



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified

Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.

Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in

Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2578129

DEPARTMENT OF INTERNET OF THINGS

Date:30/03/2024

KLEF/ IOT/ IQAC - ACAD/ AQ.5/ DCMs /5.3

MINUTES OF VI BOARD OF STUDIES MEETING

The Department Board of Studies meeting was held on 30th March 2024, online via Google Meet from 2:00 PM to 4:00 PM, with Dr. P. Satya Narayana, HoD-IoT, as the chair.

The following members were present:

1. Dr.P.Satyanarayana, Professor & HoD, KLEF, BoS -Chairman
2. Dr. Ravi Kumar Jatoth, Professor, Department of Electronics & Communication Engineering
3. National Institute of Technology, Warangal, Telangana, INDIA., External BoS Member
4. Dr Ramesh Kumar Mojjada, Associate Architect AI, Renault Nissan Technology & Business Centre, India., External member BoS
5. Mr.Murali Krishna Vemuri, Director, software engineer, BlackBerry-QNX,Hyderabad, Telangana, External BoS member
6. Dr.PSG Aruna Sri, Professor, KLEF, Internal Member
7. Dr. J.K.R. Sastry, Professor, KLEF, Internal Member
8. Dr. Md. Ali Hussain, Professor, KLEF, Internal Member
9. Dr.M.Kameswara Rao, Professor, KLEF, Internal Member
10. Dr.T.Narendra Babu, Associate Professor, KLEF, Internal Member
11. Dr.K.Venkata Ratnam , Associate Professor, KLEF, Internal Member
12. Dr.JRK Kumar, Associate Professor, KLEF, Internal Member
13. Dr.K.V.D.Sagar, Associate Professor, KLEF, Secretary-BoS
14. Dr..S.Sridevi , Assistant Professor, KLEF, Internal Member
15. Dr.Ch.Bhupathi, Assistant Professor, KLEF, Internal Member
16. Dr.J.Raja Sekhar, Assistant Professor, KLEF, Internal Member
17. Dr. N.Venkatram , Professor& Pro-VC, KLEF, **Special Invitee**
18. Sri Harikiran Vegi, Additional Dean Academics, KLEF, **Special Invitee**
19. Dr.P.Vidya Sagar, Associate Dean Academics, KLEF, **Special Invitee**
20. Dr.K.V.D.Kiran, Professor in CSE, KLEF, internal Member.
21. Dr. N.Konda Reddy , Assoc Professor, Dept. of Mathematics., KLEF, internal Member.
22. Dr. L.Lavanya, Professor & Head, Dept. of English, KLEF, internal Member.
23. Mr. Siddarth, Sr.Software developer, L&T, Bangalore, Alumni



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

24. Mr. Satvik, Software Developer, Deloit, Hyderabad, Alumni
25. Kavya Adepalli, Application Engineer, Synopsys Inc, Hyderabad, Alumni
26. Mr.M. Maruthi Sri Charan, B. Tech-III/IV, KLEF, Student Member
27. Ms. M.Lahari Krishna, B. Tech-II/IV, KLEF, Student Member

The following members are Absent:

Nil

Dr. P. Satya Narayana, Chairman of BoS, opened the meeting with remarks welcoming and introducing the external members to the internal and special invite members. He expressed gratitude for their acceptance to become members of the Board of Studies. The Chairman then presented the agenda items before the Board.

The following items of the agenda were placed for consideration before the Board of Studies on the Internet of Things at its present meeting.

AGENDA ITEMS

1. To consider and approve the Department Academic Committee (DAC) meeting minutes held on March 29, 2024.
2. To consider and approve the feedback received from stakeholders on the curriculum.
3. To consider and approve the proposed course structure and curriculum, and to approve the PDD for the B. Tech (IoT) Y24 admitted batch students.
4. To consider and approve the revision of the curriculum, and to approve the PDD for the B. Tech (IoT) Y23 admitted batch students.
5. To consider and approve the MOOCs and value-added courses for the Academic Year 2024-25 ODD Semester.
6. Any other points for discussion with the permission of the BoS Chairman.


Dr. P. SATYANARAYANA
Professor & Head
Department of IoT
K L E F
Green Fields, Vaddeswaram
Guntur Dist., A.P. Pin-522 302.



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

AGENDA and RESOLUTIONS

AGENDA ITEM-1

Description	Resolution Passed
To consider and approve the Department Academic Committee (DAC) meeting minutes held on March 29, 2024.	Approved Forwarded to academic council for further approval.

