

#### KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL - 15

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (Networks)** 

Date: 06.06.2023

No. /KITS/CSN/UG/URR-18

#### BoS meeting of B.Tech CSE(AI & ML) program (Virtual mode)

Date and time of the meeting: 06.06.2023 @9.30 am (through MS teams online)

#### Agenda:

- Presentation of URR-18 IV year scheme and syllabus of CSE(AI & ML) to BoS members for approval
- Any other issues with the permission of the chair

The following is the list of BoS members (CSE-AIML) who attended the meeting:

S.No.	Name	Designation	Position in BoS	Attended/n ot
1	Dr. Soora Narasimha Reddy	Assoc. Professor & HoD, CSN Dept ,KITSW	Chairperson, BoS	Attended
2	Dr.V. Shankar	Professor of CSN Dept , KITSW	Member	Attended
3	Dr. Jothi Prabha Appadurai	Assoc. Prof. of CSE Dept , KITSW	Member	Attended
4	Dr. V. Swathy	Assoc. Prof. of CSN Dept , KITSW	Member	Attended
5	Sri. B. Srinivas	Asst. Prof. of CSN Dept , KITSW	Member	Attended
6	Prof. S. G. Sanjeevi	Professor, Dept. of CSE, NIT Warangal	External Member(From renowned Academic Institute)	Attended
7	Dr. P. Sateesh Kumar	Professor, Dept. of CSE, IIT Roorkee	External Member(From renowned Academic Institute)	Attended
8	Dr. K. Padmaja	Asst. Prof. KU College of Engineering and Technology, Warangal	External Member(Universit y Nominee)	Attended
9	Sri. P . Prasad	CTO- Technology Business Unit at TCS	External Member(From Industry)	Attended
10	Sri. K. Venkata Swamy	Senior Software Architect, CA Technology, Hyd.	External Member(From	Attended

			Industry)	
11	Dr. Praveen Jambholkar	CEO, Metagogy Learning Systems Pvt. Ltd. Hyd.	External Member(From Industry)	Attended
12	Sri Koushik Bhupathi	Senior Software Architect, ADP, Hyderabad	External Member(Post Graduate Meritorious Alumnus Academia/Indust ry)	Attended
13	Sri. I. Sai Rama Krishna	Asst. Prof. of CSN Dept, KITSW	Co-Opted Member -1	Attended
12	Dr. B. Hanumanthu	Asst. Prof. of CSN Dept, KITSW	Co-Opted Member-2	Attended
13	Prof. Y. Purandar	Prof. and Dean, Training & Placement, KITSW	Special Invitee	Not Attended

#### MINUTES OF MEETING:

- 1. The chairperson of the BoS Dr. Soora Narasimha Reddy, Associate Professor & Head of Department, CSN welcomed the internal and External BoS members and further proceedings were taken up by Dr.Jothi Prabha Appadurai
- 2. Dr. Jothi Prabha Appadurai presented the URR-18 Scheme and Syllabus of 7<sup>th</sup> and 8<sup>th</sup> semesters respectively
- 3. Firstly, VII Semester course syllabus was presented to BoS
- 4. Reinforcement learning course syllabus of VII Semester was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

- (i) It was suggested that students should have prior knowledge on dynamic programming. The Internal BoS Members informed him that Dynamic programming is already covered in the subject"Design and Analysis of Algorithms"
- (ii) Syllabus is good to go.
- 5. Secondly, Social information and Network analysis course syllabus of VII Semester was presented to BoS unit wise and made open for suggestions
  - (i) Syllabus is fine and good to go
- 6. Cloud computing laboratory course syllabus was presented to BoS experiment wise

and made open for suggestions

Below are the comments/suggestions given by external BoS members

- (i) Suggested usage of public open source cloud platform and has also offered to help virtually if required. The internal BoS members said that they will definitely take help from him to bridge the gap between industry and academia.
- (ii)Add topics related to VM, Map-Reduce, containers and integration of cloud computing platforms in both theory and laboratory course. Also they suggested revisiting the experiments as few of them are primitive (Eg: Experiment XII)
- (iii) Suggested to refer text book "Enterprise Cloud Computing" by Gautam Shroff to get insight of latest topics in cloud computing
- (iv) Suggested to add the below textbook for Cloud Computing Theory and Laboratory syllabus

Cloud Computing: Theory and Practice, Dan C. Marinescu, Morgan Kaufmann

7. NLP laboratory course syllabus was presented to BoS experiment wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

- (i) Experiments look good. However few topics are to be added during next syllabus review.
- 8. Robotics course syllabus was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

- (i) Syllabus is fine. He also suggested taking inputs from the robotics course offered by IIT Kharagpur
- (ii) Few case studies has to be included in the syllabus
- 9. Cognitive Computing Systems course syllabus was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

- (i) External BoS members suggested to remove the term "Systems" from the course title as the course components does not align with course title. Below are the alternative titles suggested 1. Cognitive Modeling 2. Cognitive computing
- (ii) External BoS members suggested including some applications /case studies in syllabus

- 10. 8th semester courses syllabus were presented to BoS
- 11. Robotic Process Automation course syllabus was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

- (i) Syllabus is good to go and its comprehensive
- (ii) Need to review on time bound .He also suggested to refer MIT syllabus.
- (iii) Include some project/ laboratory/ case study component in to syllabus.
- 12. Virtual Reality Technologies course syllabus was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

- (i) BoS Members suggested that the course title is not aligned with course syllabus and need to rework on the title. It was suggested to remove the word technologies and leave it to be Virtual Reality
- (ii) They also suggested including some applications/ case studies in the syllabus.
- 13. Presentation of all course syllabus to be approved was completed. The meeting adjourned at 11:05 AM after thanking all the Internal and External BoS members for thie active participation , support and valuable inputs

Dr.S.Narasimha Reddy Assoc.Prof & Head, CSN

AKATIYA INSTITUTE OF Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, Telangana, INDIA

Opp: Yerragattu Gutta, Hasanparthy (Mandal), WAHANGAL - 500 013, 1elangana, INDIA. काकतीय प्रेचोगिकी एवं विज्ञान संस्थान, वरंगल - ५०६ ०१५ तेलंगाना, भारत इन्हर्किक సాంకేతిక విజ్ఞాన ಕಾಸ್ತ್ರ ವಿద్యాలయం, కరంగశ - २०६ ०२०२ ३७००००, इर्पटर्ड इंडिंड (An Autonomous Institute under Kakatiya University, Warangal) (Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SO

No. KITS/Acad/Circular/ 2024/252

#### // CIRCULAR//

Sub: Reframing of composition of Board of Studies (BoS) - Reg.,

Ref:1) UGC Gazzette Notification, F. No. 1-18/2021 (CPP-II) - Conferment of Autonomous Upon Colleges and Measures for Maintenance of Standards in Autonomous Colleges - Regulations, 2023, dated 13.04.2023.

