ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES
(AUTONOMOUS)
Approved by AICTE, New Delhi & Permanent Affiliation to JNTUA, Anantapur.
Recognized under sections 2(f) & 12(B) of UGC Act 1956.
Three B. Tech Programmes (ECE, CSE & Civil) Accredited by NBA-New Delhi
Accredited by NAAC-Bangalore & IEI Kolkata, A-Grade awarded by AP Knowledge Mission
Venkatapuram (V), Karakambadi Road, Renigunta (M), Tirupati – 517 520

Minutes of the seventh Meeting of the Board of Studies (UG & PG), Department of Electrical & Electronics Engineering held at 10.30 A.M on 22.07.2024.

(via zoom online meeting application)

MEMBERS PRESENT FOR THE MEETING:

S. No	Name of the Member	Designation
1	Dr. R. Murugesan	Associate Professor, AITS
2	Dr. P. Sujatha	Principal & Professor (EEE), JNTUCEA, Anantapur.
3	Dr. V. C. Veera Reddy	Professor in EEE Dept., School of Engg. & Technology, Sri Padmavathi Mahila Viswa Vidyalayam, Tirupathi-517502
4	Dr. P. Saravanan	Professor in EEE Dept., SSN College of Engineering, Kalavakkam, Chennai.
5	Ms. Y. Vijayasambhavi	Research Scholar, VIT- Vellore
6	Mr. R. Ramesh	Deputy General Manager, Electrical Projects Division, BGR Energy Systems Limited, Chennai.
7	Dr. K. Balaji Nanda Kumar Reddy	Associate Professor, AITS
8	Mr. P. Chandrasekhar	Assistant Professor, AITS

Agenda of the meeting:

1. Introduction of new members.
2. Read and confirm previous BOS meeting minutes conducted on 1.6.2023.
3. Read and review the minutes Curriculum monitoring committee meeting conducted on 25.06.2024 in respect to feedback analysis for the academic year 2023-24.
4. Approve AK 23 B. Tech course structure for First year and second year.
5. Approve course composition for AK23 B. Tech curriculum.
6. Approve Course outcomes and syllabus of AK 23 B. Tech subjects for First year and second year.
7. Review targets set for POs and PSOs for AK23 Regulation curriculum.

8. Review targets set for COs of AK 23 B. Tech subjects for second year.
9. Review of CO & PO target attainments for 2020-24 (AK20) batch subjects.
10. Review of AK22 course structure and syllabus of M. Tech.
11. Agenda 11: Discuss Year on year comparison of CO attainments.
12. Discuss NBA accreditation preparedness for Committee visit scheduled from 30.8.24 to 1.9.24.
13. Discuss on curricular, co-curricular and extra-curricular activities conducted during 2023-24.
14. Any other subject brought forward by members.

i. **Meeting started with BOS Chairman welcoming the members.**

ii. **Agenda 1: BOS Chairman introduced the new members replacing old members due to completion of their term.**

The old members relieved are:

1. Dr. A. Senthilkumar, Professor of Electrical Engineering, SITAC, Puttaparthi.
2. Dr. R. Kalyan, Technology Associate, AWS, Tirupati.

The new members included are:

1. Dr. S. Sivaprasad, Professor (EEE), AITS.
2. Mr. P. Chandrasekhar, Assistant Professor, AITS.

iii. **Agenda 2: Read and confirm minutes of meeting of fourth BOS meeting held on 1.6.2023.**

BOS Chairman read the minutes of meeting of the previous meeting held on 1.06.2023. Members confirmed the minutes of meeting.

iv. **Agenda 3: Read and review the minutes Curriculum monitoring committee meeting conducted on 25.06.2024 in respect to feedback analysis for the academic year 2023-24.**

The Chairman presented the minutes of Curriculum monitoring committee meeting held on 25.06.2024. Members carefully examined the minutes of meeting, ensuring accuracy, identifying key decisions and understanding the discussions held. After meticulously going through the minutes of the Curriculum Monitoring Committee meeting and assessing the effectiveness of curriculum implementation, Members approved the following actions to be taken:

1. Conduct workshop on Indian Electricity Rules.
2. Conduct awareness program on Electrical practise Licensing process through APSPDCL.
3. Conduct awareness program on Electrical contracting practise process.
4. Conduct industrial visit to Rayalaseema Thermal Power plant during September 2024 for Second, Third and final year students.
5. Introduction of Utilization of Electrical Energy subject at final year level for AK23 Regulation students.

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Venkatapuram(V), Karakambadi Road, Renigunta(M), Tirupati-517 520,Chittoor, A.P

Department of Electrical and Electronics Engineering

Minutes of Curriculum Monitoring Committee meeting

The members of curriculum monitoring committee of B.Tech Electrical and Electronics Engineering programme gathered on 25.06.2024 at the HOD room to discuss the feedback given by the stakeholders on AK19 and AK20 curricula for the academic year **2023-2024**. The following members were present for the meeting.

Sl No	Members	Position	Signature
1	Dr.R.Murugesan	Chairperson/HOD	
2	Dr.S.Siva Prasad	Member	
3	Dr.K.Balaji NandaKumar Reddy	Member	
4	Dr.P.Saravanam	Member	
5	Mr.P.Chandrasekhar	Member	

Agenda of the meeting

- To discuss the area of improvement/suggestions given by the stakeholders on the curriculum.
- To propose necessary actions to be planned and responsibility for implementation in the next academic year (2024-2025).
- To verify the implementation of the action plans for the previous academic year (2023-2024) and discuss the possible carry over to the next academic year (2024-2025).

Curriculum	Stakeholder	Area of improvement /suggestions	Resolutions/Action plan	Responsibility
AK19 curriculum	Alumni	No suggestions	-	-
	Employers	Expose Students Knowledge On Indian Electricity Rules And Professional Licensing Process.	Planned to conduct a workshop on Indian Electricity Rules And Professional Licensing Process through APSPDCL.	HOD
AK20 curriculum	Students	Provide industrial visits to get practical knowledge on the subject.	Planning To Visit RTTP (Rayalaseema Thermal Power Plant) Next Academic Year.	HOD
	Faculty	Introduce Utilization of Electrical Energy Subject.	Suggested course is planned to add in syllabus of Ak23 curriculum.	HOD/ Chairperson of BOS

.The action plans for the previous academic year (2023-2024) were successfully implemented and the proofs were verified. Hence, no carryover of the action plans/activities is necessary for the next academic year (2024-25).

Feedback coordinator

IQAC

HOD

Dept. of Electrical & Electronics Engg.
Annamacharya Institute of Technology & Sciences
TIRUPATI - 517 507

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RENIGUNTA (M), TIRUPATI-517 520

v. **Agenda 4: Approve AK 23 B. Tech course structure for First year and second year.**

Chairman presented the course structure for B. Tech program of AK23 Regulations. Members thoroughly reviewed and approved the proposed course structure for the Bachelor of Technology (B. Tech) program under AK23 Regulations. The approval is based on a comprehensive evaluation of the curriculum's alignment with industry standards, academic rigor and its potential to equip students with the necessary skills and knowledge. Details of the approved Course Structure are as per the table below.

I Year – I Semester

S. No	Category	Course Code	Course Title	Hours per week			Credits	CIE	SEE	Total
				L	T	P	C			
1	Humanities & Social Sciences	23AHM9901	Communicative English	2	0	0	2	30	70	100
2	Basic Sciences	23ABS9901	Chemistry	3	0	0	3	30	70	100
3	Basic Sciences	23ABS9904	Linear Algebra & Calculus	3	0	0	3	30	70	100
4	Engineering Sciences	23AES0101	Basic Civil& Mechanical Engineering	3	0	0	3	30	70	100
5	Engineering Sciences	23AES0501	Introduction to Programming	3	0	0	3	30	70	100
6	Humanities & Social Sciences	23AHM9902	Communicative English Lab	0	0	2	1	30	70	100
7	Basic Sciences	23ABS9906	Chemistry Lab	0	0	2	1	30	70	100
8	Engineering Sciences	23AES0302	Engineering Workshop	0	0	3	1.5	30	70	100
9	Engineering Sciences	23AES0502	Computer Programming Lab	0	0	3	1.5	30	70	100
10	Humanities & Social Sciences	23AHM9903	Health and wellness, Yoga and Sports	-	-	1	0.5	50	-	50
			Total	**14**	**0**	**11**	**19.5**	-	-	**950**

I Year – II Semester

S. No	Category	Course Code	Course Title	Hours per week			Credits	CIE	SEE	Total
				L	T	P	C			
1	Basic Sciences	23ABS9903	Engineering Physics	3	0	0	3	30	70	100
2	Basic Sciences	23ABS9905	Differential Equations &Vector Calculus	3	0	0	3	30	70	100
3	Engineering Sciences	23AES0201	Basic Electrical & Electronics Engineering	3	0	0	3	30	70	100
4	Engineering Sciences	23AES0301	Engineering Graphics	1	0	4	3	30	70	100
5	Engineering Sciences	23AES0503	IT Workshop	0	0	2	1	30	70	100
6	Professional Core	23APC0201	Electrical Circuit Analysis-1	3	0	0	3	30	70	100
7	Basic Sciences	23ABS9908	Engineering Physics Lab	0	0	2	1	30	70	100
8	Engineering Sciences	23AES0202	Electrical & Electronics Engineering Workshop	0	0	3	1.5	30	70	100
9	Professional Core	23APC0202	Electrical Circuits Lab	0	0	3	1.5	30	70	100
10	Humanities & Social Sciences	23AHM9904	NSS/NCC/Scouts & Guides/Community Service	-	-	1	0.5	50	-	50
			Total	**13**	**0**	**15**	**20.5**	-	-	**950**

II Year – I Semester

S. No	Category	Course Code	Course Title	Hours per week			Credits	CIE	SEE	Total
				L	T	P	C			
1	Basic Sciences	23ABS9910	Complex Variable & Numerical Methods	3	0	0	3	30	70	100
2	Humanities & Social Sciences	23AHM9905	Universal Human Values	2	1	0	3	30	70	100
3	Professional Core	23APC0205	Electromagnetic Field Theory	3	0	0	3	30	70	100
4	Professional Core	23APC0206	Electrical Circuit Analysis-II	3	0	0	3	30	70	100
5	Professional Core	23APC0207	DC Machines & Transformers	3	0	0	3	30	70	100
6	Professional Core	23APC0208	Electrical Circuit Analysis-II & Simulation Lab	0	0	3	1.5	30	70	100
7	Professional Core	23APC0209	DC Machines & Transformers Lab	0	0	3	1.5	30	70	100
8	Skill Enhancement Courses	23ASC0502	Data Structures	0	1	2	2	100	-	100
9	Mandatory course	23AMC9901	Environmental Sciences	2	0	0	-	30	-	30
			Total	**16**	**2**	**8**	**20**	**410**	**560**	**830**

