R22 ratifications.   |  |  |
| Item 3.08 | Approval of Value Added and NPTEL courses.                                     |  |  |
| Item 3.09 | Review of Panel of Examiners   |  |  |
| Item 3.10 | Any other matter   |  |  |
|           | Teaching Learning pedagogy   |  |  |
|           | Effectiveness of Hackathon   |  |  |
|           | Department Specific best practices followed and details of best                |  |  |
|           | practices followed in the experts institutions                                 |  |  |
|           | Changes in assessment patterns   |  |  |
|           | • Flexibility provided to fast learners in the experts Institutions.           |  |  |
|           | Flexibility in working hours   |  |  |
|           | Project Based Learning   |  |  |
|           | Industry Collaboration   |  |  |
|           | Up skilling and outreach Activities  |  |  |
|           | Students Industrial Visits   |  |  |
|           | • Inputs for Placement, Higher Studies and Entrepreneurship                    |  |  |
|           | Faculty Capacity Building  |  |  |
|           | International connect  |  |  |



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The proceedings of BoS started. The discussions and resolutions are recorded as follows:

|             | Welcome note and introduction of members  |  |  |
|-------------|---|--|--|
| Item 3.01   | Dr.Vanathi D, Chairman BoS introduced the members and welcomed all followed by a brief note on functioning of BoS.  |  |  |
| Item 3.02   | Approval of the 2 <sup>nd</sup> BoS meeting minutes and ATR   |  |  |
| Resolution  | Resolved to approve the Action Taken Report of 2 <sup>nd</sup> BoS meeting.   |  |  |
| Item - 3.03 | Review and approval of the PAC and DAB meeting minutes.   |  |  |
| Discussion  | <ul> <li>Along with the important suggestions given by the members.</li> <li>✓ PAC meeting-1 held on 02.08.23</li> <li>✓ PAC meeting-2 held on 06.10.23</li> <li>✓ PAC meeting-3 held on 17.04.24</li> <li>✓ PAC meeting-4 held on 15.05.24</li> <li>✓ DAB meeting-1 held on 15.12.23</li> <li>✓ DAB meeting-2 held on 06.05.24</li> </ul>  |  |  |
| Resolution  | All members have noted the MoM of PAC and DAB meeting. Resolved to record the proceeding.   |  |  |
| Item- 3.04  | Presentation of Institute Vision & Mission  |  |  |
| Discussion  | Dr. D. Vanathi presented the proposed Institute Vision, Mission.  |  |  |
|             | <ul> <li>VISION <ul> <li>To be an Institute of excellence providing quality Engineering, Technology and Management education to meet the ever changing needs of the society.</li> <li>MISSION</li> <li>To provide quality education to produce ethical and competent professionals with social Responsibility</li> <li>To excel in the thrust areas of Engineering, Technology and Entrepreneurship by solving real- world problems.</li> <li>To create a learner centric environment and improve continually to meet the changing global needs.</li> </ul> </li> </ul> |  |  |
| Resolution  | Resolved to record.   |  |  |
| Item-3.05   | Presentation of Department Vision, Mission, PEOs and PSOs.  |  |  |
| Discussion  | <ul> <li>Dr.D.Vanathi presented the proposed Department Vision, Mission, PEOs and PSOs statements.</li> <li><u>VISION</u></li> <li>To be a center of excellence providing high quality Computing and Internet of Things education to meet the ever growing needs of the smart society.</li> <li><u>MISSION</u></li> <li>To provide quality education to produce Computer Science and Internet of Things</li> </ul>  |  |  |
|             | <ul> <li>To provide quarty education to produce computer science and internet of Things professionals with social responsibility</li> <li>To excel in research in the field of Computing and Internet of Things</li> </ul>  |  |  |