2) KITSW-Administrative Manual.

As per the new guidelines (vide Ref.1) issued by the University Grants Commission (UGC), New Delhi, the composition of Board of Studies is reframed. The same was notified in the administrative manual of our institute (vide Re.2).

The composition of the BoS is mentioned in the following table for your information and necessary action.

S.No	BoS Members	Name and Designation	Status
1.	Head of the Department concern (Chairman).		Chairman
2	Two subject experts from Institutes of National Importance.		Member
3	One subject expert from outside the country.		Member
4	One expert from Kakatiya University (one expert to be nominated by the Vice-Chancellor from <i>a panel of six recommended</i> by the department).	names of Six Subject Experts from	Member
5	Four members of industry /corporate sector/allied areas.		Member
6	Two members of the College alumni (preferably one from UG and one from PG)		Member

In this regard HoDs are requested to submit a panel of six subject experts (Sr. No.4, in the above mentioned table) in from Kakatiya University, Warangal, on or before 30.01.2024, to the under signed for its submission to the affiliating University. Out of a panel of six subject experts, one will be nominated as BoS member (subject expert from the affiliating university) by the Vice-Chancellor.

Further, HoDs are requested to nominate other BoS members as per the above mentioned table (Sr. No. 2, 3, 5 & 6). They have to take consent (through a phone call) from the experts before finalizing the members before sending a formal request letter.

The HoDs are requested to submit a duly signed list of the members (other than University Subject Expert) as per the above format in the office of Dean, AA on or before 02.02.2024 and send a soft copy to <u>deanaa@kitsw.ac.in</u>.

Dean, AA

Date: 27-01-2024

All HoDs, with a request for necessary action

Copy to:

The Chairman, KITSW

The Registrar

Stack file -Academic Section



### KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE Opp: Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत इन्डर्डेक रेन्ट्डेंडिड విజ్ఞాన कार्यु విద్యాలయం, వరంగత్ - xce on acoma, क्रवर्डक्क

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by LIGC under 2(f) & 12(B), Sponsored by EKASILA EDUCATION SOCIETY)

E-mail: principal@kitsw.ac.in

Date: 23.07.2024

No.KITS/Acad/Autonomous-BoS (CSM)/2024

#### **ORDERS**

Sub: KITS, Warangal – UGC Autonomous status - Constitution of Board of Studies (BoS) for B. Tech. Computer Science and Engineering (Artificial Intelligence & Machine Learning) (CSM) Programme – Modified Orders - Issued.

Ref: 1. Letter No. F. 22-1/2014(AC), Dt. 19.6.2014 from the Joint Secretary, UGC, New Delhi.

2. Letter No. 350/CDC/KU/2014, Dt. 18.8.2014, from the Registrar, KU, Warangal.

3. Letter No F. 22-1/2017(AC), Dt. 07.12.2021 from the Additional Secretary, UGC, New Delhi.

4. Letter No. 05/CDC/KU/2022, Dt. 20.04.2022. from the Registrar, KU, Warangal.

5. F No. 1-18/2021 of UGC (Conferment of Autonomous Status) Regulations 2023, Date: 03.04.2023

6. CSMD office Note No. KITS/Acad/Autonomous-BoS (CSM)/2024, Date: 08.05.2024

7. Letter No. 854/B3/KU/2024, Dt. 18.07.2024. from the Registrar, KU, Warangal.

With ref. to note 6 cited above, the Board of Studies (BoS) for B. Tech. Computer Science and Engineering (Artificial Intelligence & Machine Learning) – (CSM) Programme has been constituted with the following members for a period of three (3) years with effect from the date of issue of these orders.

S. No.	Name of the Member	Designation	Position in BoS
1.	Prof. S. Narasimha Reddy	Professor & HoD, CSE(AI&ML), KITSW	Chairperson, BoS
2.	Dr. Jitendra V. Tembhurne	Asst. Professor, CSE IIIT, Nagpur	Member (Subject expert from Institute of National Importance)
3.	Dr. P. Sateesh Kumar	Assoc. Professor, Dept. of CSE, IIT Roorkee	Member (Subject expert from Institute of National Importance)
4.	Mrs. Seema Vodithala	Engineering Manager – BMJ, BMA House, Tavistock Square London WC1H 9JR, United Kingdom	Member (Subject expert from outside the country)
5.	Dr. K. Padmaja	University College of Engineering, Kothagudem Kakatiya University	Member (University Nominee)
6.	Sri P. Prasad	CTO, Strategy, Technology Software & Services Business Unit, TCS	Member (Industry Representative)
7.	Sri K. Venkata Swamy	Senior Software Architect, CA Technology, Hyderabad	Member (Industry Representative)
8.	Dr. Praveen Jambholkar	CEO, Metagogy Learning systems Pot. Ltd, Hyderabad	Member (Industry Representative)
9.	Sri D. Sherlin Paul	Senior Manager, Project Management, Cognizant Technology Solutions, Chennai	Member (Industry Representative)
10.	Sri K. Sai Anirudh	Software Developer, Adjoint Technologies, Hyderabad	Member (UG Alumni)
11.	Sri Koushik Bhupathi	Senior Software Architect, ADP, Hyderabad	Member (PG Alumni)
12.	All Faculty of the Department	-	Members

The Board shall exercise such powers, perform such duties and functions in accordance with the procedure laid down in UGC norms for the Kakatiya Institute of Technology & Science, Warangal.

The meeting of the Board shall ordinarily be convened as and when necessary, at least once in every six months.

However, any member of the Board of Studies shall cease to be a member when he vacates the office, which he was holding at the time of his/her appointment, unless otherwise permitted by the authority.