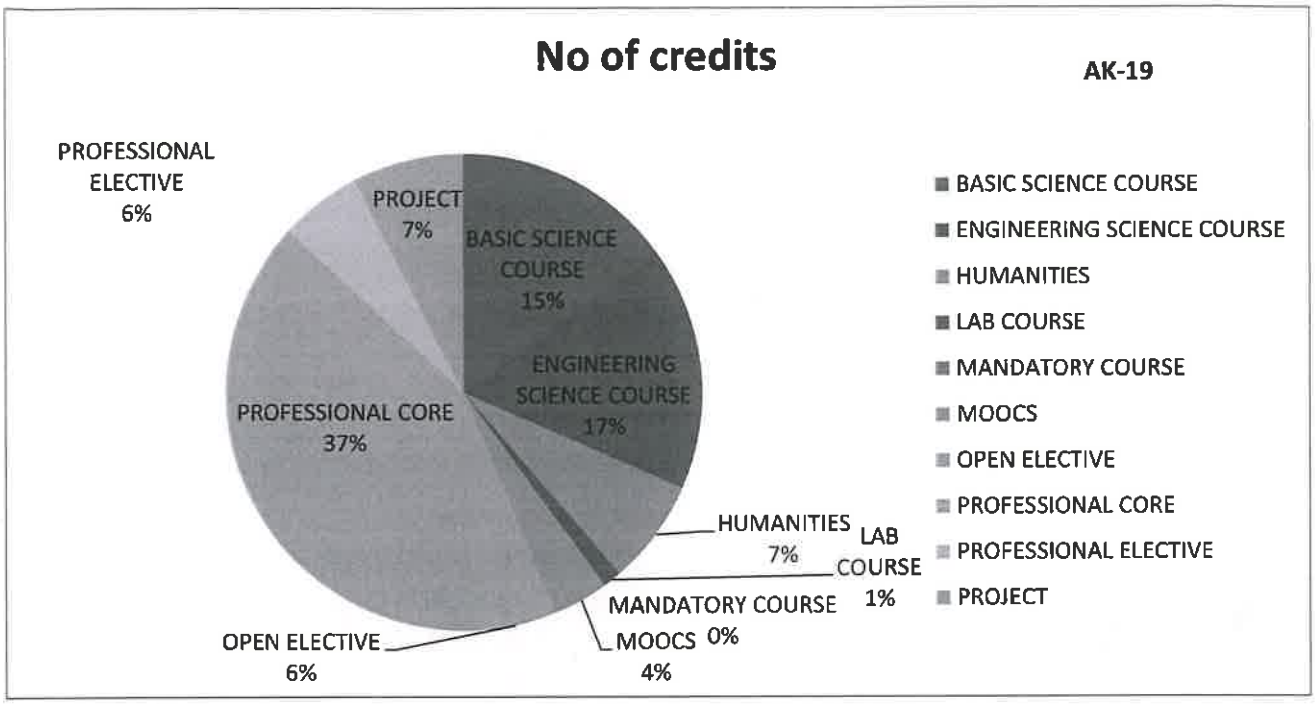
II Year – II Semester

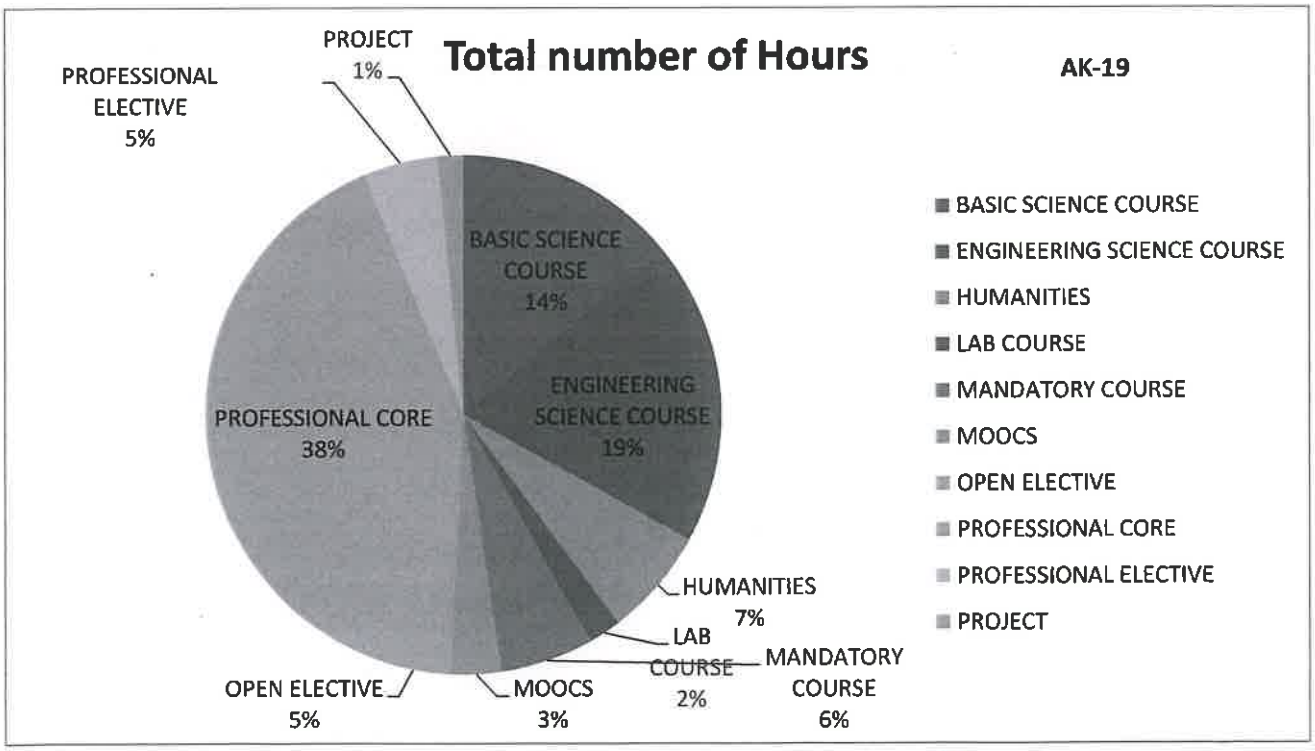
S. No	Category	Course Code	Course Title	Hours per week			Credits	CIE	SEE	Total
				L	T	P	C			
1	Management Course-I	23AHMMB01	Managerial Economics and Financial Analysis	2	0	0	2	30	70	100
2	Engineering Sciences	23AES0403	Analog Circuits	3	0	0	3	30	70	100
3	Professional Core	23APC0210	Power Systems-I	3	0	0	3	30	70	100
4	Professional Core	23APC0211	Induction and Synchronous Machines	3	0	0	3	30	70	100
5	Professional Core	23APC0212	Control Systems	3	0	0	3	30	70	100
6	Professional Core	23APC0213	Induction and Synchronous Machines Lab	0	0	3	1.5	30	70	100
7	Professional Core	23APC0214	Control Systems Lab	0	0	3	1.5	30	70	100
8	Skill Enhancement Courses	23ASC0501	Python Programming	0	1	2	2	100	-	100
9	Engineering Sciences	23AES0304	Design Thinking & Innovation	0	1	2	2	30	70	100
			Total	**14**	**2**	**10**	**21**	**340**	**560**	**900**

Mandatory Community Service Project of 08 weeks duration during summer vacation

vi. **Agenda 5: Approve course composition for AK23 B. Tech curriculum.**

Chairman presented the composition of the category of courses in the AK23 B. Tech course structure. Members thoroughly reviewed and approved the proposed course composition for the AK23 Regulations B. Tech program. This decision follows an extensive discussion to ensure that the curriculum meets the highest academic standards and aligns with the current demands of the engineering profession. The approved course composition is designed to provide a holistic education that combines theoretical knowledge with practical skills. The composition chart is given below.





vii. **Agenda 6: Approve Course outcomes and syllabus of AK 23 B. Tech subjects for First year and second year.**

Chairman presented the syllabus with defined course outcomes and CO-PO articulation matrix. Members thoroughly reviewed and approved the course outcomes and syllabus for the AK 23 B. Tech subjects for the first and second years. This approval is given after a comprehensive analysis, aimed at ensuring the curriculum meets academic excellence standards and aligns with the latest advancements in the engineering field.

Dr. P. Sujatha, expressed that,

- The extensive syllabus ensures that students gain a broad and deep understanding of engineering principles and concepts.
- The breadth of the syllabus requires students to tackle a wide array of problems, enhancing their critical thinking and problem-solving skills. This prepares them to address real-world engineering challenges effectively.
- Students who aspire to pursue higher studies benefit from the comprehensive syllabus, as it covers advanced topics that provide a head start for facing competitive examinations and specialized education.

Dr. V. C. Veera Reddy expressed that the vast syllabus of the B. Tech program has been positively received for its ability to provide a well-rounded, thorough and versatile education. He also noted that the comprehensive coverage ensures that our students are well-prepared to meet the demands of the engineering profession and excel in their careers. He extended gratitude to all faculty members and stakeholders for their dedication in maintaining such high educational standards.

Dr. P. Saravanan expressed that,

- The syllabus covers an extensive range of topics, resulting in an overwhelming content load for students.
- The vast syllabus forces students to rush through topics, limiting the depth of understanding.
- A balanced curriculum that prioritizes quality over quantity can alleviate stress and promote a healthier learning environment.

Mr. R. Ramesh noted that, while a comprehensive syllabus aims to cover all bases, it often falls short in terms of relevance to specific industry needs. Many topics included in the curriculum may not be directly applicable to the current demands of the engineering sector. Streamlining the syllabus to focus on industry-relevant skills and knowledge would be more beneficial.

Members also thanked all faculty members and stakeholders for their valuable contributions and feedback during the review process. The approved syllabus is attached as Annexure-1.

viii. **Agenda-7: Review targets set for POs and PSOs for AK23 Regulation curriculum.**

Chairman explained that the targets set for POs and PSOs in the AK23 Regulation curriculum are designed to provide a comprehensive education that equips students with essential engineering knowledge, skills, and competencies. By meeting these targets, students will be well-prepared for their professional careers and capable of contributing effectively to the engineering community and society at large. Continuous assessment and feedback will help in tracking progress and making necessary adjustments to ensure the curriculum remains relevant and effective. Further the targets set for the Program Outcomes (POs) and Program Specific Outcomes (PSOs) for AK23 Regulation Curriculum were tabled for discussion and approval.

Program Outcomes (POs)

1. Engineering Knowledge: This target ensures that a high percentage of students have a strong foundation in essential engineering principles, which is critical for their success in more advanced courses and professional practice.

Target: 70% of students should demonstrate proficiency in core engineering subjects with at least 70% marks.

2. Problem Analysis: Students must develop the ability to tackle complex engineering problems using their analytical skills. This target aims to gauge their proficiency in applying theoretical knowledge to real-world scenarios.

Target: 70% of students should be able to effectively analyze and solve complex problems, evidenced by performance in project work and examinations.