The Chairman of the BoS informed the present members about the Department Academic Committee (DAC) meeting held on 30th March 2024 (Agenda Item No: 1) and highlighted the major resolutions discussed. These resolutions were brought to the notice of the DAC by the student members, and the Board unanimously resolved and approved the recommendations made by the DAC (**Annexure 01**).

AGENDA ITEM-2

Description	Resolution Passed
To consider and approve the feedback received from stakeholders on the curriculum.	Approved Forwarded to academic council for further approval

Resolutions:

1. The BoS Chairman was informed about the input and suggestions received on the curriculum from stakeholders. An action taken report on the feedback was presented, and a brief analysis report of the feedback was given to the members.
 - a) Considering the feedback given by the student Mr. S.D. Pavan Kumar (ID: 2100100010) regarding the incorporation of Python's Matplotlib, Seaborn, and Scikit-learn libraries into the curriculum for the Data Visualization Techniques course for B.Tech (IoT) students, it is resolved and recommended to the academic council for further approval.
 - b) Considering the feedback given by student Ms. P. Harshitha (ID: 2100100019) regarding including IoT analytics on the AWS cloud computing platform in the curriculum for the Cloud Computing for IoT course for B.Tech (IoT) students.
 - c) Considering the feedback given by the student G. Chandrika (ID: 2200100002) on including the creation of dashboards for IoT data analytics in the



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

- curriculum for the Data Visualization Techniques course for B.Tech (IoT) students recommended to the academic council for further approval.
- d) Considering the feedback given by the student Ch. Rohitha (ID: 2200100006) to incorporate security concepts related to IoT devices into the curriculum for the IoT Security course for B.Tech (IoT) students, it is resolved and recommended to the academic council for further approval.
- e) Considering the feedback given by student Tanisha Anil Nikkam (ID: 2200100007), to introduce IoT device security concepts in the IoT Security course for B.Tech (IoT) students, it is resolved and recommended to the academic council for further approval.
- f) Considering the feedback given by the student Mr. V. Srinadh (ID: 2100100044) to include wireless technologies for IoT and MATLAB tools for signal processing and analysis concepts in the Wireless Technologies for IoT course for B.Tech (IoT) students and recommended to the academic council for further approval.
- g) Considering the feedback given by faculty Dr. Sridevi Sakhamuri, Asst.Professor, to introduce a data science and statistics course for B.Tech (IoT) students It is resolved and is recommended to the academic council for further approval.
- h) Considering the feedback given by faculty Dr.P.Gopi Krishna, Associate Professor to introduce an electronic devices and integrated circuits course for B.Tech (IoT) students It is resolved and is recommended to the academic council for further approval.
- i) Considering the feedback given by faculty Dr. Ch. Bhupathi, Asst. Professor, to introduce an IoT system design course for B.Tech (IoT) students It is resolved and is recommended to the academic council for further approval.
- j) Considering the feedback given by industry personnel Mr. Ch.Prassana Jochi, Technopark I.T solutions Industry offered virtual labs utilized by B.Tech (IoT) students. It is resolved and is recommended to the BoS for further approval.
- k) Considering the feedback given by industry personnel, Mr. Murali Krishna Vemuri, Director and Software Engineer at BlackBerry-QNX, Hyderabad, Telangana, proposed to introduce a Wireless Technologies for Internet of



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

Things (WTIoT) course for B.Tech (IoT) students. It is resolved and is recommended to the academic council for further approval.