To
The Persons concerned
Copy to:

- 1. Chairman
- 2. Treasurer
- 3. Registrar
- 4. Administrative Officer
- 5. All Heads of Departments
- 6. Academic Section



## CO CONTRACTOR OF THE PARTY OF T

#### KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15

(An Autonomous Institute under Kakatiya University, Warangal)

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (AI & ML)

## MINUTES OF THE MEETING OF BOARD OF STUDIES (BoS) in COMPUTER SCIENCE & ENGINEERING (AI & ML) Held at 07.00 PM on 02.08.2024 (Friday)

Venue: Online through Microsoft teams

#### Agenda:

- 1. Approval of the scheme of instruction of B.Tech. CSE (AI & ML) program under URR24
- 2 Approval of the syllabus of B.Tech. CSE (AI & ML) program I & II semesters under URR24
- 3. Approval of rules and regulations under URR24
- 4. Any other item with the permission of the Chair

#### **Members Present:**

S.No.	Name of the Member	Position in BoS	Attendance
1.	Prof. S. Narasimha Reddy, Professor & HoD, CSE (AI&ML), KITSW	Chairperson, BoS	Present
2.	Dr. Jithendra V. Tembhurne Professor, Dept. of CSE IIT, Nagpur	Member (Subject expert from Institute of National Importance)	Present
3.	Dr. P. Sateesh Kumar Assoc. Prof, Dept. of CSE ,IIT Roorkee	Member (Subject expert from Institute of National Importance)	Absent due to travelling
4.	Mrs. Seema Vodithala, Engineering Manager - BMJ, BMA House, Tavistock Square, London WC1H 9JR, United Kingdom	Member (Subject expert from outside the country)	Present
5.	Dr. K. Padmaja University College of Engineering, Kothagudem, Kakatiya University	Member (University Nominee)	Present
6.	Sri P. Prasad CTO, Strategy Technology Software and Services Business Unit TCS	Member (Industry Representative)	Present
7.	Sri K. Venkata Swamy Senior software Architect, CA Technology, Hyderabad	Member (Industry Representative)	Present
8.	Dr. Praveen Jambholkar CEO Metagogy Learning Systems Pvt. Ltd., Hyderabad	Member (Industry Representative)	Present

9.	Sri D. Sherlin Paul Senior Manager, Project Management Cognizant Technology Solutions, Chennai	Member (Industry Representative)	Present
10.	Sri K. Sai Anirudh Software Developer, Adjoint Technologies, Hyderabad	Member (UG Alumni)	Present
11.	Sri Koushik Bhupathi Senior Software Architect, ADP, Hyderabad	Member (PG Alumni)	Present
12.	Sri. S. Naga Raju, Associate professor	Member	Present
13.	Dr. A. Jothi Prabha, Associate professor	Member	Present
14.	Dr. K. Vinay Kumar, Assistant professor	Member	Present
15.	Dr. B. Hanumanthu, Assistant professor	Member	Present
16.	Sri. I. Sai Rama Krishna, Assistant professor	Member	Present
17.	Dr. M. Sujatha, Assistant professor	Member	Present
18.	Mrs. R. Swetha, Assistant professor	Member	Present
19.	Mrs. E. Rajitha, Assistant professor	Member	Present
20.	Ms. M. Hithasri, Assistant professor	Member	Present
21.	Mrs. D. Haritha, Assistant professor	Member	Present
22.	Mrs. V. Prashanthi, Assistant professor	Member	Present
23.	Sri. M. Ramarao, Assistant professor	Member	Present
24.	Dr. S. Raghu, Assistant professor	Member	Present
25.	Sri. B. Ramji, Assistant professor	Member	Present
26.	Dr. M. Rajesh, Assistant professor	Member	Present
27.	Sri. V. Ramu, Assistant professor	Member	Present
28.	Sri. B. Kalyan, Assistant professor	Member	Present
29.	Mrs. A. Ramya Kumari, Assistant professor	Member	Present
30.	Mrs. T. Rajitha, Assistant professor	Member	Present
31.	Sri. K. Venkateshwara Rao, Assistant professor	Member	Present

1. BoS meeting of Computer Science and Engineering (AI & ML) Department was conducted on 02.08.2024, from 07:00 PM to 09:00 PM online mode through Microsoft

Teams.

- 2 Nine(09) external members and all the Internal BoS members attended the online meeting conducted through MS Teams platform
- 3. All the BoS members who attended the meeting offered their valuable suggestions.

#### Details of the meeting

The meeting commenced at 07:00 PM and was presided over by the Chairman, BoS. At the outset, the Chairman, BoS welcomed the members to the meeting to discuss the prenotified items on the agenda and sought approval.

- At the outset, the Chairman presented his views that the engineering programmes are required to impart required Knowledge (K), Skills (S) and Qualities (Q) (values and attitude) and facilitate students to acquire the characteristics of good engineer. The KSQ imparted to the students will make them industry ready and also capable of entering Institutes of National Importance for higher education and research.
- The chairman informed the BoS members that industry experts and alumni have been contacted for inputs in preparing URR24 industry ready curriculum. The expected competencies (both Technical and generic competencies) to be demonstrated by the graduates of B.Tech. AI & ML programme along with the target industries/research organizations have been identified. The courses (theory& Labs) for the B.Tech. AI & ML programme have been identified by mapping the desired competencies with courses and prepared the blueprint of the scheme.
- Learning tracks for Placements (core & IT/ITES), higher education and research are identified for the benefit of students
- The members of BoS have been informed about the following new components that are newly introduced in the curriculum under URR24 regulations.

Component introduced	Semester	Total credits	Justification
Multidisciplinary Open Electives Courses (MOPEC)	V, VII & VIII	9	To give exposure on interdisciplinary and cross disciplinary domains.

Practicum	I, II, III & IV	4	For experiential learning to impart problem-solving, critical thinking, and communication skills
Startups & Entrepreneurship (STE) basket	V	3	To inspire and prepare the graduates with startup and entrepreneurial mindset
Social Empowerment Activities (SEA) and Self Accomplishment Activities (SAA)	I, II, III & IV	4	To ensure all dimensional holistic growth of the learner
Expert Talk Series	I, II, III, IV, V & VI	6	To provide graduates with up-to-date industry relevant knowledge and technological trends in their respective fields

The members of BoS have also been informed that as per NEP 2020 guidelines,
 Multiple Entry Multiple Exit (MEME) option has been introduced in the programme.

S. No.	Exit Description	Exit Point	Degree/Certificate offered	Goal
1.	First Exit	After completion of First year.	UG Certificate in CSE (AI & ML)	The student should be employable as Technical Assistant CSE(AI & ML) in any industry/organization.
2.		After completion of Second year.	UG Diploma in CSE (AI & ML)	The student should be employable as Technician (CSE (AI & ML)) in any industry/organization.
3.	Third Exit	After completion of Third year.	B. Voc in CSE (AI & ML)	The student should be employable as Technical Supervisor (CSE (AI & ML)) in any industry/organization.
4.	Normal Exit	After completion of Fourth year.	B.Tech in CSE (AI & ML)	The student should be employable as an Engineer (CSE (AI & ML)) inany relevant industry/organization.