3. Design/Development of Solutions: This ensures students can create innovative solutions that address engineering problems, considering factors like safety, sustainability, and practicality.

Target: 70% of students should successfully complete design projects that meet all specified criteria.

4. Conduct Investigations of Complex Problems: This target emphasizes the importance of research skills and the ability to derive meaningful conclusions from experimental data.

Target: 70% of students should be able to conduct experiments and interpret data accurately in their final year projects.

5. Modern Tool Usage: Proficiency in current engineering tools and technology is essential for students to stay competitive in the industry.

Target: 70% of students should demonstrate proficiency in using modern engineering tools and software.

6. The Engineer and Society: Students should understand the broader impact of their work on society and the environment and apply this understanding in their projects.

Target: 70% of students should successfully engage in projects addressing societal and environmental concerns.

7. Environment and Sustainability: Promoting sustainability in engineering practices is crucial for the future, and this target ensures students integrate these principles into their work.

Target: 70% of students should include sustainability considerations in their project reports.

8. Ethics: Ethical behaviour is fundamental in engineering practice, and this target reinforces its importance in the educational process.

Target: 70% of students should adhere to ethical standards in their coursework and projects.

9. Individual and Team Work: Collaboration and leadership are key skills in the engineering profession, and this target ensures students develop these competencies.

Target: 70% of students should show effective teamwork and leadership skills in group projects.

10. Communication: Clear communication is vital for engineers to convey their ideas and solutions effectively, and this target measures students' proficiency in this area.

Target: 70% of students should demonstrate effective communication skills in presentations and written reports.

11. Project Management and Finance: Understanding project management and financial principles is essential for engineers to manage projects efficiently, and this target ensures students gain these skills.

Target: 70% of students should apply project management principles successfully in their capstone projects.

12. Lifelong Learning: The engineering field is constantly evolving, and this target ensures students are prepared to continue learning throughout their careers.

Target: 70% of students should engage in lifelong learning activities such as internships and online courses.

Program Specific Outcomes (PSOs)

1. PSO1: Enhance ability of students to mathematically model, simulate and analyze the performance of Electric circuits, Electrical Machines, Control Systems, Power Systems and Power Electronic Systems. This target ensures that students acquire specialized skills relevant to their specific engineering discipline, as outlined.

Target: 70% of students should demonstrate proficiency in PSO1-specific skills through projects and assessments.

2. PSO2: Develop competency of students in existing and emerging technologies so that, they can contribute to society by addressing power generation, distribution and utilization challenges with a focus on energy sustainability. This target measures the application of discipline-specific knowledge in practical situations, ensuring students can translate theory into practice.

Target: 70% of students should effectively apply PSO2-specific knowledge in practical and real-world scenarios.

ix. **Agenda-8: Review targets set for COs of AK 23 B. Tech subjects for second year.**

Chairman briefed the efforts and care taken for fixing CO targets. Since Outcome-Based Education (OBE) is a student-centric approach that focuses on measuring student performance through clearly defined outcomes. The course outcome targets are uniformly fixed for all COs of the particular subject. As AK23 is a new regulation with revised syllabus contents, IPAC has recommended the targets for various subjects as detailed below. Members accepted the targets set and advised to explore opportunities for further improvement in upcoming batches targets.

S. No	Category	Course Code	Course Title	CO Target fixed
1	Basic Sciences	23ABS9910	Complex Variable & Numerical Methods	60
2	Humanities & Social Sciences	23AHM9905	Universal Human Values	60
3	Professional Core	23APC0205	Electromagnetic Field Theory	60
4	Professional Core	23APC0206	Electrical Circuit Analysis-II	60
5	Professional Core	23APC0207	DC Machines & Transformers	60
6	Professional Core	23APC0208	Electrical Circuit Analysis-II and Simulation Lab	70
7	Professional Core	23APC0209	DC Machines & Transformers Lab	70
8	Skill Enhancement Courses	23ASC0502	Data Structures	70
9	Mandatory course	23AMC9901	Environmental Sciences	70

S. No	Category	Course Code	Course Title	CO Target fixed
1	Management Course-I	23AHMMB01	Managerial Economics and Financial Analysis	60
2	Engineering Sciences	23AES0403	Analog Circuits	60
3	Professional Core	23APC0210	Power Systems-I	60
4	Professional Core	23APC0211	Induction and Synchronous Machines	60
5	Professional Core	23APC0212	Control Systems	60
6	Professional Core	23APC0213	Induction and Synchronous Machines Lab	70
7	Professional Core	23APC0214	Control Systems Lab	70
8	Skill Enhancement Courses	23ASC0501	Python Programming	70
9	Engineering Sciences	23AES0304	Design Thinking & Innovation	70

x. **Agenda-9: Review of CO & PO target attainments for 2020-24 (AK20) batch subjects.**

Chairman presented the CO and PO-PSOs attainment details for review by the members. Addressing the gaps in course outcome attainments is essential to maintaining the high standards of the B. Tech program. Chairman ascertained that implementing the recommended actions, one can ensure that the students receive the best possible education and are well-prepared for their future careers and look forward to seeing positive results in the next assessment cycle.

The details of the attainments are as per the table below.

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CO TABLE FROM II-I TO III-II ALL SUBJECTS OF AK20 (2020-2021 Admitted) BATCH (2020-2024)

S. No	Year	Sem	Subject Code	Name Of the Subject	CO	CO Attainment Percentage			
						Target Fixed	Target Attained	REMARKS	Next Year Target
1	I	I	20ABS9912	ALGEBRA AND CALCULUS	CO1	50	43.50	Not attained	51.75
2	I	I			CO2	50	50.97	Attained	55.48
3	I	I			CO3	50	56.67	Attained	58.33
4	I	I			CO4	50	41.17	Not attained	50.59
5	I	I			CO5	50	55.16	Attained	57.58
6	I	I	20ABS9902	Applied Physics	CO1	50	37.75	Not attained	48.87
7	I	I			CO2	50	24.03	Not attained	42.01
8	I	I			CO3	50	36.81	Not attained	48.41
9	I	I			CO4	50	39.62	Not attained	49.81
10	I	I			CO5	50	36.95	Not attained	48.47
11	I	I	20AHS9901	COMMUNICATIVE ENGLISH	CO1	50	43.64	Not attained	51.82
12	I	I			CO2	50	50.99	Attained	55.49
13	I	I			CO3	50	56.87	Attained	58.43
14	I	I			CO4	50	40.93	Not attained	50.47
15	I	I			CO5	50	55.18	Attained	57.59
16	I	I	20AES0501	Problem Solving And Programming	CO1	50	70.82	Attained	65.41
17	I	I			CO2	50	69.42	Attained	64.71
18	I	I			CO3	50	74.79	Attained	67.39
19	I	I			CO4	50	72.24	Attained	66.12
20	I	I			CO5	50	71.91	Attained	65.95
21	I	I	20AHS9902	Communicative English Lab	CO1	70	86.10	Attained	73.05
22	I	I			CO2	70	99.40	Attained	79.70
23	I	I			CO3	70	99.27	Attained	79.63
24	I	I			CO4	70	99.53	Attained	79.77
25	I	I			CO5	70	99.40	Attained	79.70

26	I	I	20ABS9907	Applied Physics Lab	CO1	70	84.17	Attained	72.09
27	I	I			CO2	70	94.00	Attained	77.00
28	I	I			CO3	70	99.27	Attained	79.63
29	I	I			CO4	70	99.53	Attained	79.77
30	I	I			CO5	70	90.40	Attained	75.20
31	I	I	20AES0503	Problem Solving And Programming Lab	CO1	70	79.98	Attained	69.99
32	I	I			CO2	70	86.21	Attained	73.11
33	I	I			CO3	70	94.28	Attained	77.14
34	I	I			CO4	70	87.79	Attained	73.90
35	I	I			CO5	70	86.21	Attained	73.11
36	I	II	20ABS9906	Differential Equations and Vector Calculus	CO1	50	47.16	Not attained	53.58
37	I	II			CO2	50	33.62	Not attained	46.81
38	I	II			CO3	50	39.58	Not attained	49.79
39	I	II			CO4	50	43.01	Not attained	51.50
40	I	II			CO5	50	42.21	Not attained	51.11
41	I	II	20ABS9904	Chemistry	CO1	50	80.45	Attained	70.23
42	I	II			CO2	50	64.94	Attained	62.47
43	I	II			CO3	50	62.72	Attained	61.36
44	I	II			CO4	50	74.38	Attained	67.19
45	I	II			CO5	50	74.88	Attained	67.44
46	I	II	20AES0102	BASICS OF CIVIL & MECHANICAL ENGINEERING LAB	CO1	70	92.93	Attained	76.47
47	I	II			CO2	70	92.73	Attained	76.37
48	I	II			CO3	70	93.07	Attained	76.53
49	I	II			CO4	70	93.13	Attained	76.57
50	I	II			CO5	70	92.87	Attained	76.43
51	I	II			CO6	70	92.87	Attained	76.43
52	I	II	20ABS9909	CHEMISTRY LAB	CO1	70	90.60	Attained	75.30
53	I	II			CO2	70	99.40	Attained	79.70
54	I	II			CO3	70	95.89	Attained	77.95
55	I	II			CO4	70	99.53	Attained	79.77
56	I	II			CO5	70	99.40	Attained	79.70
57	I	II	20AES0506	INTERNET OF THINGS LABORATORY	CO1	70	96.37	Attained	78.18
58	I	II			CO2	70	92.79	Attained	76.40
59	I	II			CO3	70	90.64	Attained	75.32
60	I	II			CO4	70	96.30	Attained	78.15
61	I	II			CO5	70	92.79	Attained	76.40
62	I	II	20AES0101	Basics of Civil & Mechanical Engineering	CO1	50	63.93	Attained	61.96
63	I	II			CO2	50	69.60	Attained	64.80
64	I	II			CO3	50	69.48	Attained	64.74
65	I	II			CO4	50	66.31	Attained	63.16
66	I	II			CO5	50	64.66	Attained	62.33
67	I	II			CO6	50	67.47	Attained	63.74