- l) Considering the feedback provided by industry personnel, Mr. M D V S Sundar, Delivery Manager, L& T, Hyderabad proposed to introduce an IoT security course for B.Tech (IoT) students. is recommended to the academic council for further approval.
- m) Considering the feedback given by academic peer Dr.J Ravi Kumar, Professor NIT, Warangal, to include cloud computing concepts and container technologies in the Cloud Computing for IoT course for B.Tech (IoT) students. It is resolved and is recommended to the academic council for further approval.
- n) Considering the feedback given by academic peer Dr.J.ArulValan,Asst. Professor, NIT, Nagaland proposed to include quantum computing concepts in the Quantum Computing course for B.Tech (IoT) students. It is resolved and is recommended to the academic council for further approval.
- o) Considering the feedback given by academic peer Dr. Samrat L Sabat, Professor at the Center for Advanced Studies in Electronics Science and Technology, University of Hyderabad, to include ARM programming and SoC design using FPGA concepts in the Embedded Systems Design and VLSI courses for B.Tech (IoT) students. It is resolved and is recommended to the academic council for further approval.
- p) Considering the feedback given by the parent Mr. G Kiran Kumar to include Wi-Fi hardware and software tools concepts in the Wireless Technologies for IoT course for B.Tech (IoT) students. It is resolved and is recommended to the academic council for further approval.
- q) Considering the feedback given by alumni(student) Mr. Siddarth working in L&T, regarding including the design of 32-bit IoT applications using tools such as Keil uVision and IAR Embedded Workbench, as well as simulation and emulation tools like Proteus, QEMU, and Simul IDE in the IoT System Design course. Additionally, incorporating IoT platforms such as AWS IoT, Azure IoT, and Google Cloud IoT, which offer tools and services for developing IoT applications, will be included in the Cloud Computing for IoT


Dr. P. SATYANARAYANA
Professor & Head
Department of IoT
K L E F
Green Fields, Vaddeswaram
Guntur Dist., A.P. Pin-522 502.



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

course for B.Tech (IoT) students. It is resolved and is recommended to the academic council for further approval.

- r) Considering the feedback given by alumni(student) Mr. T S V Rajeev, a Software Developer at Capgemini, Bangalore, India, regarding integrating NLP capabilities into IoT systems for various applications, including text-based data integration, language translation, contextual understanding, data processing, sentiment analysis, and voice-activated control. This integration will be covered in the Computer Vision for IoT and Learning for IoT courses for B.Tech (IoT) students. and the same is recommended to the academic council for further approval.
- s) Considering the feedback given by alumni(student) Ms. Vineela, a Research Scholar at SRM University, A.P. to include Machine Learning and AI concepts for IoT in the Artificial Intelligence and Machine Learning course, Standardization and Interoperability concepts, as well as Edge Computing and Fog Computing, in the Edge Computing course, and Security and Privacy concepts in the IoT Security course for B.Tech (IoT) students is recommended to the academic council for further approval.
- t) Considering the feedback given by alumni(student) Gahani Nath, database administrator at IBM, Hyderabad, to include concepts of storing, processing, and analyzing IoT data in the Big Data Analytics course. Additionally, concepts such as cloud services (AWS IoT, Azure IoT, Google Cloud IoT), data management, scalability, and security considerations in cloud based IoT deployments will be covered in the Cloud Computing for IoT course for B.Tech (IoT) students.
- u) Considering the feedback given by alumni Mr. Paleti Surya Teja, Programmer Analyst at Cognizant, Hyderabad, to include concepts related to the security and privacy of IoT devices, networks, and data in the IoT Security course for B.Tech. (IoT) students.

All the members agreed and resolved forwarded to the academic council for further approval the details feedback analysis and action taken report are shown in **Annexure-2**

AGENDA ITEM-3

Description	Resolution Passed
-------------	-------------------



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

To consider and approve the proposed course structure and curriculum, and to approve the PDD for the B. Tech (IoT) Y24 admitted batch students.

Approved
Forwarded to
academic council for
further approval.

Resolutions:

1. The Chairman of the BoS gave a brief presentation on how the curriculum was designed for the B. Tech Internet of Things 2024 admitted batch. He explained the process of preparing the academic curriculum in detail.
2. The Chairman of BoS presented the proposed structure of the curriculum and detailed the syllabus for Humanities and Social Sciences, Basic Sciences, Engineering Sciences, Professional Core, Professional Electives, Open Electives, Project Courses, and CRT training for the B. Tech (IoT) A.Y. 2024-25 admitted batch students.
3. He explained all types of structures and salient features, including changes in the curriculum and all 20 types of flexibilities, such as 'Major Flexibility – HONORS,' 'HONORS through RESEARCH,' 'HONORS through Innovation,' 'HONORS through EXPERIENTIAL LEARNING,' 'SPECIALIZATION,' 'MINOR,' 'DOUBLE MAJOR,' 'HONORS WITH SPECIALIZATION,' 'HONORS WITH MINOR,' 'HONORS WITH DOUBLE MAJOR,' 'B.Sc (Internet of Things),' and 'Diploma (Internet of Things). According to industry, academia, faculty and alumni recommendations, the following new courses included B.Tech (IoT) 2024-25 admitted batch curriculum.
 - a. Based on local needs the industry personnel proposed introducing the course QUANTUM COMPUTING for B.Tech(IoT)Students.
 - b. Based on local needs the industry personnel proposed introducing the course DATA SCIENCE & STATISTICS for B.Tech(IoT)Students.