- The members of BoS have been informed that the following degrees can be awarded for fast learners (students need to acquire additional credits by completing additional courses/research)
  - o B. Tech with "Minor"
  - o B. Tech "Honours"
  - o B. Tech "Honours with Research"

- The BoS members have been informed that the curriculum is designed to offer **four** baskets of Programme Electives, each basket having identified courses corresponding to the programme specializations called verticals. This enables learners to grow in a domain specialization or domain vertical. The student can opt for courses in the sequel (PEC-1 to PEC-4) in any of the specific verticals or across the verticals. If a student completes the sequel of courses PEC-1 to PEC-4 listed under a specific vertical, that specific vertical will be mentioned in his/her degree certificate, as specialisation.
- Respected external members have given following inputs and suggestions for the curriculum revision under URR 24

#### **Suggestions Received from External BoS Members:**

S. No.	Name of the member	Suggestions/Remarks offered
1.	Dr. Jithendra V. Tembhurne Professor, Dept. of CSE IIT, Nagpur	<ol> <li>More weightage should be given to Program Core Courses.</li> <li>The subject name Programming for Program Solving using C should be generic.</li> <li>Customize Physics and Chemistry syllabus to benefit CSE students. Chemical bonds and few tools can be added to the chemistry syllabus.</li> <li>Tutorials are not required for every subject especially theory subjects.</li> <li>Suggested to convert tutorials to theory class so the faculty has more time to sharpen the skill of students.</li> <li>Design and Analysis of algorithms subject to be moved to fourth semester or earlier.</li> <li>Suggested to remove "state minimization" topic in Switching Theory and Logic Design and add Analog circuits.</li> <li>Suggested GPU Architecture to be added for "Computer Architecture and Organization" subject.</li> <li>Pointed out that it's always not possible to give a 1 mark question as per the TOC for all subjects.</li> </ol>
2.	Dr. P. Sateesh Kumar Assoc. Prof Dept. of CSE ,IIT Roorkee	Absent for the meeting as he was travelling
3.	Engineering Manager – BMJ, BMA House, Tavistock	<ol> <li>Checked for the rules listed for PRACTICUM</li> <li>Enquired on how the projects for PRACTICUM will be given to students and how is it monitored</li> <li>Insisted on maintaining clear rules and regulations for assessment of marks for CIE and all exam components</li> </ol>
4.	Dr. K.Padmaja University College of Engineering, Kothagudem, Kakatiya University	No remarks
5.	Sri.P.Prasad CTO, Strategy Technology Software	No remarks

	and Services Business	
	Unit TCS	
6.	Sri K. Venkata Swamy Senior software Architect, CA Technology, Hyderabad	<ol> <li>Design and Analysis of algorithms subject to be moved earlier and lab is also required for this subject</li> <li>Arrays has to be included in self learning topics of "Data Structures through C"</li> <li>He insisted on practicing data structures through C to improve their logical and coding skills</li> <li>Assemble language programming to be covered in "Computer Architecture and Organization" subject</li> <li>Case studies and Virtual labs can be introduced in "Computer Architecture and Organization" subject to engage the students in learning</li> <li>Suggested including "No SQL" concepts in the exit course after first year</li> <li>Suggested to minimize the syllabus of Computer Networks in the exit course as it is difficult to cover in 2 months.</li> </ol>
7.	Dr. Praveen Jambholkar CEO Metagogy Learning Systems Pvt. Ltd., Hyderabad	No remarks
8.	Sri. D.Sherlin Paul Senior Manager, Project Management Cognizant Technology Solutions, Chennai	<ol> <li>C++ and Linux operating system are to be offered in the syllabus</li> <li>Multiple Exit option with certification after the first year or second year may not be beneficial to the student as IT Industry does not usually consider such certifications.</li> <li>Students to be trained to improve their logical skills mainly during programming skill development labs.</li> </ol>
9.	Sri K. Sai Anirudh Software Developer, Adjoint Technologies, Hyderabad	<ol> <li>Case studies can be introduced in "Computer Architecture and Organization" subject to engage the students in learning</li> <li>Mathematics Projects or assignments can be beneficial to students</li> </ol>
10.	Sri Koushik Bhupathi Senior Software Architect, ADP, Hyderabad	No remarks

#### **RESOLUTIONS**

After deliberations, the BoS in Computer Science and Engineering(AI&ML)has resolved the following

#### 1. <u>BoS-URR24 -CSE (AI&ML)- August 2024 - R1:</u>

Resolved to approve the scheme of instruction of B.Tech. CSE(AI&ML)programme under URR24

#### 2. <u>BoS-URR24 - CSE(AI&ML)- August 2024 - R2:</u>

Resolved to approve the syllabus of B.Tech. CSE (AI&ML) programme for semesters I & II under URR24

#### 3. **BoS-URR24 - CSE**(AI&ML)- August 2024 - R3:

Resolved to approve the rules and regulations of B.Tech. CSE(AI&ML) programme under URR24

At the end, the Chairperson, BoS, thanked all the BoS members for giving their suggestions and approving the B.Tech CSE (AI&ML) scheme and syllabus under URR24.

The meeting was adjourned at 9.00 pm.

Prof.S. Narasimha Reddy Chairperson, BoS of CSE (AIML),KITSW Professor & Head, CSMD



#### KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp: Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506015, TELANGANA, INDIA काकतीय प्रोद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत उर्डिक పాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, కరంగళ - గం६ ००గ తెలంగణ, భారతదేశమ

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

No.KITS/Acad/Autonomous-BoS (CSM)/2025

Date: 14.02.2025

#### **ORDERS**

Sub: KITS, Warangal – UGC Autonomous status - Constitution of Board of Studies (BoS) for B. Tech. Computer Science and Engineering (Artificial Intelligence & Machine Learning) (CSM) Programme – Modified Orders - Issued.

Ref: 1. Letter No. F. 22-1/2014(AC), Dt. 19.6.2014 from the Joint Secretary, UGC, New Delhi.