68	I	II	20AES0505	INTERNET OF THINGS LABORATORY	CO1	50	67.09	Attained	63.54
69	I	II			CO2	50	59.35	Attained	59.67
70	I	II			CO3	50	66.33	Attained	63.16
71	I	II			CO4	50	66.47	Attained	63.24
72	I	II			CO5	50	63.23	Attained	61.61
73	I	II	20AMC9902	CONSTITUTION OF INDIA	CO1	50	93.88	Attained	76.94
74	I	II			CO2	50	92.45	Attained	76.23
75	I	II			CO3	50	96.19	Attained	78.09
76	I	II			CO4	50	91.63	Attained	75.81
77	I	II			CO5	50	96.26	Attained	78.13
78	II	I	20ABS9912	TRANSFORM TECHNIQUES AND COMPLEX VARIABLES	CO1	60	56.13	Not attained	58.06
79	II	I			CO2	60	53.30	Not attained	56.65
80	II	I			CO3	60	60.13	Attained	60.06
81	II	I			CO4	60	55.37	Not attained	57.68
82	II	I			CO5	60	53.44	Not attained	56.72
83	II	I	20APC0202	ELECTRICAL CIRCUITS-I	CO1	60	70.25	Attained	65.13
84	II	I			CO2	60	68.22	Attained	64.11
85	II	I			CO3	60	62.64	Attained	61.32
86	II	I			CO4	60	69.29	Attained	64.64
87	II	I			CO5	60	62.90	Attained	61.45
88	II	I	20APC0401	ELECTRONIC DEVICES AND CIRCUITS	CO1	61	66.81	Attained	63.40
89	II	I			CO2	63	63.64	Attained	61.82
90	II	I			CO3	63	69.04	Attained	64.52
91	II	I			CO4	63	65.27	Attained	62.63
92	II	I			CO5	60	62.00	Attained	61.00
93	II	I	20APC0203	ELECTRICAL MACHINES-I	CO1	60	62.60	Attained	61.30
94	II	I			CO2	60	61.13	Attained	60.57
95	II	I			CO3	60	56.47	Not attained	58.24
96	II	I			CO4	60	58.39	Not attained	59.20
97	II	I			CO5	60	55.44	Not attained	57.72
98	II	I	20APC0202	Power Systems – I	CO1	60	63.85	Attained	61.93
99	II	I			CO2	60	62.56	Attained	61.28
100	II	I			CO3	60	62.74	Attained	61.37
101	II	I			CO4	60	58.22	Not attained	59.11
102	II	I			CO5	60	61.84	Attained	60.92
103	II	I	20APC0204	ELECTRICAL CIRCUITS-I LAB	CO1	70	98.39	Attained	79.20
104	II	I			CO2	70	98.67	Attained	79.34
105	II	I			CO3	70	98.63	Attained	79.32
106	II	I			CO4	70	98.55	Attained	79.28
107	II	I			CO5	70	98.55	Attained	79.28

108	II	I	20APC0404	ELECTRONIC DEVICES AND CIRCUITS	CO1	70	98.39	Attained	79.20
109	II	I			CO2	70	98.67	Attained	79.34
110	II	I			CO3	70	94.77	Attained	77.39
111	II	I			CO4	70	98.55	Attained	79.28
112	II	I			CO5	70	98.55	Attained	79.28
113	II	I	20APC0205	ELECTRICAL MACHINES-I LAB	CO1	70	88.94	Attained	74.47
114	II	I			CO2	70	89.22	Attained	74.61
115	II	I			CO3	70	89.18	Attained	74.59
116	II	I			CO4	70	89.10	Attained	74.55
117	II	I			CO5	70	89.10	Attained	74.55
118	II	I	20AMC9903	ENVIRONMENTAL STUDIES	CO1	60	78.89	Attained	69.45
119	II	I			CO2	60	94.81	Attained	77.40
120	II	I			CO3	60	77.87	Attained	68.94
121	II	I			CO4	60	79.98	Attained	69.99
122	II	I			CO5	60	88.57	Attained	74.28
123	II	I	20AHE9902	PRINCIPLES OF EFFECTIVE PUBLIC SPEACKING	CO1	70	66.71	Attained	63.36
124	II	I			CO2	70	75.17	Attained	67.59
125	II	I			CO3	70	85.83	Attained	72.92
126	II	I			CO4	70	73.89	Attained	66.94
127	II	I			CO5	70	58.69	Attained	59.35
128	II	II	20AES0509	BASICS OF PHYTHON PROGRAMMING	CO1	60	72.23	Attained	66.11
129	II	II			CO2	60	67.25	Attained	63.63
130	II	II			CO3	60	61.37	Attained	60.68
131	II	II			CO4	60	67.36	Attained	63.68
132	II	II			CO5	60	65.72	Attained	62.86
133	II	II	20APC0206	ELECTRICAL CIRCUITS-II	CO1	60	54.39	Attained	57.20
134	II	II			CO2	60	56.39	Attained	58.20
135	II	II			CO3	60	57.96	Attained	58.98
136	II	II			CO4	60	52.44	Attained	56.22
137	II	II			CO5	60	57.22	Attained	58.61
138	II	II	20APC0208	ENGINEERING ELECTROMAGNETICS	CO1	63	59.62	Attained	59.81
139	II	II			CO2	64	57.33	Attained	58.67
140	II	II			CO3	65	58.21	Attained	59.11
141	II	II			CO4	64	57.94	Attained	58.97
142	II	II			CO5	63	57.04	Attained	58.52
143	II	II	20APC0207	ELECTRICAL MACHINES-II	CO1	60	66.44	Attained	63.22
144	II	II			CO2	60	65.36	Attained	62.68
145	II	II			CO3	62	67.18	Attained	63.59
146	II	II			CO4	61	65.05	Attained	62.53
147	II	II			CO5	60	62.15	Attained	61.08
148	II	II	20AHSMB01	MANAGERIAL ECONOMICSANDFINANCIAL ANALYSIS	CO1	60	65.71	Attained	62.85
149	II	II			CO2	67	61.56	Attained	60.78
150	II	II			CO3	60	67.24	Attained	63.62
151	II	II			CO4	61	67.08	Attained	63.54
152	II	II			CO5	61	64.03	Attained	62.02

153	II	II	20AHS9905	Universal Human Values	CO1	60	67.23	Attained	63.61
154	II	II			CO2	60	67.63	Attained	63.81
155	II	II			CO3	60	67.02	Attained	63.51
156	II	II			CO4	60	68.58	Attained	64.29
157	II	II			CO5	60	61.24	Attained	60.62
158	II	II	20APC0527	Basics of Python Programming Lab	CO1	70	97.34	Attained	78.67
159	II	II			CO2	70	97.62	Attained	78.81
160	II	II			CO3	70	96.21	Attained	78.11
161	II	II			CO4	70	97.50	Attained	78.75
162	II	II			CO5	70	97.50	Attained	78.75
163	II	II	20APC0209	ELECTRICAL CIRCUITS-II LAB	CO1	70	96.22	Attained	78.11
164	II	II			CO2	70	97.62	Attained	78.81
165	II	II			CO3	70	98.14	Attained	79.07
166	II	II			CO4	70	97.50	Attained	78.75
167	II	II			CO5	70	97.50	Attained	78.75
168	II	II	20APC0210	ELECTRICAL MACHINES-II LAB	CO1	70	97.20	Attained	78.60
169	II	II			CO2	70	97.55	Attained	78.78
170	II	II			CO3	70	97.65	Attained	78.83
171	II	II			CO4	70	97.50	Attained	78.75
172	II	II			CO5	70	97.55	Attained	78.78
173	II	II	20ASC0201	SIMULATION OF CIRCUITS USING PSIPCE	CO1	70	99.44	Attained	79.72
174	II	II			CO2	70	99.72	Attained	79.86
175	II	II			CO3	70	99.68	Attained	79.84
176	II	II			CO4	70	99.60	Attained	79.80
177	II	II			CO5	70	99.60	Attained	79.80
178	III	I	20APC0211	ELECTRICAL MACHINES-III	CO1	60	65.00	Attained	62.50
179	III	I			CO2	60	60.45	Attained	60.23
180	III	I			CO3	60	60.55	Attained	60.28
181	III	I			CO4	60	62.44	Attained	61.22
182	III	I			CO5	60	64.79	Attained	62.40
183	III	I	20APC0213	CONTROL SYSTEMS	CO1	64	61.01	Attained	60.51
184	III	I			CO2	61	61.27	Attained	60.63
185	III	I			CO3	65	61.08	Attained	60.54
186	III	I			CO4	60	59.56	Not attained	59.78
187	III	I			CO5	62	58.07	Not attained	59.03
188	III	I	20APC0212	POWER ELECTRONICS	CO1	60	62.43	Attained	61.21
189	III	I			CO2	61	60.09	Attained	60.05
190	III	I			CO3	60	64.22	Attained	62.11
191	III	I			CO4	60	61.44	Attained	60.72
192	III	I			CO5	60	58.13	Not attained	59.06
193	III	I	20APE0201	POWER SYSTEM-II	CO1	64	60.76	Not attained	60.38
194	III	I			CO2	61	58.73	Not attained	59.37
195	III	I			CO3	62	63.68	Attained	61.84
196	III	I			CO4	59	61.54	Attained	60.77
197	III	I			CO5	60	58.72	Not attained	59.36

198	III	I	20APC0425	ANALOG AND DIGITAL IC APPLICATIONS	CO1	60	61.25	Attained	60.62
199	III	I			CO2	60	62.72	Attained	61.36
200	III	I			CO3	60	63.63	Attained	61.82
201	III	I			CO4	60	54.45	Not attained	57.23
202	III	I			CO5	60	62.75	Attained	61.37
203	III	I	20APC0214	CONTROL SYSTEMS LAB	CO1	70	92.29	Attained	76.15
204	III	I			CO2	70	95.54	Attained	77.77
205	III	I			CO3	70	96.10	Attained	78.05
206	III	I			CO4	70	96.65	Attained	78.33
207	III	I			CO5	70	94.05	Attained	77.02
208	III	I	20APC0215	POWER ELECTRONICS LAB	CO1	70	94.05	Attained	77.03
209	III	I			CO2	70	94.25	Attained	77.13
210	III	I			CO3	70	94.50	Attained	77.25
211	III	I			CO4	70	94.40	Attained	77.20
212	III	I			CO5	70	83.50	Attained	71.75
213	III	I	20ASC0202	INTRODUCTION TO PROGRAMMING WITH MATLAB	CO1	70	99.44	Attained	79.72
214	III	I			CO2	70	99.72	Attained	79.86
215	III	I			CO3	70	99.68	Attained	79.84
216	III	I			CO4	70	99.60	Attained	79.80
217	III	I			CO5	70	99.60	Attained	79.80
218	III	I	20AMC9901	BIOLOGY FOR ENGINEERS	CO1	60	74.90	Attained	67.45
219	III	I			CO2	60	67.14	Attained	63.57
220	III	I			CO3	60	62.33	Attained	61.17
221	III	I			CO4	60	80.52	Attained	70.26
222	III	I			CO5	60	79.32	Attained	69.66
223	III	II	20APC0216	Electrical Measurements & Instrumentation	CO1	60	68.66	Attained	64.33
224	III	II			CO2	60	68.40	Attained	64.20
225	III	II			CO3	60	67.43	Attained	63.71
226	III	II			CO4	60	66.05	Attained	63.02
227	III	II			CO5	60	61.90	Attained	60.95
228	III	II	20APC0418	MICROPROCESSORS AND MICROCONTROLERS	CO1	61	59.94	Not attained	59.97
229	III	II			CO2	60	58.91	Not attained	59.46
230	III	II			CO3	61	53.92	Not attained	56.96
231	III	II			CO4	61	60.85	Attained	60.43
232	III	II			CO5	60	60.24	Attained	60.12
233	III	II	20APC0217	POWER SYSTEM ANALYSIS	CO1	60	64.28	Attained	62.14
234	III	II			CO2	60	63.96	Attained	61.98
235	III	II			CO3	60	63.95	Attained	61.98
236	III	II			CO4	63	61.83	Attained	60.91
237	III	II			CO5	62	64.27	Attained	62.13