Sl.No	Course code	Course Title	Course type	Remarks
1	24IN3113	QUANTUM COMPUTING	BSC	It is introduced based on stakeholders' feedback
2	24IN3114	DATA SCIENCE & STATISTICS	BSC	It is introduced based on stakeholders feedback

All the members are agreed upon approved and forwarded to academic council for further approval. The details are shown in (**Annexure 03**)



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

AGENDA ITEM-4

Description	Resolution Passed
To consider and approve the revision of the curriculum, and to approve the PDD for the B. Tech (IoT) Y23 admitted batch students.	Approved and forward to the academic council for further approval

Resolutions:

1. The Chairman of the BoS gave a brief presentation on how the curriculum was revised for the B. Tech (Internet of Things) 2023 admitted batch. He explained the process of preparing the academic curriculum in detail.
2. According to recommendations from industry, academia, faculty, and alumni, the following new courses were included in the curriculum changes for the B. Tech (IoT) Y23 admitted batch.
 - a. Based on local needs the industry personnel proposed introducing the course IOT SYSTEM DESIGN for B.Tech(IoT) Students.
 - b. Based on local needs the industry personnel proposed introducing the course ELECTRONIC DEVICES AND INTEGRATED CIRCUITS for B.Tech(IoT) Students.
 - c. Based on local needs the industry personnel proposed introducing the course IOT SECURITY for B.Tech (IoT)Students.
 - d. Based on local needs the industry personnel proposed introducing the course WIRELESS TECHNOLOGIES FOR INTERNET OF THINGS (WTIoT) for B.Tech (IoT) Students.

Sl.No	Course code	Course Title	Course type	Remarks
1	23IN2101R	IOT SYSTEM DESIGN	PCC	It is introduced based on stakeholders' feedback
2	23IN2102	ELECTRONIC DEVICES AND INTEGRATED CIRCUITS	PCC	It is introduced based on stakeholders feedback
3	23IN2102	ELECTRONIC DEVICES AND INTEGRATED CIRCUITS	PCC	It is introduced based on stakeholders feedback
4	23IN2203	WIRELESS TECHNOLOGIES FOR INTERNET OF THINGS (WTIoT)	PCC	It is introduced based on stakeholders feedback

All the members are agreed upon approved and forwarded to academic council for further approval. The details are shown in (**Annexure 04**)

AGENDA ITEM-5


Dr. P. SATYANARAYAN
Professor & Head
Department of IoT
K L E F
Green Fields, Vaddeswaram
Guntur Dist., A.P. Pin-522 302



Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

AGENDA ITEM Description	Resolution Passed
Consider and approve the MOOCs and value-added courses for A.Y. 2024-25 Odd Semester.	Approved and forward to the academic council for further approval

Resolutions:

1. The Chairman of BoS presented all the proposed MOOCs and value-added courses for A.Y. 2024-25 Odd Semester.
 - a. service now Certified Application Developer
 - b. automation anywhere
 - c. digital Skills Readiness program Wipro Talent Next
 - d. UI Path
 - e. Certified System Architect 7.4 - PEGA Academy
 - f. Pega Certified Senior System Architect 8
 - g. Sports
 - h. YOGA
 - i. CRICKET
 - j. LAWN TENNIS
 - k. TABLE TENNIS
 - l. BADMINTON
 - m. VOLLEYBALL
 - n. KHO-KHO

All the members agreed, approved, and forwarded the proposal to the Academic Council for further approval.