2. Letter No. 350/CDC/KU/2014, Dt. 18.8.2014. from the Registrar, KU, Warangal.

3. Letter No F. 22-1/2017(AC), Dt. 07.12.2021 from the Additional Secretary, UGC, New Delhi.

4. Letter No. 05/CDC/KU/2022, Dt. 20.04.2022. from the Registrar, KU, Warangal.

5. F No. 1-18/2021 of UGC (Conferment of Autonomous Status) Regulations 2023, Date: 03.04.2023

6. CSMD office Note No. KITS/Acad/Autonomous-BoS (CSM)/2024, Date: 08.05.2024

7. Letter No. 854/B3/KU/2024, Dt. 18.07.2024. from the Registrar, KU, Warangal.

8. CSMD office Note No. 141/BoS/CSM/2025, Date: 10.02.2025

With ref. to note 8 cited above, the Board of Studies (BoS) for B. Tech. Computer Science and Engineering (Artificial Intelligence & Machine Learning) - (CSM) Programme has been constituted with the following members for a period of three (3) years with effect from the date of issue of these orders.

S. No.	Name of the Member	Designation	Position in BoS
1.	Prof. S. Narasimha Reddy	Professor & HoD, CSE(AI&ML), KITSW	Chairperson, BoS
2.	Dr. Jitendra V. Tembhurne	Asst. Professor, CSE IIIT, Nagpur	Member (Subject expert from Institute of National Importance)
3.	Prof. S. Ravichandra	Professor of CSE, NIT Warangal	Member '(Subject expert from Institute of National Importance)
4.	Smt Archana Tandra	Vice President, Goldman Sachs Dallas, United States of America	Member (Subject expert from outside the country)
5.	Dr. K. Padmaja	University College of Engineering, Kothagudem Kakatiya University	Member (University Nominee)
6.	Sri P. Prasad	CTO, Strategy, Technology Software & Services Business Unit, TCS	Member (Industry Representative)
7.	Sri K. Venkata Swamy	Senior Software Architect, CA Technology, Hyderabad	Member (Industry Representative)
8.	Dr. Praveen Jambholkar	CEO, Metagogy Learning systems Pvt. Ltd, Hyderabad	Member (Industry Representative)
9.	Sri D. Sherlin Paul	Senior Manager, Project Management, Cognizant Technology Solutions, Chennai	Member (Industry Representative)
10.	Sri K. Sai Anirudh	Software Developer, Adjoint Technologies, Hyderabad	Member (UG Alumni)
11.	Sri Koushik Bhupathi	Senior Software Architect, ADP, Hyderabad	Member (PG Alumni)
12.	All Faculty of the Department	- /	Members

The Board shall exercise such powers, perform such duties and functions in accordance with the procedure laid down in UGC norms for the Kakatiya Institute of Technology & Science, Warangal.

The meeting of the Board shall ordinarily be convened as and when necessary, at least once in every six months.

However, any member of the Board of Studies shall cease to be a member when he vacates the office, which he was holding at the time of his/her appointment, unless otherwise permitted by the authority.

To

The Persons concerned

Copy to:

- Chairman
   Treasurer
- 3. Registrar
- Administrative Officer
- 5. All Heads of Departments
- 6. Academic Section

PRINCIPAL



#### KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL - 15

Date: 29.03.2025

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING (AI&ML)

No. /KITS/CSM/UG/URR-18\_R23

#### BoS meeting of B.Tech CSE( Data Science) program (Virtual mode)

Date and time of the meeting: 25.02.2025 @ 9.30 am (through MS teams online)

#### Agenda:

- Presentation of URR-18\_R23 III year scheme and syllabus of CSE(Data Science) to BoS members for approval
- Any other issues with the permission of the chair

The following is the list of BoS members (CSE-Data Science) who attended the meeting:

S.No.	Name	Designation	Position in BoS	Attended/n ot
1.	Prof. S. Narasimha Reddy	Professor & HoD, CSE (AI&ML), KITSW	Chairperson, BoS	Attended
2.	Dr. Tausif Diwan	Asst. Professor & HoD, CSE, IIT, Nagpur	Member (Subject expert from Institute of National Importance)	Attended
3.	Dr. Damodar Reddy Edla	Associate Professor, Dept. of CSE, NIT, GOA	Member (Subject expert from Institute of National Importance)	Attended
4.	Smt. Vinathi. S	Senior IT QA, LexisNexis Risk Solutions, GA	Member (Subject expert from outside the country)	Attended
5.	Ms. Sravanthi	University College of Engineering, Kothagudem, Kakatiya University	<i>Member</i> (University Nominee)	Attended
6.	Sri. S. UdayAditya	Senior Consultant, Thoughtworks, Hyderabad	<i>Member</i> (Industry Representative)	Attended
7.	Sri M. Deepan Raj	Senior Technical Lead - Data Science, HCL Technologies	<i>Member</i> (Industry Representative)	Not Attended
8.	Mrs. Neeraja Patnala	Engineer-3, JMPC, Hyderabad	<i>Member</i> (Industry Representative)	Attended

9.	Sri Sai Krishna Mohan Chitikam	Senior Manager and Principal Consultant, Infosys Pvt. Ltd., Hyderabad	Member (Industry Representative)	Attended
10.	Sri Venkat Sai Teja	Artificial Intelligence Engineer, AssetSense Technologies Private Limited	Member (UG Alumni)	Attended
11.	Sri Rahul Veeraganti	Senior Software Engineer, Movate Technologies Pot. Ltd., Bangalore	Member (PG Alunni)	Attended
12.	Sri. S.Nagaraju	Assoc. Prof of CSE(AI&ML) Dept , KITSW	Member	Attended
13.	Dr. Jothi Prabha Appadurai	Assoc. Prof. of CSE(AI&ML), KITSW	Member	Attended
14.	Dr.A.Kiranmayee	Assoc. Prof. of CSE(AI&ML), KITSW	Member	Attended
15.	Dr. K.Vinay Kumar	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
16.	Dr.B.Hanumanthu	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
17.	Sri. I. Sai Rama Krishna	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
18.	Dr. M.Sujatha	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
19.	Smt. R.Swetha	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
20.	Smt. E. Rajitha	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
21.	Ms. M. Hithasri	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
22.	Smt. D. Haritha	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
23.	Smt. V. Prashanthi	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
24.	Sri. M. Ramarao	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
25.	Dr. S. Raghu	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
26.	Sri. B. Ramji	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended

27.	Dr. M. Rajesh	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
28.	Sri. K. Shiva Kumar	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
29.	Sri. V. Ramu	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
30.	Sri. B. Kalyan	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
31.	Smt. A. Ramya Kumari	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
32.	Smt. T. Rajitha	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
33.	Sri. K. Venkateshwara Rao	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended
34.	Smt. N.Haritha	Asst. Prof. of CSE(AI&ML), KITSW	Member	Attended