238	III	II	20APC0218	SWITCH GEAR AND PROTECTION	CO1	63	63.52	Attained	61.76
239	III	II			CO2	62	59.32	Not attained	59.66
240	III	II			CO3	62	62.96	Attained	61.48
241	III	II			CO4	61	60.67	Attained	60.33
242	III	II			CO5	60	57.16	Not attained	58.58
243	III	II	20APC0219	ELECTRICAL MEASUREMENTS LAB	CO1	70	93.30	Attained	76.65
244	III	II			CO2	70	97.67	Attained	78.83
245	III	II			CO3	70	97.53	Attained	78.77
246	III	II			CO4	70	95.21	Attained	77.61
247	III	II			CO5	70	97.67	Attained	78.83
248	III	II	20APC0220	POWER SYSTEM ANALYIS LAB	CO1	70	98.75	Attained	79.38
249	III	II			CO2	70	98.65	Attained	79.33
250	III	II			CO3	70	98.58	Attained	79.29
251	III	II			CO4	70	98.72	Attained	79.36
252	III	II			CO5	70	98.72	Attained	79.36
253	III	II	20APC0221	SWITCH GEAR AND PROTECTION LAB	CO1	70	98.75	Attained	79.38
254	III	II			CO2	70	96.57	Attained	78.29
255	III	II			CO3	70	96.33	Attained	78.17
256	III	II			CO4	70	98.72	Attained	79.36
257	III	II			CO5	70	98.72	Attained	79.36
258	III	II	20ASC0203	NUMERICAL TECHNIQUES USING MATLAB	CO1	70	99.44	Attained	79.72
259	III	II			CO2	70	99.72	Attained	79.86
260	III	II			CO3	70	99.60	Attained	79.80
261	III	II			CO4	70	99.60	Attained	79.80
262	III	II			CO5	70	99.60	Attained	79.80
263	III	II	20AMC9904	PROFESSIONAL ETHICS AND HUMAN VALUES	CO1	60	89.15	Attained	74.57
264	III	II			CO2	60	74.92	Attained	67.46
265	III	II			CO3	60	90.25	Attained	75.12
266	III	II			CO4	60	89.24	Attained	74.62
267	III	II			CO5	60	80.61	Attained	70.30
268	IV	I	20APE0204	Flexible AC Transmission Systems	CO1	60	72.41	Attained	66.21
269	IV	I			CO2	60	69.42	Attained	64.71
270	IV	I			CO3	60	75.27	Attained	67.63
271	IV	I			CO4	60	73.01	Attained	66.50
272	IV	I			CO5	60	74.09	Attained	67.05
273	IV	I	20APE0203	Neural Networks And Fuzzy Logic	CO1	60	71.71	Attained	65.86
274	IV	I			CO2	60	72.86	Attained	66.43
275	IV	I			CO3	60	70.07	Attained	65.04
276	IV	I			CO4	60	69.92	Attained	64.96
277	IV	I			CO5	60	69.92	Attained	64.96
278	IV	I	20AHSMB02	Entrepreneurship Development	CO1	60	72.32	Attained	66.16
279	IV	I			CO2	60	69.85	Attained	64.92
280	IV	I			CO3	60	73.95	Attained	66.98
281	IV	I			CO4	60	73.66	Attained	66.83
282	IV	I			CO5	60	72.77	Attained	66.38

283	IV	I	20AHSMB03	Principles Of Management	CO1	60	98.70	Attained	79.35
284	IV	I			CO2	60	97.52	Attained	78.76
285	IV	I			CO3	60	99.33	Attained	79.67
286	IV	I			CO4	60	98.66	Attained	79.33
287	IV	I			CO5	60	98.38	Attained	79.19
288	IV	I	20APE0206	Electrical Distribution System and Automation	CO1	60	64.17	Attained	62.08
289	IV	I			CO2	60	65.68	Attained	62.84
290	IV	I			CO3	60	67.35	Attained	63.68
291	IV	I			CO4	60	66.87	Attained	63.44
292	IV	I			CO5	60	68.32	Attained	64.16
293	IV	I	20ASC0204	FUNDAMENTALS OF USING AI TOOLS LAB	CO1	70	99.44	Attained	79.72
294	IV	I			CO2	70	99.72	Attained	79.86
295	IV	I			CO3	70	99.68	Attained	79.84
296	IV	I			CO4	70	99.60	Attained	79.80
297	IV	I			CO5	70	99.60	Attained	79.80
298	IV	I	20AHE9903	Professional Communication	CO1	60	75.15	Attained	67.58
299	IV	I			CO2	60	74.46	Attained	67.23
300	IV	I			CO3	60	74.92	Attained	67.46
301	IV	I			CO4	60	73.57	Attained	66.78
302	IV	I			CO5	60	74.57	Attained	67.29
303	IV	II	20APR0203	MAJOR PROJECT WORK	CO1	60	62.12	Attained	61.06
304	IV	II			CO2	60	60.82	Attained	60.41
305	IV	II			CO3	60	62.00	Attained	61.00
306	IV	II			CO4	60	62.10	Attained	61.05
307	IV	II			CO5	60	62.17	Attained	61.08

Dr. P. Sujatha suggested the following to improve CO attainments:

- Additional Tutorials: Implement supplementary tutorial sessions focusing on difficult topics.
- Practice Assignments: Provide additional practice assignments and quizzes to reinforce learning.

Dr. V. C. Veera Reddy suggested the following to improve CO attainments:

- Peer Tutoring: Practise peer tutoring program where fast learners help slow learners.
- Advanced Tool Training: Offer advanced training sessions for engineering tools to further enhance proficiency.
- Faculty Development: Offer ongoing professional development for faculty to enhance teaching methods and keep up with the latest educational trends.

Dr. P. Saravanan suggested the following to improve CO attainments:

- Certification Programs: Encourage students to participate in certification programs for key tools and technologies.
- Tool-Based Projects: Incorporate more tool-based projects in the curriculum to provide hands-on experience.

Subsequently, the Chairman presented the PO and PSOs attainment analysis for the 2020-2024 (AK20) batch B. Tech curriculum. The members conducted a comprehensive review of the Program Outcomes (POs) and Program Specific Outcomes (PSOs) attainments. They commend the achievements while also identifying areas that require improvement. Following are the comments / suggestions by the members.

- The attainment level indicates a solid foundation in core engineering principles.
- Students have shown competence in using modern engineering tools.
- While the attainment is narrow, there is room for improvement.
- More detailed project guidelines and detailed interim reviews could help improve attainments.
- More hands-on training and specialized workshops are recommended.
- Incorporate more practical investigations and case studies into the curriculum to enhance problem-solving and research skills.
- Strengthen student support services, including tutoring and mentoring programs, to help students who are struggling to meet the targets.
- Foster stronger partnerships with industry to provide students with real-world experience and exposure to current engineering practices.
- Chairman acknowledged that by implementing the recommended actions, we can ensure continuous improvement and maintain the high standards of our B. Tech program. He extended gratitude to all faculty members and stakeholders for their dedication and contributions to this process.

TABLE: PO-PSO ATTAINMENT OF ALL COURSES FOR 2020-2024 batch

AK20 (BATCH 2020-2024) PO ATTAINMENT															
Course Name	Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Algebra and	C111	2.52	2.52	2.40	-	-	-	-	-	-	-	-	2.40	-	-
Applied	C112	2.18	-	-	2.10	-	-	-	-	-	-	-	-	-	-
Communicative English	C113	-	-	-	-	-	-	-	-	1.60	1.60	-	-	-	-
Engineering Workshop	C114	2.72	3.00	3.00	-	-	3.00	-	-	3.00	-	-		2.72	3.00
Problem Solving and	C115	2.52	2.52	2.40									2.40		
Communicative English	C116	-	-	-	-	-	-	-	-	3.00	2.65	-		-	-
Applied	C117	2.58	-	-	2.58	-	-	-	-	-	-	-		-	-
Problem Solving and	C118	2.02	3.00	2.13	2.13	2.13	-	-	-	-	-	-	2.65	2.02	1.95
Differential Equations	C121	1.00	1.10	-	-	-	-	-	-	-	-	-	-	-	-
Chemistry	C122	1.60	1.60	-	-	-	-	-	-	-	-	-	-	-	-
Basics of Civil and Mechanical	C123	1.30	1.40	1.20		1.30	1.15	1.40							
Internet of Things (IoT)	C124	1.60	1.53		1.60										
Engineering	C125	2.46	-	2.46	-	-	-	-	-	-	2.46	-		2.46	2.46
Basics of Civil and Mechanical	C126	2.77	2.77	2.53	2.77	-	3.00	-	-	2.53	-	-		-	-
Chemistry	C127	-	-	-	2.86	-	-	-	-	-	-	-		-	-
Internet of Things	C128	3.00	3.00	3.00	3.00	3.00	-	-	-	-	-	-		-	-
Constitution	C129	-	-	-	-	-	3.00	3.00	3.00	-	-	-	3.00	-	-
Transform Techniques and	C211	1.30	1.00												
Electrical	C212	1.36	1.36				1.36							1.36	
Electronic devices and	C213	1.60	1.60	1.60	1.60										
Power	C214	1.54	1.54				1.54							1.54	1.60
Electrical	C215	1.54	1.42	1.42	1.42					1.42				1.42	1.42
Electrical Circuits-I	C216	3.00	3.00	-	-	-	-	-	-	3.00	-	-		3.00	-
Electronic Devices and	C217	3.00	3.00	3.00	3.00	-	-	-	-	-	-	-		-	-
Electrical Machines-I	C218	2.40	2.40	-	2.40	-	-	-	-	2.40	-	-		2.40	2.40
Principles of Effective	C219	-	-	-	-	-	-	-	-	-	3.00	-		-	-
Environmental Studies	C219a	-	-	-	-	-	3.00	3.00	-	-	-	-	-	-	-
Basics of Python	C221	1.42	1.42	1.38	1.30	1.60							1.38	1.38	1.38
Electrical	C222	1.36	1.36	1.60			1.36							1.30	
Electrical	C223	1.48	1.48	1.48	1.48					1.48				1.48	1.48
Engineering Electromag	C224	1.60	1.60				1.60							1.60	
Managerial Economics and	C225	1.60	1.60												
Universal Human	C226						1.60	1.53	1.54				1.50		
Basics of Python	C227	1.60	1.60	3.00	3.00				3.00	3.00			3.00		
Electrical Circuits-II	C228	3.00	3.00	-	-	3.00	-	-	-	3.00	-	-		3.00	-
Electrical Machines-II	C229	3.00	3.00	-	3.00	-	-	-	-	-	-	-		3.00	3.00
Simulation of circuits	C229a	3.00	-	-	-	3.00	-	-	-	-	-	-		-	3.00
Electrical	C311	1.76	1.76										1.76	1.76	1.76
Power	C312	1.36	1.36				1.36							1.36	
Control	C313	1.48	1.48	1.50			1.48							1.48	
Analog and Digital IC	C314	1.54	1.54	1.54	1.60										
Power	C315	1.24	1.24				1.24							1.24	1.45
Control	C316	-	-	-	3.00	3.00	3.00	-	-	-	-	-		3.00	3.00
Power	C317	-	-	-	2.72	1.60	2.72	-	-	-	-	-		2.72	2.72