Dr. P. SATYANARAYANA
Professor & Head
Department of IoT
KLEF
Green Fields, Vaddeswaram
Guntur Dist., A.P. Pin-522 302

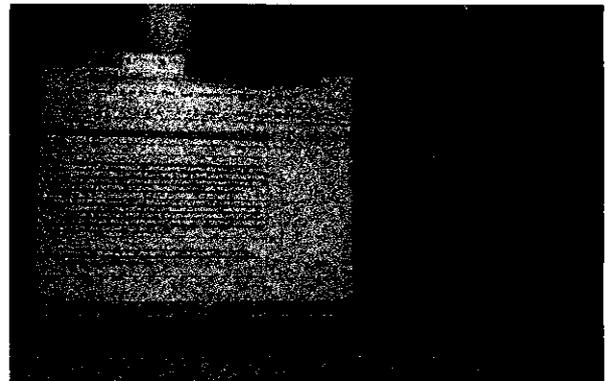
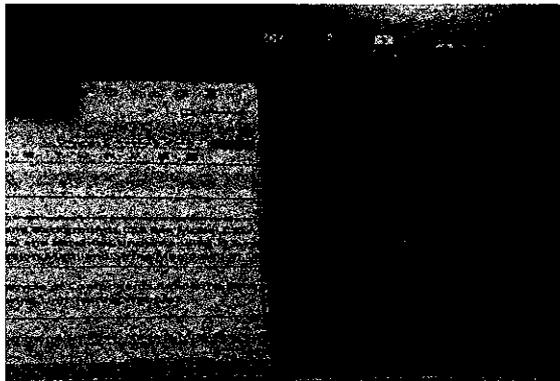
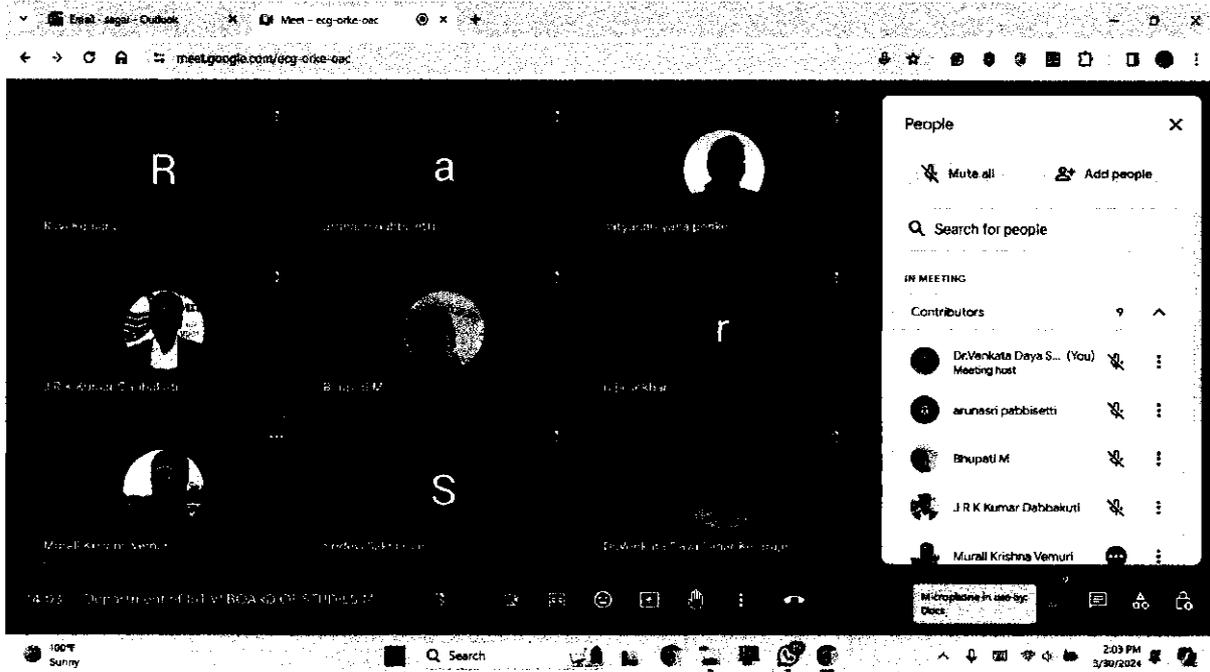


Koneru Lakshmaiah Education Foundation

(Category -1, Deemed to be University estd. u/s. 3 of the UGC Act, 1956)

Accredited by NAAC as 'A++' ♦ Approved by AICTE ♦ ISO 21001:2018 Certified
Campus: Green Fields, Vaddeswaram - 522 302, Guntur District, Andhra Pradesh, INDIA.
Phone No. +91 8645 - 350 200; www.klef.ac.in; www.klef.edu.in; www.kluniversity.in
Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91 - 866 - 3500122, 2576129

Photos



Dr. A SATYANARAYAN
Professor & Head
Department of IOT
K L E F
Green Fields, Vaddeswara
Dist. A.P. Pin-522 302