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|            | • To be a learner centric environment with continual progress to meet the global   |
|------------|--|
|            | smart computing needs  |
|            | PROGRAMME EDUCATIONAL OBJECTIVES (PEO)   |
|            | <ul><li>PEO1: Core Competency: To transform the graduates as experts in the computing profession and to satisfy the needs of the IoT industry.</li><li>PEO2: Research, Innovation and Entrepreneurship: To empower the</li></ul>   |
|            | graduates with knowledge in communicating equipments using Internet with ability to offer solutions for real time applications.  |
|            | <b>PEO3: Ethics, Human values and Life-long learning</b> : To possess the necessary soft skills for working in diverse cultural and interdisciplinary teams and ensure that the graduates practice professional othics in LoT  |
|            | that the graduates practice professional ethics in IoT.  |
|            | PROGRAMME SPECIFIC OUTCOMES (PSO)  |
|            | <b>Knowledge Proficiency:</b> Students at the time of graduation will be equipped with knowledge of IoT equipments in various platforms, possess computing skills with secured network control and act responsibly in legal, ethical and security related issues.              |
|            | <b>Recent Technology:</b> Students at the time of graduation will be able to apply emerging appropriate technology and programming skills to find optimal solutions for complex problems by applying domain knowledge to transform innovative ideas into reality.              |
|            |  |
|            |  |
| Resolution | Resolved to record.  |
| Item 3.06  | Review of syllabus from V to VIII semester courses and electives   |
|            | Syllabus –5 <sup>th</sup> to 8 <sup>th</sup> semesters with CO–PO / PSO Mapping.   |
|            | Semester -5  |
|            | Course-1: Design of Smart Cities   |
|            | Course-2: Advanced Java Programming (Theory + Lab)   |
|            | Course-3: Web Technology (Theory + Lab)  |
|            | ➢ Course-4: Elective(PEC)  |
|            | ➢ Course-5: Elective(PEC)  |
|            | ➢ Course-6: Elective(OEC/PEC)  |
|            | Semester -6  |
|            |  |
|            | Course-1: Mobile Application Development for IoT (Theory + Lab)  |
|            | <ul> <li>Course-1: Mobile Application Development for IoT (Theory + Lab)</li> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> </ul>   |
|            |  |
|            | Course-2: Programming for IoT Boards (Theory + Lab)  |
|            | <ul> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> <li>Course-3: Elective(PEC)</li> </ul>   |
|            | <ul> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> <li>Course-3: Elective(PEC)</li> <li>Course-4: Elective(PEC)</li> </ul>  |
|            | <ul> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> <li>Course-3: Elective(PEC)</li> <li>Course-4: Elective(PEC)</li> <li>Course-5: Elective(OEC)</li> </ul>   |
|            | <ul> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> <li>Course-3: Elective(PEC)</li> <li>Course-4: Elective(PEC)</li> <li>Course-5: Elective(OEC)</li> <li>Course-6: Elective(OEC/PEC)</li> </ul>  |
|            | <ul> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> <li>Course-3: Elective(PEC)</li> <li>Course-4: Elective(PEC)</li> <li>Course-5: Elective(OEC)</li> <li>Course-6: Elective(OEC/PEC)</li> <li>Semester -7</li> </ul>   |
|            | <ul> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> <li>Course-3: Elective(PEC)</li> <li>Course-4: Elective(PEC)</li> <li>Course-5: Elective(OEC)</li> <li>Course-6: Elective(OEC/PEC)</li> <li>Semester -7</li> <li>Course-1: Universal Human Values</li> </ul> |