Introductio n to Programmi	C318	3.00	-	-	3.00	3.00	-	-	-	-	-	-	3.00	3.00	3.00
Biology for	C319	-	-	-	-	-	2.40	-	-	-	-	-	-	-	-
Electrical Measureme nts and	C321	1.54	1.54				1.54							1.54	
Power System	C322	1.60	1.60				1.60							1.60	
Switch Gear and	C323	1.42	1.60	1.60			1.42							1.42	1.30
Microproces sors and	C324	1.24	1.15	1.23	1.30										
Electrical Measureme	C325	3.00	3.00	-	3.00	-	-	-	-	3.00	-	-		3.00	3.00
Power System	C326	2.72	2.72	-	-	2.53	-	-	-	2.72	-	-		2.72	-
Switch Gear and	C327	3.00	-	-	3.00	3.00	3.00	-	-	-	-	-		3.00	3.00
Numerical techniques	C328	3.00	-	-	3.00	3.00	-	-	-	-	-	-	3.00	3.00	3.00
Professional Ethics and	C329	-	-	-	-	3.00	3.00	3.00	3.00	3.00	-	-	3.00	-	-
Flexible AC Transmissio n Systems	C411	2.30	2.30							2.30				2.30	2.30
Neural networks	C412	2.30	2.30	2.30		2.30				2.30				2.30	2.30
Entreprene	C413	2.30		2.30	2.30						2.30	2.30			
Principles of Managemen	C414	3.00								3.00	3.00				
Electrical Distribution	C415	1.60	1.60							1.60				1.60	1.60
Professional Communica	C416						2.30			2.30	2.30		2.30		
Fundamenta ls of using	C417	3.00	-	-	-	3.00	-	-	-	-	-	-	3.00	-	3.00
PROJECT	C421	2.64	2.64	2.64	2.64	2.64	2.625	2.64	2.7	2.7	2.7	2.7	2.64	2.63	2.6
Average Direct		2.10	1.97	2.08	2.39	2.57	2.10	2.43	2.65	2.49	2.50	2.50	2.50	2.136	2.32
80% of Direct		1.68	1.57	1.66	1.91	2.05	1.68	1.94	2.12	1.99	2.00	2.00	2.00	1.71	1.86

CALCULATION OF INDIRECT ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
EXIT SURVEY	3	3	3	3	2	2	1	2	3	2	3	2	2	2
ALUMNI SURVEY	3	3	3	3	2	2	1	1	2	2	2	2	2	2
EMPLOYERS SURVEY	2	2	2	2	2	2	1	1	1	2	2	2	2	2
Indirect Attainment	2.67	2.67	2.7	2.7	2.0	2.00	1.00	1.33	2.00	2.00	2.33	2.00	2.00	2.00
direct Attainment 20	0.53	0.53	0.5	0.5	0.4	0.40	0.20	0.27	0.40	0.40	0.47	0.40	0.40	0.40

CALCULATION OF FINAL ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
% of Direct Attainme	1.68	1.57	1.66	1.91	2.05	1.68	1.94	2.12	1.99	2.00	2.00	2.00	1.71	1.86
20% of Indirect	0.53	0.53	0.5	0.5	0.4	0.4	0.20	0.3	0.40	0.4	0.5	0.4	0.40	0.4
Final	2.21	2.11	2.20	2.45	2.45	2.08	2.14	2.39	2.39	2.40	2.47	2.40	2.11	2.26

Target of attainment	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Attainment analysis	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

xi. **Agenda 10: Review of AK22 course structure and syllabus of M. Tech (Power systems)**

Members reviewed and approved the AK22 M. Tech Regulations course structure and syllabus as read by Chairman.

xii. Agenda 11: Discuss Year on year comparison of CO attainments.

Chairman presented the CO attainments in comparison with the same as that of the previous year. Members felt that insufficient time due to more holidays, increased leave availed by students which is evident from the list of condoned students and advised that further more efforts shall be taken to achieve targets.

Target Attainment

II YEAR I SEM

S. No	Subject Code		Name of the Subject	COs	AK19			AK20		
	AK19	AK20			Target Fixed	Target Attainment 2021-22	Yes/ No	Target Fixed	Target Attainment 2022-23	Yes/ No
1	19APC0401	20APC0401	Electronic Devices and Circuits	CO1	90	88.58	No	90	91.27	Yes
				CO2	90	91.66	Yes	90	89.81	No
				CO3	90	91.55	Yes	90	89.74	No
				CO4	90	91.69	Yes	90	89.34	No
				CO5	90	79.87	No	90	88.39	No
2	19APC0204 (2-2)	20APC0203	Electrical Machines-I	CO1	81	77.25	No	89	70.77	No
				CO2	81	77.84	No	89	70.78	No
				CO3	81	76.85	No	89	66.13	No
				CO4	81	78.19	No	89	66.60	No
				CO5	81	71.24	No	89	62.97	No
3	19APC0206 (3-1)	20APC0202	Power Systems – I	CO1	78	80.79	Yes	92	70.46	No
				CO2	78	81.75	Yes	92	65.29	No
				CO3	78	84.36	Yes	92	67.68	No
				CO4	78	81.49	Yes	92	66.06	No
				CO5	78	69.16	No	92	65.02	No
4	19ABS9912	20ABS9912	Transform Techniques and Complex Variables	CO1	57	83.48	Yes	75	84.39	Yes
				CO2	57	83.93	Yes	75	79.40	Yes
				CO3	57	83.19	Yes	75	89.46	Yes
				CO4	57	86.69	Yes	75	81.22	Yes
				CO5	57	84.68	Yes	75	82.58	Yes

5	19APC0202 (2-2)	20APC0208	Engineering Electromagnetics	CO1	72	51.03	No	81	85.66	Yes
				CO2	72	54.10	No	81	83.49	Yes
				CO3	72	55.87	No	81	79.26	No
				CO4	72	53.87	No	81	84.65	Yes
				CO5	72	51.70	No	81	83.00	Yes

III YEAR I SEM

S. No	Subject Code		Name of the Subject	COs	AK19			AK20		
	AK19	AK20			Target Fixed	Target Attainment 2021-22	Yes/ No	Target Fixed	Target Attainment 2022-23	Yes/ No
1	19APC0208	20APC0213	Control Systems	CO1	67	90.61	Yes	68	62.62	No
				CO2	67	84.51	Yes	68	64.00	No
				CO3	67	92.93	Yes	68	57.86	No
				CO4	67	82.97	Yes	68	56.42	No
				CO5	67	86.37	Yes	68	61.16	No
2	19APC0209	20APC0212	Power Electronics	CO1	79	72.72	No	90	57.94	No
				CO2	79	73.03	No	90	54.69	No
				CO3	79	72.18	No	90	59.45	No
				CO4	79	65.67	No	90	58.20	No
				CO5			No	90	57.14	No
3	19APC0213 (3-2)	20APE0201	Power Systems – II	CO1	84	83.76	No	86	81.09	No
				CO2	84	80.02	No	86	81.16	No
				CO3	84	85.51	Yes	86	85.90	No
				CO4	84	76.46	No	86	77.64	No
				CO5	84	75.90	No	86	79.27	No

IV YEAR I SEM

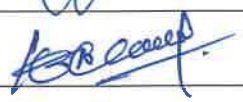
S. No	Subject Code	Name of the Subject	COs	AK19		
	AK19			Target Fixed	Target Attainment 2021-22	Yes/ No
1	19APE0201	Electrical Distribution Systems	CO1	97	91.62	No
			CO2	97	95.78	No

			CO3	97	91.32	No
			CO4	97	93.93	No
			CO5	97	88.58	No
2	19APE0411	Embedded Systems	CO1	63	98.97	Yes
			CO2	63	96.27	Yes
			CO3	63	93.45	Yes
			CO4	63	96.86	Yes
			CO5	63	91.52	Yes
3	19APE0205	Flexible AC Transmission Systems	CO1	97	94.18	No
			CO2	97	91.45	No
			CO3	97	94.00	No
			CO4	97	88.28	No
4	19APC0220	High Voltage Engineering	CO1	56	85.40	Yes
			CO2	56	82.18	Yes
			CO3	56	82.90	Yes
			CO4	56	77.93	Yes
			CO5	56	87.53	Yes
5	19APC0219	Switchgear And Protection	CO1	92	92.68	Yes
			CO2	92	91.38	No
			CO3	92	91.86	No
			CO4	92	89.70	No
6	19AHE9901	Technical Writing	CO1	62	92.83	Yes
			CO2	62	94.54	Yes
			CO3	62	98.93	Yes

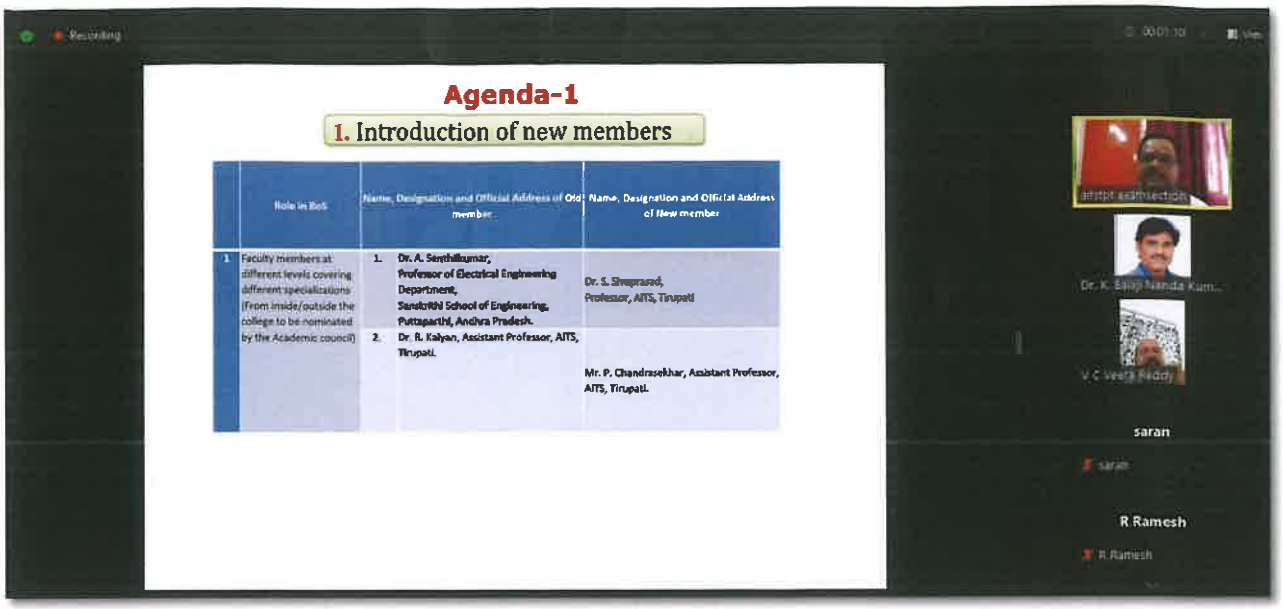
xiii. Agenda 12: **Any other subject brought forward by members.**