#### **MINUTES OF MEETING:**

- 1. The chairperson of the BoS Dr. Soora Narasimha Reddy, Professor & Head of Department, CSE(AI&ML) welcomed the internal and External BoS members and further proceedings were taken up by the academic coordinator Dr.Jothi Prabha Appadurai
- 2. Dr. K. Vinay Kumar presented the URR-18\_R23 Scheme and Syllabus of 5<sup>th</sup> and 6<sup>th</sup> semesters respectively
- 3. Firstly, V semester syllabus to be approved was presented to BoS
  - (i) Data Mining and Data Warehousing course syllabus of V Semester was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

(a) Outlier Detection topic need to added and mentioned clearly in the syllabus

Response: Outlier Detection is added to Unit IV. The updated syllabus is enclosed for reference

(b) Suggested the subject title to be changed to "Data Warehousing and Data Mining"

Response: The subject title is changed to "Data Warehousing and Data Mining" as suggested. The updated syllabus is enclosed for reference.

(ii) Data Mining and Data Warehousing Laboratory course syllabus of V Semester was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

(a) Data Analytics and Visualization tools like Tableau / PowerBI can be added.

Response: Data Analytics and visualization is dealt with in a separate subject called Data Visualization in VII Semester. Tableau/ PowerBI tools will be added to the subject Data Visualization

(b) Time Series Analysis to be added to the laboratory exercise

Response: Time Series Analysis will be added to the subject "Data Visualization Laboratory "in the VII semester

(iii) Big Data Analytics course syllabus of VI Semester was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

(a) Introduction to various databases and PostgreSQL can be added

Response: Introduction to various databases and PostgreSQL are already added in the subject "Database Management Systems"

(b) Data Analytics and visualization tools like Tableau / PowerBI can be added

Response: Data Visualization topic is suggested for both DWDM Lab as well as BDA Lab. It has been incorporated into Data Visualization Lab in VII Semester.

(v) R Programming course syllabus of VI Semester was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

Syllabus is good to go

(vi) R Programming Laboratory course syllabus of VI Semester was presented to BoS unit wise and made open for suggestions

Below are the comments/suggestions given by external BoS members

(a) Deserialization and Serialization shall be added in the X th experiment of R programming laboratory course

Response: Programs on De-Serialization and Serialization has been added to X th experiment of R programming laboratory course as suggested. Updated syllabus is attached for your reference.

(b) Cloud based deployment in R programming

Response: Cloud based deployment is added as a course project of Cloud Computing Subject in VII Semester as they don't have knowledge on cloud computing while they study R Programming.

Below are the generic comments regarding the roadmap for AI Engineering

1. The traditional approach of learning fundamentals in detail first and focusing on tools later should be restructured. It should integrate relevant tools within each topic, enabling students to apply concepts immediately through hands-on projects and lab work, ensuring both theoretical understanding and practical expertise.

Response: The design of URR24 syllabus for III- VIII Semester is in progress. The above points will be considered and incorporated during syllabus design and revision.

2. The curriculum should be designed to align with core competencies of the course and the evolving industry demands of a data science engineer.

Response: The design of URR24 syllabus for III- VIII Semester is in progress. The above points will be considered and incorporated during syllabus design and revision.

3. Is Data Security covered as a subject in the curriculum?

Response: Data Security is covered in the subject "Cryptography and Network Security" in the sixth semester

4. Batch Processing and Multithreading concepts need to be added in the curriculum if not added.

Response: Batch Processing and Multithreading concepts covered in the subject "Operating Systems"

5. The roadmap to AI engineer should cover the entire lifecycle of Data from data ingestion, Data Lake, computation, data warehouse and presentation. AWS, Microsoft Azure, Google Cloud to be integrated into syllabus in the laboratory courses or projects can be helpful for students to make them industry ready

Response: The design of URR24 syllabus for III- VIII Semester is in progress. The above workflow and topics will be considered and incorporated during syllabus design and revision

6. The curriculum should have a roadmap with different levels.

Level 1: Foundation and Data Science

Level 2: Traditional ML, DL and Neural Networks

Level 3: Generative AI, Large Language Models and Retrieval-Augmented Generation

Response: The design of URR24 syllabus for III- VIII Semester is in progress. The above subjects/topics will be added during syllabus design and revision

Level 4: Evaluating and Optimizing LLM's, Fine-tuning Large Language Models, AI Engineering Ethics and Safety

Response: The design of URR24 syllabus for III- VIII Semester is in progress. The above subjects/topics will be added during syllabus design and revision

Presentation of all course syllabus to be approved was completed. The meeting adjourned at 11:05 AM after thanking all the Internal and External BoS members for thie active participation, support and valuable inputs

Dr. S. Narasimha Reddy Professor & Head, CSE(AI&ML)



#### KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE, WARANGAL-15

(An Autonomous Institute under Kakatiya University, Warangal)

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING(AI&ML)

# MINUTES OF THE MEETING OF BOARD OF STUDIES (BoS) in COMPUTER SCIENCE AND ENGINEERING (AI&ML) Held at 02.00 PM on 10.05.2025 (Saturday) Online Through Microsoft Teams

#### Agenda:

- 1. Approval of the Modified scheme of instruction of B.Tech. CSE(AI&ML) program under URR24
- 2. Approval of the syllabus of B.Tech. CSE(AI&ML) program III & IV semesters under URR24
- 3. Approval of Course Articulation Matrix (CAM) of B.Tech. CSE(AI &ML) program I & II semesters under URR24 as per NBA tier I new format
- 4. Any other item with the permission of the Chair