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|            | Course-5: Elective(OEC)   |
|------------|---|
|            | Course-6: Internship /Industrial Training   |
|            | Semester -8   |
|            | Course-1: Project Work  |
|            | <ul> <li>Dr. Jothi K R , Dr.N.K.Karthikeyan , Dr.D.Vijendra Babu , Dr.Uma Maheswari suggested to         <ul> <li>To have two text books &amp; three reference book for every course.</li> <li>Give web materials for case studies.</li> <li>Asked about the provision provided for the fast learners and action plan for slow learners.</li> <li>Include Full Stack Development as a core course.</li> <li>Asked to include internal assessments for NPTEL courses.</li> </ul> </li> <li>Semester -5         <ul> <li>Course-1: Design of Smart Cities</li> <li>Dr.KarthikaRenuka D suggested to Include Industry 5.0</li> <li>Replace the course Design of Smart Cities with Automata Theory and Compiler Design</li> <li>Course-2: Advanced Java Programming(Theory+Lab)</li> <li>Dr.KarthikaRenuka D and Dr. Vijendra Babu D suggested to             <ul> <li>Replace the course Advanced JAVA programming and Lab with</li> </ul> </li> </ul></li></ul> |
| Discussion | <ul> <li>Embedded systems and Lab</li> <li><u>Course-3: Web Technology (Theory+Lab)</u></li> <li>➢ Dr.KarthikaRenuka D and Dr. Vijendra Babu D suggested to         <ul> <li>Replace the course Web Technology and Lab with Full Stack Development and Lab</li> </ul> </li> <li><u>Course-4: Elective(PEC)-</u> No Comments         <ul> <li><u>Course-5: Elective(PEC)-</u> No Comments</li> <li><u>Course-6: Elective(OEC)-</u> No Comments</li> </ul> </li> </ul>  |
|            | <ul> <li>Semester -6         <ul> <li>Course-1: Mobile Application Development for IoT (Theory + Lab)</li> <li>Dr.KarthikaRenuka D suggested to Include Industry 5.0</li> <li>Dr.N.K.Karthikeyan suggested to include case study topics from web materials and Literature survey papers can be given to have practical knowledge</li> <li>Course-2: Programming for IoT Boards (Theory + Lab)</li> <li>Dr. Jothi K R and Dr.N.K.Karthikeyan suggested robotics as a part of the course.</li> </ul> </li> </ul>  |
|            | <ul> <li>Course-3 to 6:Elective(PEC)</li> <li>Dr.KarthikaRenuka D suggested to exclude smart city designing in electives.</li> <li>Dr.D.Vijendra Babu suggested that the syllabus of cognitive IoT is vast and asked to remove one unit and also suggested to use the word BEYOND 5G in the course 5G and IoT Technologies.</li> <li>Dr. Jothi K R and Dr.N.K.Karthikeyan told that edge and fog computing syllabus is good.</li> <li>Dr.D.Vijendra Babu suggested to combine Industrial and medical IoT and Internet of Multimedia things as single elective.</li> </ul>   |



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|            | <ul> <li>Dr.Uma Maheswari suggested to include cloud computing in core or elective course.</li> <li><u>Semester -7</u></li> <li><u>Course-1: Universal Human Values</u>-No Comments</li> <li><u>Course-2: Elective (Management)</u> -No Comments</li> <li><u>Course-3 to 5: Elective(OEC/PEC)</u></li> <li>Dr.Uma Maheswari suggested to exclude Data analytics for smart farming in electives list.</li> <li><u>Course-6: Internship /Industrial Training-No Comments</u></li> <li><u>Semester -8</u></li> <li><u>Course-1: Project Work</u>- No Comments</li> </ul> |  |
|------------|---|--|
| Resolution | Resolved to approve the changes suggested by the members.   |  |
| Item 3.07  | Review of R22 ratifications.  |  |
| Discussion | <ul> <li>Dr. Vanathi D presented new CO-PO mapping for the following courses</li> <li>1. 22CIC05 Internet of Things and its Applications</li> <li>2. 22CIC11 Sensors and Actuator Devices</li> <li>3. 22CIC12 Privacy and Security in IoT</li> </ul>  |  |
| Resolution | Resolved to approve.  |  |
| Item 3.08  | Approval of Value added and NPTEL courses.  |  |
| Discussion | <ul> <li>VALUE ADDED COURSES:         <ol> <li>22CII01-IoT PLATFORMS AND SECURITY- No Comments</li> <li>22CII02-EMBEDDED C- No Comments</li> <li>NPTEL COURSES                 <ol> <li>OCCC002- CLOUD COMPUTING- No Comments</li> <li>OCCI001- ENHANCING SOFT SKILLS- No Comments</li> </ol> </li> </ol></li></ul>   |  |
| Resolution | Resolved to approve.  |  |
| Item 3.09  | Approval of Panel of Examiners  |  |
| Discussion | BoS members clarified about minimum eligibility fixed for becoming a panel of<br>examiner. Dr. D Vanathi explained the process of preparing panel of examiner for<br>question paper setting, valuation and laboratory examinations based on the examiner<br>specialization. The minimum experience of 5 years is fixed for being an examiner.   |  |
| Resolution | Resolved to approve the panel of Examiners for question paper setting, valuation and laboratory examinations  |  |
| Item 3.10  | Any other matter – Nil  |  |



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### Summary of approvals

- 2<sup>nd</sup> BoS meeting minutes and ATR are approved
- MoM of PAC meeting-1 held on 02.08.2023, PAC meeting-2 held on 06.10.2023, PAC meeting-3 held on 17.04.2024, PAC meeting-4 held on 15.05.2024, DAB meeting-1 held on 15.12.2023 & DAB meeting-2 held on 06.05.2024 are approved
- Semester: 5 to 8 syllabi of courses under R22 regulations and electives are approved.
- Panel of Examiners for question paper setting, valuation and laboratory examinations are approved

Finally, Dr.Vanathi D HoD/CSE thanked all the members for their active participation.