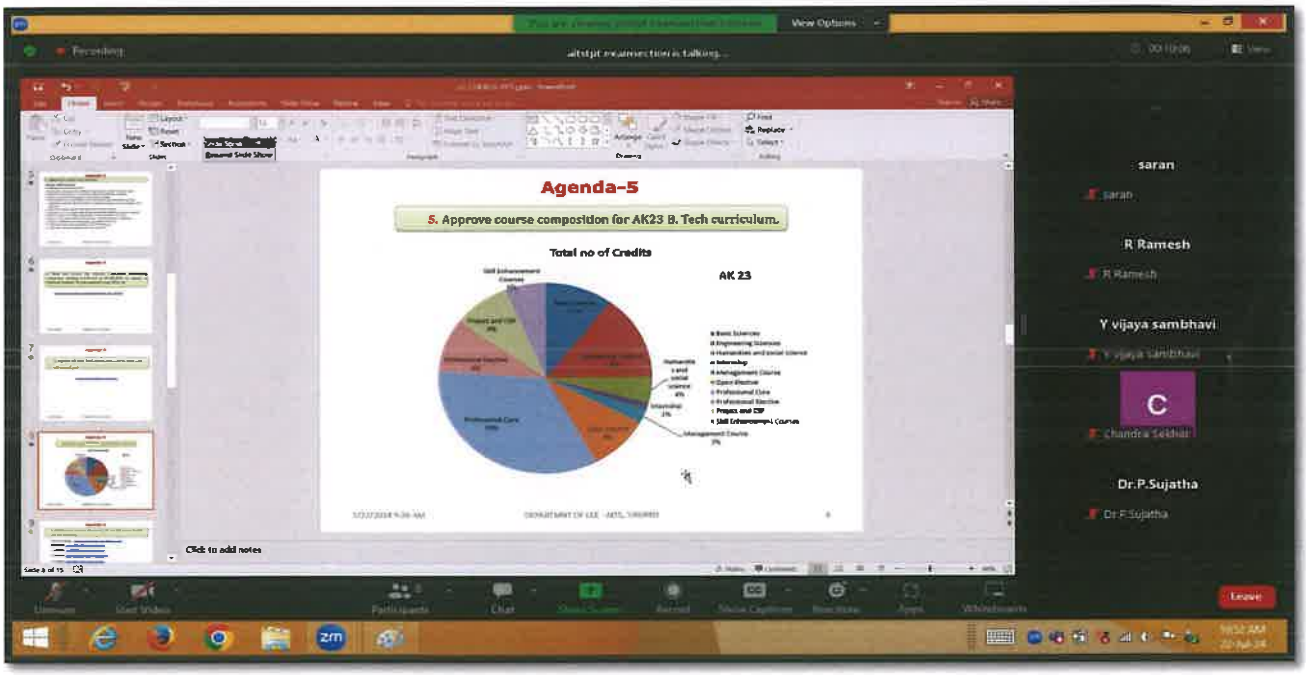
No other matter was brought forward for discussion.

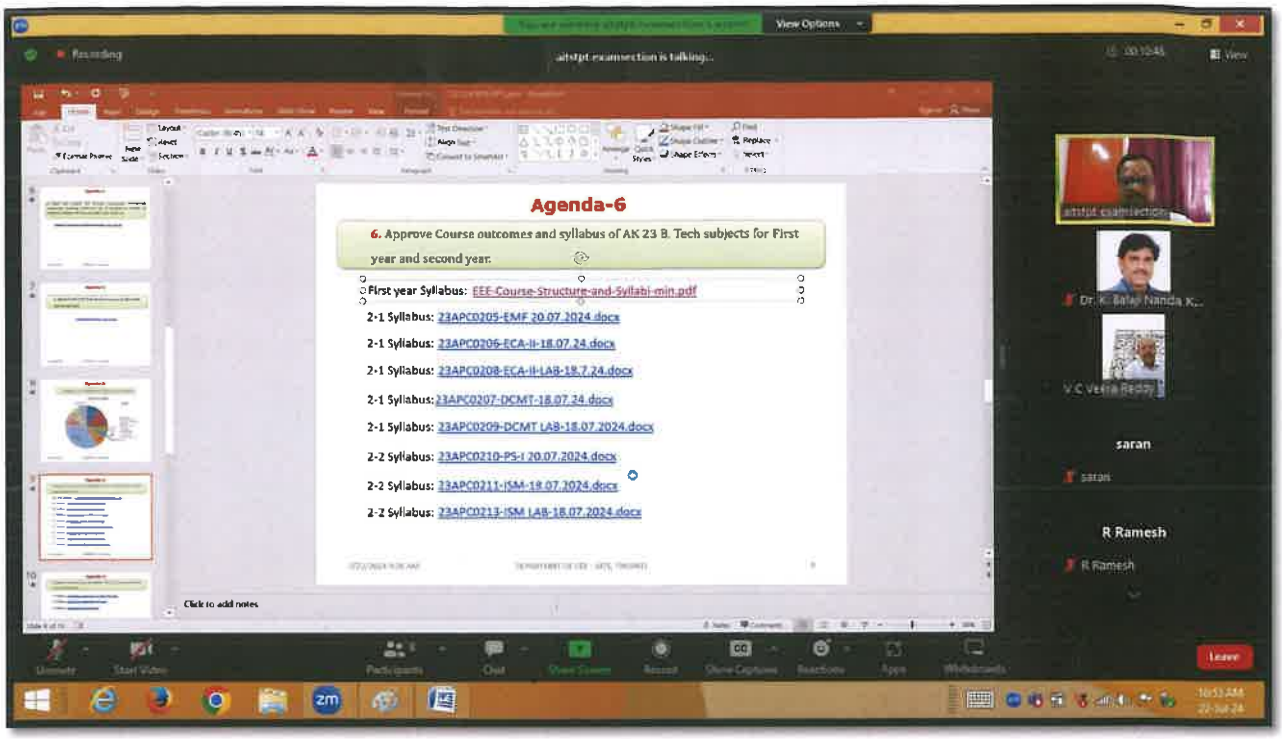
The meeting concluded with Dr. Murugesan thanking the members for their valuable time and contributions.

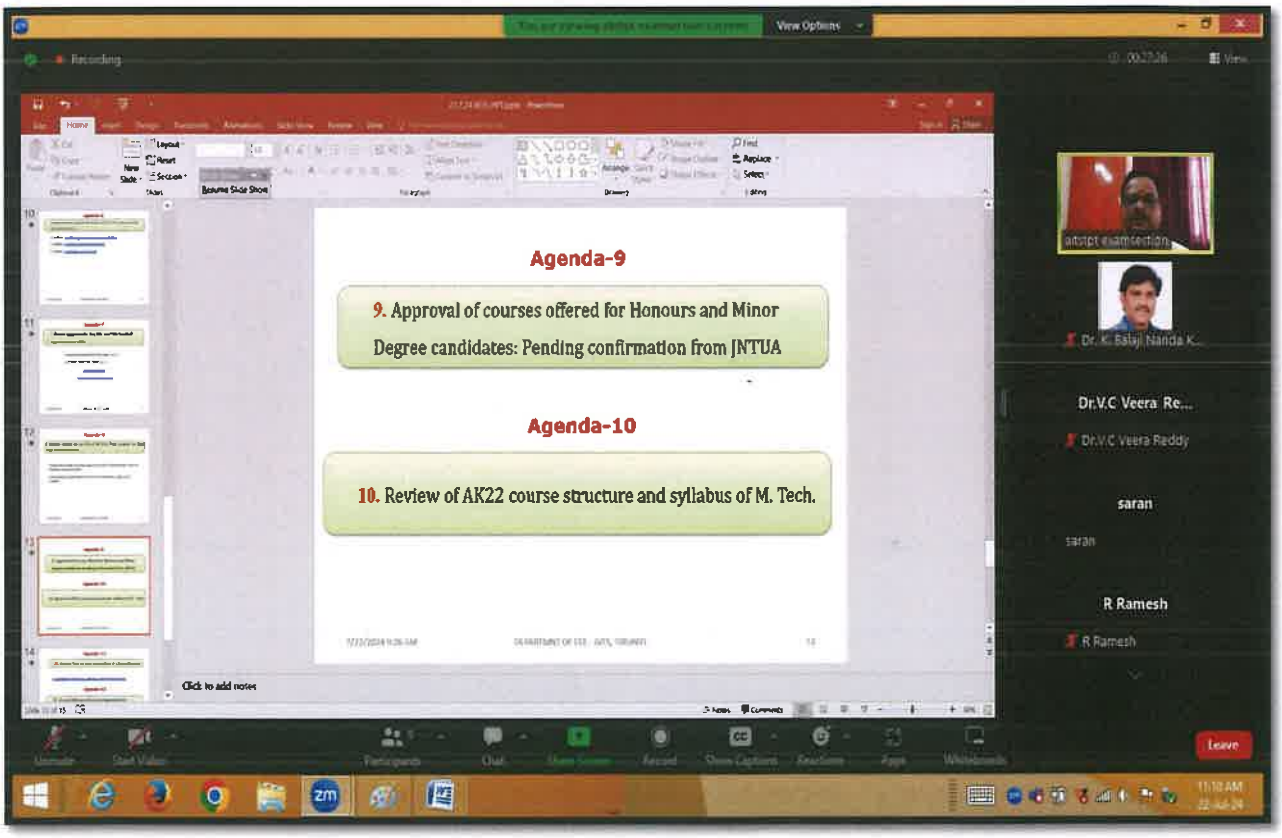
S. No	Name of the BOS Member	Signature
1	Dr. R. Murugesan	
2	Dr. K. Balaji Nandakumar Reddy	
3	Mr. P. Chandrasekhar	
4	Dr. P. Sujatha	**Virtual presence** (Attended through Zoom application)
5	Dr. V. C. Veera Reddy	
6	Dr. P. Saravanan	
7	Ms. Y. Vijayasambhavi	
8	Mr. R. Ramesh	