#### **Members Present:**

S.No.	Name of the Member	Position in BoS	Signature
1.	Prof. S. Narasimha Reddy, Professor & HoD, CSE(AI&ML), KITSW	Chairperson, BoS	Present
2.	Dr. Jithendra V. Tembhurne Professor, Dept. of CSE IIT, Nagpur	Member (Subject expert from Institute of National Importance))	Present
3.	Prof. S. Ravichandra Professor of CSE, NIT Warangal	Member (Subject expert from Institute of National Importance)	Present
4.	Smt. Archana Tandra Vice President, Goldman Sachs Dallas, United States of America	Member (Industry Representative)	Not Present
5.	Dr. K. Padmaja University College of Engineering, Kothagudem, Kakatiya University	Member (University Nominee)	Present
6.	Sri P. Prasad CTO, Strategy Technology Software and Services Business Unit TCS	Member ( Industry Representative)	Not Present
7.	Sri K.Venkata Swamy Senior software Architect, CA Technology, Hyderabad	Member ( Industry Representative)	Present
8.	Dr. Praveen Jambholkar CEO Metagogy Learning Systems Pvt. Ltd., Hyderabad	Member ( Industry Representative)	Present
9.	Sri D. Sherlin Paul Senior Manager, Project Management Cognizant Technology Solutions, Chennai	Member ( Industry Representative)	Present
10.	Sri K. Sai Anirudh Software Developer, Adjoint Technologies, Hyderabad	Member (UG- Alumni)	Present
11.	Sri Koushik Bhupathi Senior Software Architect, ADP,	Member (PG- Alumni)	Present

	Hyderabad		
12.	Sri. S. Naga Raju, Associate professor	Member	Present
13.	Dr. A. Jothi Prabha, Associate professor	Member	Present
14.	Dr. A. Kiranmayee, Associate professor	Member	Present
15.	Dr. K. Vinay Kumar, Assistant professor	Member	Present
16.	Dr. B. Hanumanthu, Assistant professor	Member	Present
17.	Sri. I. Sai Rama Krishna, Assistant professor	Member	Present
18.	Dr. M. Sujatha, Assistant professor	Member	Present
19.	Mrs. R. Swetha, Assistant professor	Member	Present
20.	Mrs. E. Rajitha, Assistant professor	Member	Present
21.	Ms. M. Hithasri, Assistant professor	Member	Present
22.	Mrs. D. Haritha, Assistant professor	Member	Present
23.	Mrs. V. Prashanthi, Assistant professor	Member	Present
24.	Sri. M. Ramarao, Assistant professor	Member	Present
25.	Sri. B. Ramji, Assistant professor	Member	Present
26.	Dr. M. Rajesh, Assistant professor	Member	Present
27.	Sri. V. Ramu, Assistant professor	Member	Present
28.	Sri. B. Kalyan, Assistant professor	Member	Present
29.	Mrs. A. Ramya Kumari, Assistant professor	Member	Present
30.	Mrs. T. Rajitha, Assistant professor	Member	Present
31.	Sri. K. Venkateshwara Rao, Assistant professor	Member	Present
32.	Mrs.N.Haritha, Assistant professor	Member	Present
33.	Sri.K.Chandar, Assistant professor	Member	Present
34.	Sri. S. Sankeerth , Assistant professor	Member	Present
35.	Ms. M. Akhila, Assistant professor	Member	Present
36.	Smt. T.Swetha, Assistant professor	Member	Present
37.	Sri. P.Sravan, Assistant professor	Member	Present

BoS meeting of Computer Science and Engineering (AI & ML) Department was conducted on 10.05.2025, from 02:00 PM to 04:45 PM online mode through Microsoft Teams. 8 BoS External members and all Internal BoS members attended the online meeting conducted through MS Teams platform

The meeting commenced at 02.00 PM and was presided over by the Chairperson, BoS. At the outset, the Chairperson, BoS welcomed the members to the meeting to discuss the pre notified items on the agenda and sought approval.

The chairperson informed the BoS members that industry experts and alumni have been contacted for inputs in preparing URR24 industry ready curriculum and syllabus.

In the revised scheme, 1 credit out of the 2 credits of "Soft and Interpersonal Skills" course has been transferred to the "Sports and Yoga "course in the I semester.

As per the NBA Tier I revised format, the number of Program Outcomes (POs) in the Course Articulation Matrix (CAM) tables for I and II semesters has been reduced from 12 to 11, and all Course Outcomes (COs) have been appropriately mapped to the revised POs.

Respected external members have given following inputs and suggestions for the III semester & IV semester curriculum revision under URR24.

Suggestions Received from External BoS Members and Action Taken for the suggestions:

Sl. No	Ros Mambar	Suggestions	Remarks/Action Taken
1.	Professor, Dept. of CSE IIT,	DAA- Suggested to move the subject "Design and Analysis of algorithms" from 5 <sup>th</sup> semester to fourth semester	

PSD Lab 2 - Suggested using various PSD Lab 2: All Theory tools in AIML that are not taught as Integrated Lab courses are part of the curriculum in PSD Lab 2 practiced using NeoColab Invest this lab for skill development platform which has code asfrom HackerRank, using platforms such HackerRank/CodeChef etc. Chef etc. It also has programs based on previous Training & placement exams DBMS: Add Query optimization to DBMS: Query optimization Unit III, Indexing and Hashing in is already in Unit Laboratory. Use data modeling tools Indexing is added to lab such as Oracle data modeling syllabus. Added one experiment that uses Oracle Erwin, TOAD etc in the laboratory. data modeling tool TOAD suggested by the external member. Hashing is already covered in Data Structures subject AI: Add practical contents to the AI: 1 or 2 case studies to be syllabus . If possible take 1 credit added wherever applicable. from another subject and add lab to Also practical contents to be this subject. Studying DAA before covered in Practicum. AI will make understand the AI algorithms better. SE. If feasible, remove from credit As per rules and from SE and add it to AI for lab. regulations of URR24 scheme theory subject should have 3 credit and Theory Integrated Lab course should have credits hence credits cannot be moved from subject another CN: The prescribed textbook by CN: The topics relating to Tannenbaum follows top to bottom bottom up approach is to be approach and the 4<sup>th</sup> reference book covered in Self learning topics uses bottom up approach. This and also practiced during reference book shall be used for lecturers as its good, with real-world tutorials and Practicum problem examples. Suggested adding lab to this subject. PP: The topics were PP: Suggested to move data types distributed unit wise based and data structures from Unit 2 to on the order of the text book. Unit 1. This is common course

across CS/IT branches and

		approved by other
		department BoS without any changes.
2.	Prof. S. Ravichandra Professor of CSE, NIT Warangal	changes.  OOP through Java: Add small OOP through Java: The application programs like gaming laboratory experiments aretc. in the laboratory experiments only sample experiments. A Add OOP principles with programming language encapsulation in Unit -1. Basic laboratories are practice topics like datatypes, variables, using NeoColab platform control structures can be taught in which has code from the tutorial and skipped in class. HackerRank, Code Chef etc. also has programs based on previous Training of placement exams. It includes Small application program too.  OOP principles with encapsulation to be added in Unit -1.  In KITS Warangal, Tutorial classes are not meant for teaching. They are meant for practicing and students with present and Practice the designated problems during tutorials which will be evaluated by course facult and will have grading mark for students.  SE: Suggested to add a lab for SE: Students use NeoColab Software Engineering and also to which includes test case add 1-2 hours of testing activity, based programs.
		Students are to be given test cases and test the program so they get a clear understanding on how to test the program
		CN: Suggested to modify the CN: The topics relating to syllabus to cover both top to bottom bottom up approach to be and bottom to top approaches as added in Self learning topic suggested by Jithendra Sir. He and also practiced during insisted that theory and the tutorials and Practicum. corresponding lab should be covered in the same semester but in few Subjects that have more cases it covered later in PSD labs weightage from T& which could cause a gap in learning perspective have theory an lab in the same semester. I other cases they are practicin
		in PSD lab in the followin ATCD: This subject is required semester From GATE perspective.  ATCD: No action required