Date: 01.06.2024

Dr. Vanathi D (Chairman, BoS – Computer Science and Engineering)



# NANDHA Engineering College (Autonomous), Erode -638 052

|                                     | ANNEXURE-   | <u>-11</u>    |
|-------------------------------------|-------------|---------------|
| Name of the Board                   | Meeting No. | Academic year |
| Computer Science and<br>Engineering | 12          | 2023-24       |

| Meeting Attendance |   |  |                     |
|--------------------|---|--|---------------------|
| S.No               | Members   | Representation                                       | Signature with date |
| 1                  | Dr. Vanathi D<br>Professor &Head<br>Computer Science and Engineering  | Chairman   | 116/24              |
| 2                  | Dr. Karthika Renuka D<br>Professor,<br>Department of Information Technology,<br>PSG College of Technology,<br>Coimbatore- 641 004.  | University Nominee                                   | BN 16/24            |
| 3                  | Dr. Jothi K R<br>Associate Professor, Senior<br>Department of Computational<br>Intelligence,<br>School of Computer Science and<br>Engineering,<br>Vellore Institute of Technology, Vellore. | Expert Nominee<br>(Nominated by Academic<br>Council) | Ju                  |
| 4                  | Dr. Jayanthi G<br>Assistant Professor<br>Faculty of Engineering and Technology<br>Sri Ramachandra Institute of Higher<br>Education and Research University,<br>Chennai.                     | Expert Nominee<br>(Nominated by Academic<br>Council) | AB                  |
| 5                  | Mr. Santhosh Kumar A P<br>Lead - Product Management,<br>ZOHO Corporation Pvt Ltd, Chennai   | Member<br>(Expert from Industry)                     | 210 BBBDrugbrang    |
| 6                  | Mr. Elangovan K P<br>Head of Technology, Hedonova<br>United States.   | Alumni   | Apapose.            |
| 7                  | Dr.Vijendra Babu D<br>Assistant Professor, Sr.Grade 2,<br>Department of Embedded Technology,<br>School of Electronics Engineering,<br>Vellore Institute of Technology, Vellore.             | Academic Expert<br>Special Invities(CSE/IOT)         | D. K. 116/24.       |
| 8                  | Dr.Karthikeyan N K<br>Professor & Head,<br>Department of Information Technology,<br>Coimbatore Institute of Technology,<br>Coimbatore - 14  | Academic Expert<br>Special Invities(CSE/CS)          | N.L.M               |

BoS\_Form-7



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| in the second | Meeting Attendance- Internal members   |                |                                  |  |
|---|--|----------------|----------------------------------|--|
| S.No  | Members  | Representation | Signature with date              |  |
| ۱   | Dr. Thirumoorthy P<br>Professor<br>Computer Science and Engineering                | Member         | At the m                         |  |
| 2   | Dr.Sukumar P<br>Professor<br>Computer Science and Engineering                      | Member         | Alexand                          |  |
| 3   | Dr.Karuppusamy S<br>Associate Professor<br>Computer Science and Engineering        | Member         | 2.10 51/21-27                    |  |
| 4   | Dr.Prabhu S<br>Head<br>Computer Science and Engineering(Cyber<br>Security)         | Member         | g. Male Ani                      |  |
| 5   | Ms.Maheswari S<br>Head/Computer Science and<br>Engineering(Internet of Things)     | Member         | g. Malegni                       |  |
| 6   | Ms.Padma E<br>Assistant Professor<br>Computer Science and Engineering              | Member         | 87 1/6/24                        |  |
| 7   | Ms.Kavitha.S<br>Assistant Professor<br>Computer Science and Engineering            | Member         | Sur 116/24                       |  |
| 8   | Ms.Uma.P<br>Assistant Professor<br>Computer Science and Engineering                | Member         | Seceme<br>0116124                |  |
| 9   | Ms.Raja Rajeswari B<br>Assistant Professor<br>Computer Science and Engineering(CS) | Member         | B. Rai [06/2024<br>P. Mat 1.6.24 |  |
| 10  | Ms.Manothini P<br>Assistant Professor<br>Computer Science and Engineering(IOT)     | Member         | P. Mat 1.6-24                    |  |

6127 Chairman BoS