BOS Meeting Screen-Shorts held on 22-07-2024






Agenda-6
6. Approve Course outcomes and syllabus of AK 23 B. Tech subjects for First year and second year.
First year Syllabus: EEE-Course-Structure-and-Syllabi-min.pdf
2-1 Syllabus: 23APC0205-EMF 20.07.2024.docx
2-1 Syllabus: 23APC0206-ECA-II-18.07.24.docx
2-1 Syllabus: 23APC0208-ECA-II-LAB-18.7.24.docx
2-1 Syllabus: 23APC0207-DCMT-18.07.24.docx
2-1 Syllabus: 23APC0209-DCMT LAB-18.07.2024.docx
2-2 Syllabus: 23APC0210-PS-I 20.07.2024.docx
2-2 Syllabus: 23APC0211-ISM-18.07.2024.docx
2-2 Syllabus: 23APC0213-ISM LAB-18.07.2024.docx
saran
R Ramesh


Agenda-9
9. Approval of courses offered for Honours and Minor Degree candidates: Pending confirmation from JNTUA
Agenda-10
10. Review of AK22 course structure and syllabus of M. Tech.
Dr.V.C Veera Re...
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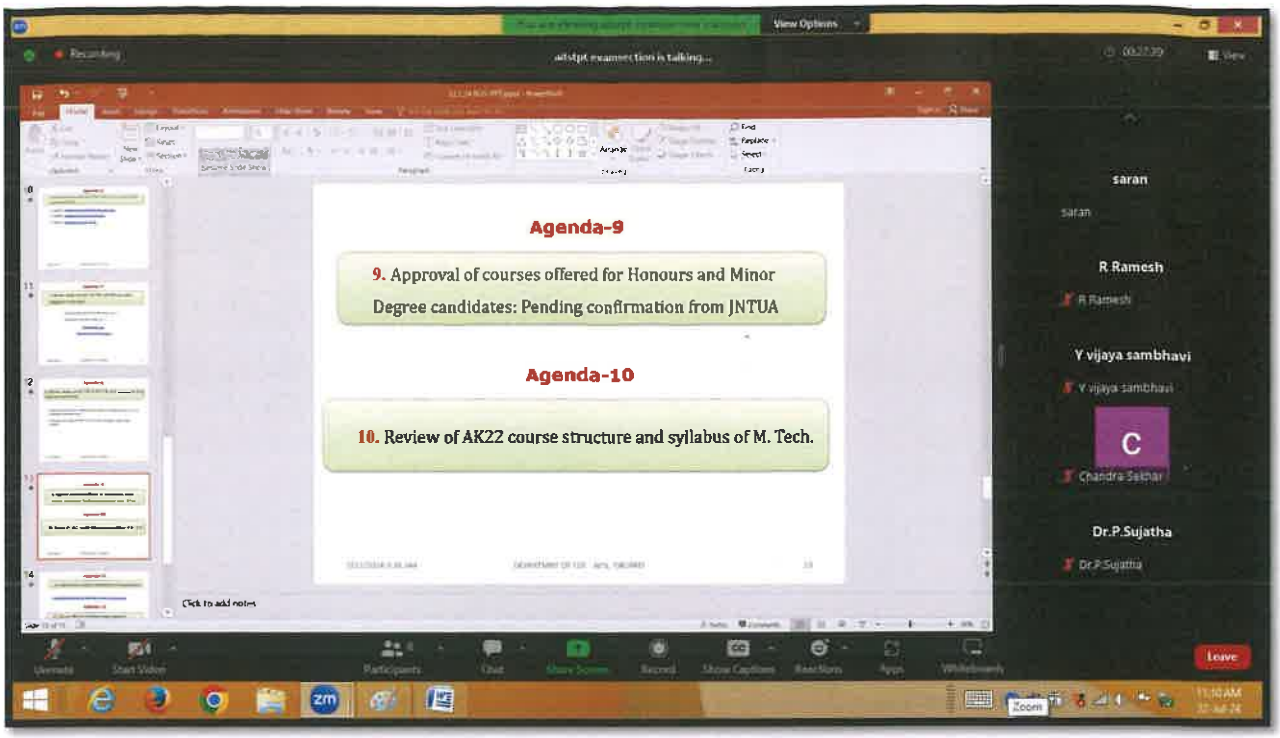
R Ramesh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Y vijaya sambhavi
Dr.P.Sujatha
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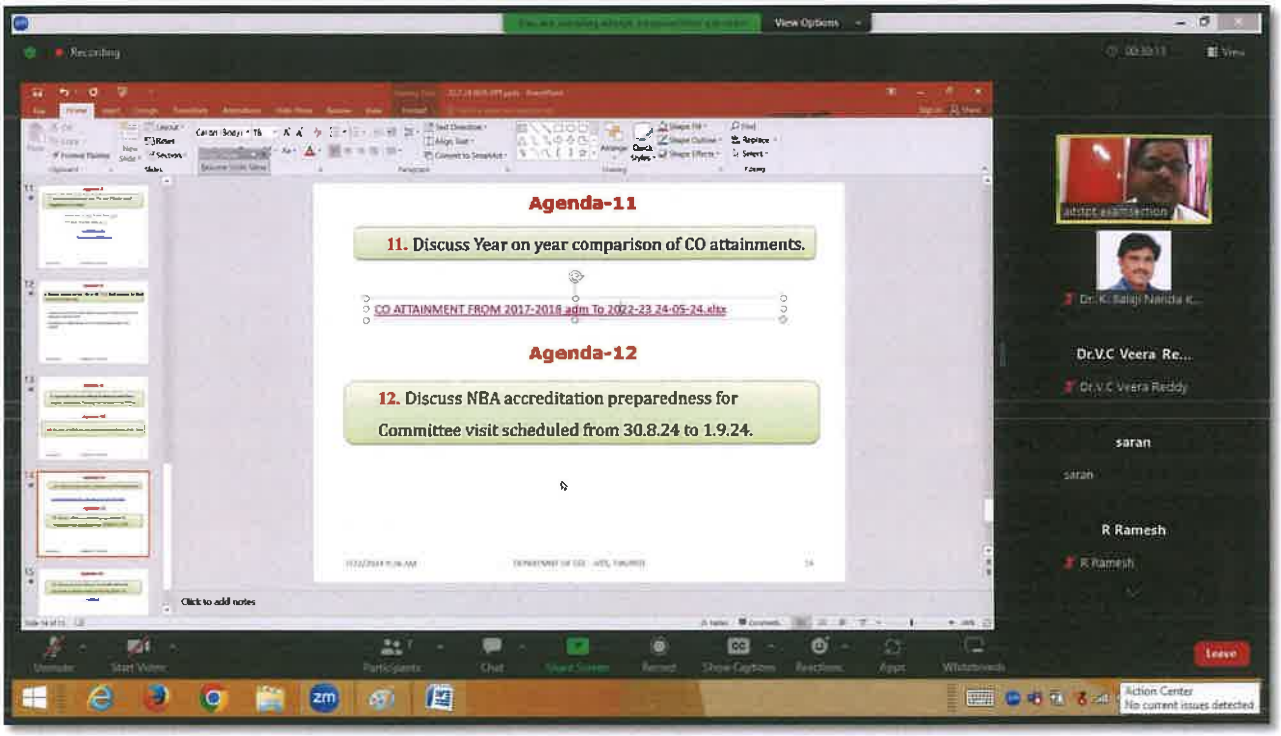
Agenda-11
11. Discuss Year on year comparison of CO attainments.
CO ATTAINMENT FROM 2017-2018 adm To 2022-23 24-05-24.xlsx
Agenda-12
12. Discuss NBA accreditation preparedness for Committee visit scheduled from 30.8.24 to 1.9.24.
Dr.V.C Veera Re...
saran
R Ramesh
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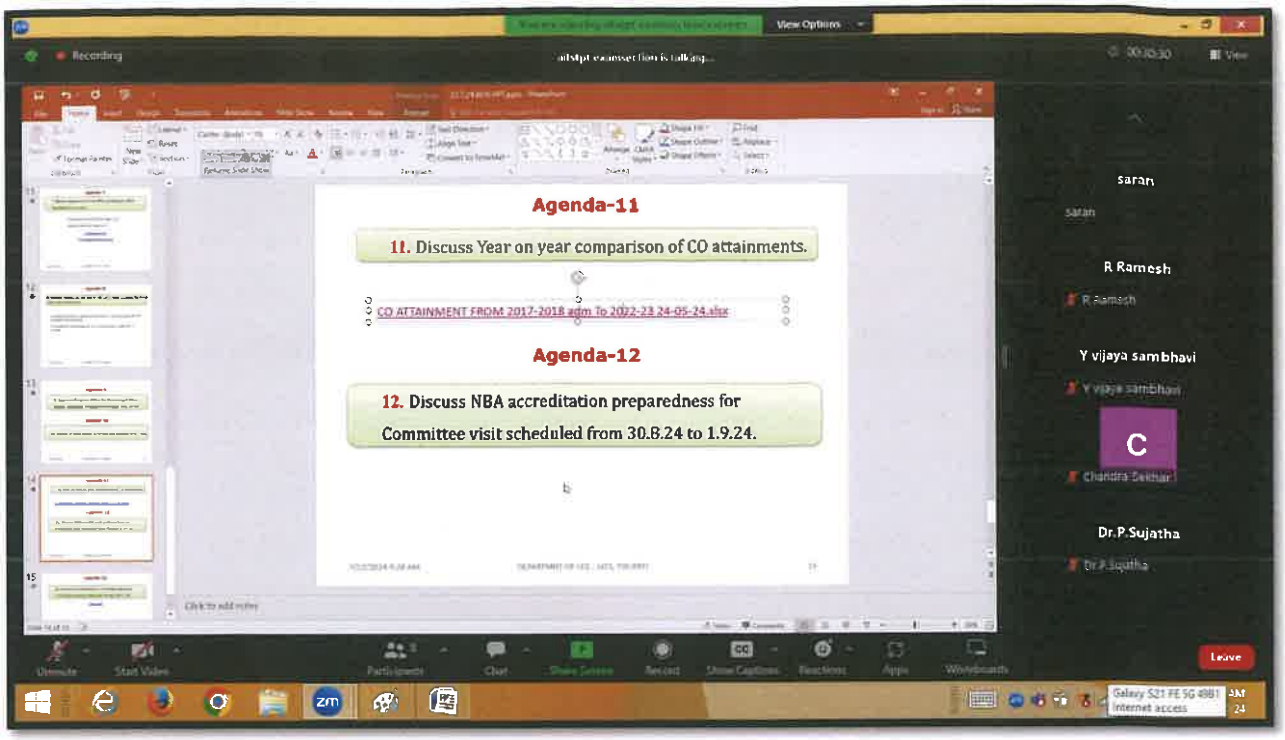
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Chandra Sekhar
Dr.P.Sujatha
Leave


Zoom Meeting
Dr. K. Balaji Nanda Kumar Reddy
Dr.V.C.Veera Reddy
R Ramesh
Y vijaya sambhavi
Dr.P.Sujatha
Chandra Sekhar
Leave