3.	Smt. ArchanaTandra	implementation of Star and snowflake schema possible? Add some usecases to datawarehouse	usecase to datawarehouse based experiments  WP exit course: Remove PHP in Unit 3 and 4. Add Angular,
J.	Vice President, Goldman Sachs Dallas, United States of America	meeting	NIL
4.	Dr.K.Padmaja, University College of Engineering, Kothagudem, Kakatiya University	syllabus as it only covers DOS and Windows mostly. Inquired about what exercises will	to be added in self learning topics. Virtualization and modern operating system is
		distribution is uneven. More	OOP Through Java: OOP Principles and encapsulation concepts are added to unit 1.
		added in theory.  ML Exit course: Syllabus is good	DBMS: PL/SQL concepts not added in theory but covered in the laboratory. ML Exit course: No action required
		Processing and Classification	CVIP Exit course: Yes its covered part of Image Pattern Classification in Unit 4
5.	Sri P. Prasad CTO, Strategy Technology, Software and Services, Business Unit TCS	He was unable to attend the meeting	NIL
6.	Sri K. Venkata Swamy Senior software Architect, CA Technology, Hyderabad	PSD Lab 2: Practice Unix/Linux Systems Programming in this lab instead of just C programming. It will cover C and OS fundamentals.  ADS: Syllabus is framed well and all topics required are covered. Check whether any advanced algorithms for graph can be added.	Programming is available as an elective in Programming Language vertical. ADS: Basic and advanced

		scheduling algorithms in self learning topics.  OOP through Java : The syllabus looks decent but the lab experiments should contain usecase based exercises.	covered in cloud computing. Add Virtualization, modern operating systems, scheduling algorithms in self learning topics.  OOP through Java: The laboratory experiments are
		databases .They can study in detail when they choose the advanced databases vertical. Add Row level security to concurrency control if not available.	Non -Relation databases is already in Unit I. Row level security is already available in the topic Data security and authorization
		ATCD: This subject is not necessary unless the student wants to go for industrial research.	ATCD: This subject is added from GATE perspective
		WP Exit Course: PHP is currently not used to build applications hence can be removed. Suggested to add Angular, Next JS, React JS topics in place of PHP.	in Unit 3 and 4 . Add Angular, Next JS, React JS topics in
7.	Dr. Praveen Jambholkar CEO Metagogy Learning Systems Pvt. Ltd., Hyderabad	especially for AIML students as	OS: Virtualization is covered in cloud computing and , Containers are covered in PSD Lab 5

		•	OOP through Java :Java is added to syllabus as part of T&P requirement for placements
8.	Sri D. Sherlin Paul, Senior Manager, Project Management, Cognizant Technology Solutions, Chennai	Overall The syllabus is framed well.  DBMS: The syllabus is heavily oriented towards Relational DB concepts – the relational DB concepts still exists and these are still maintained with existing applications (future scope is very limited). New development is shifting towards NoSQL concepts. Good to include more NoSQL concepts	DBMS: Introduction to Non-relational databases is already in the lab as Postgresql. NoSQL concepts are covered in Self learning Topics
		SE: The syllabus is talking only about waterfall methodology concepts. In industry waterfall methodology is almost extinct and Agile methodology is used extensively. Shifting focus toward Agile will align with current trend	SE: In first unit, we have a separate sections for Agile process models and different types of Agile models. Latest Agile models is to be added to Self learning topics
		The text books suggested are old books, which focuses only on traditional Waterfall methodology	SE by Roger. S. Pressman is the prescribed textbook opted by most of the universities.
		ATCD: In regulation we could see there is a Mathematics paper on Machine Learning. Some of the topics may overlap between these 2 subjects. Please validate and revise accordingly	ATCD: There is no overlap topic between these two subjects
		OS: Today's tech world is moving towards virtual/cloud and distributed systems. Good to add more concepts regarding this, by limiting the traditional concepts	OS: Virtualization is in cloud computing subject Modern operating systems, Latest scheduling algorithms are added to the syllabus as self learning topics
9.	Sri K. Sai Anirudh Software Developer, Adjoint Technologies,	PSD2 Lab: Suggested to add inline documentation, design principles and coding practice to	PSD2 Lab : All programming languages are practiced

	Hyderabad	this lab	with inline documentation
		r	DBMS : Add database principles to self learning topics
10.	Sri Koushik Bhupathi Senior Software Architect, ADP, Hyderabad	No comments	NIL

#### **RESOLUTIONS**

After deliberations, the BoS in CSE(AI & ML) has resolved the following:

#### 1. BoS-URR24 -CSE(AI&ML)-May 2025 - R1:

Resolved to approve the updated scheme of instruction of B.Tech. <u>CSE(AI&ML)</u> programme under URR24

#### 2. BoS-URR24 - CSE(AI&ML)- May 2025 - R2:

Resolved to approve the syllabus of B.Tech. <u>CSE(AI&ML)</u> programme for III& IVsemesters with exit courses under URR24

#### 3. <u>BoS-URR24 - CSE(AI&ML) - May 2025 - R3:</u>

Resolved to approve Course Articulation Matrix(CAM) with 11 Program outcomes of I and II semester coursesof B.Tech. **CSE(AI&ML)** programme under URR24

At the end, the Chairperson, BoS, thanked all the BoS members for giving their suggestions and approving the B.Tech <u>CSE(AI&ML)</u>scheme and syllabus under URR24.

The meeting was adjourned at 04.45 pm.

Prof.S. Narasimha Reddy Chairperson, BoS of CSE (AI&ML),KITSW Professor & Head, Department of CSE(AI & ML)