RAJALAKSHMI ENGINEERING COLLEGE,
(An Autonomous Institution) - Affiliated to Anna University
THANDALAM, CHENNAI-602 105

Minutes of the meeting of the 21st Academic Council held on 20.02.2025 at 11.00 am in the Conference hall

DATE: 26.02.2025

Agenda points:

S.No.	Items
AC.No.21.01	Action taken on the Minutes of the earlier meetings:
AC.No.21.02	Seeking the council's approval for curriculum and syllabus framed for V to VIII Semesters in the respective meetings of the Boards of Studies for the 19-UG programmes, as per Regulations 2023. (curriculum and syllabus for I to IV semesters have been approved in earlier Academic Council meetings, curriculum and syllabus for all the courses and BoS minutes are given in the link)
AC.No.21.03	Seeking the Council's approval for offering (3+1) twinning Programme with Arizona State University(ASU), USA, for the following UG programmes, from the academic year 2025-26 onwards: 1. B.E. - Aeronautical Engineering -60 seats 2. B.E. - Computer Science and Engineering – 60 seats 3. B.E. - Electronics and Communications Engineering- 60 seats 4. B.Tech.- Information Technology -60 Seats
AC.No.21.04	Seeking the council's recommendations for increase in the intake in the following programmes, from the academic year 2025-26 onwards: • B.Tech.-Artificial Intelligence and Data Science 300 to 360 • B.E.-Automobile Engineering from 30 to 60 • B.E.-Computer Science and Engineering from 540 to 720 • B.E.-Computer Science and Engineering (Cyber Security) from 120 to 180 • B.E.-Electronics and Communication Engineering from 360 to 480 • B.E.-Mechatronics from 60 to 120 Totally 510 seats are proposed to be increased (2970 to 3480) in UG programmes. • No change in the intake of PG programmes. Intake details of PG courses are given below:

S.No.	Department	Year of starting	2024-25 Approved
1	M.E. Avionics	2017	9
2	M.E. Medical Electronics	2011	18
3	M.Tech. Biotechnology	2006	24
4	M.E. Computer Science and Engineering	2004	18
5	M.E. Communication Systems	2005	18
6	M.E. Embedded Systems Technologies	2012	18
7	M.E. Engineering Design	2011	9
8	M.Tech. Data Science	2019	18
9	MBA	2002	240
		Total	372

S.N. Murugan

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AC.No.21.05	Reporting the following recent developments: • Established the TANSAM (Tamil Nadu Smart and Advanced Manufacturing Centre) Innovation Center focusing on emerging fields; AR/VR, IoT, and Data Analytics, providing access to latest resources, advanced laboratories, and expert guidance. It enables students to participate in workshops, training programs and projects centered on product development, digital transformation, and sustainable practices. • NBA expert team visited the departments of B. E. Chemical Engineering and B.Tech. Food Technology and awarded accreditation for three years (First – time Accreditation) for these two programmes in May 2024 • NBA Expert Team visit for data verification on compliance report is scheduled for 9 UG Programmes during Feb 22-23, 2025 and subsequently, for the another 3 UG & 1 PG programmes, the team visit is expected in late February / March 2025 • Improvements in faculty research publications for 2023 and 2024, consultancy activities taken up, Patents awarded and sponsored projects secured
AC.No.21.06	Any other points with the permission of the chairman Partial modification in the continuous assessment pattern for both Regulations 2019 revised and 2023 for UG Students for improved learning.

The following members were present:

S.No.	Name of the Academic Council Member	Category
1.	Dr. S.N.Murugesan	Principal & Chairman
2.	Dr.S.R.Devadasan Professor Department of Production Engineering PSG College of Technology Peelamedu, Coimbatore – 641 004	University Representative
3.	Dr.S.Balasivanandha Prabu Professor and Head Department of Mechanical Engineering CEG Campus, Anna University, Chennai – 600 025	University Representative
4.	Dr.R.Senthil Professor, Dept, Civil Engineering, CEG, Anna University, Chennai-600 025	University Nominee
5.	Dr. Suceendran K.M. Techno HR Leader, Digital Evangelist, Head - Academic Alliances TCS, Chennai	Industry Representative
6.	Dr.C.R.Muthukrishnan Advisor, Rajalakshmi Institutions	Academician
7.	Dr.M.Subbiah, Professor Emeritus, Department of Electrical and Electronics Engineering	Academician

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8.	Dr. S.P.Srinivasan Vice Principal	Member
9.	Dr. M. Muthusamy COE and HoD H&S	Member
10.	Dr.M.Palanivelan Director (PG studies)	Member
11.	Dr. Suresh Chandra Khandai HOD, Aeronautical Engineering	Member
12.	Dr.J.M.Gnanasekar Professor & HOD Artificial Intelligence and Data Science	Member
13.	Dr. S. Poonkuzhali Professor Artificial Intelligence and Machine Learning, (for HoD-AIML)	Member
14.	Dr. K. Bhaskar Professor & HOD, Automobile Engineering	Member
15.	Dr.S.Rajkumar Professor &HOD, Biomedical Engineering	Member
16.	Dr. M.Sankar Professor & HOD, Biotechnology	Member
17.	Dr. T.R.Sundararaman Professor & HOD, Chemical Engineering	Member
18.	Dr. S.Geetha Professor & HOD, Civil Engineering	Member
19.	Dr.K.Devaki Professor & HOD, Computer Science and Business System	Member
20.	Mr.S. Uma Maheswar Rao AOP & HOD, Computer Science & Design	Member
21.	Dr. P. Kumar Professor & HOD, Computer Science & Engineering	Member
22.	Mr.Benedict Jayaprakash Nicholas HoD - CSE (Cyber Security)	Member
23.	Dr.L.Bhagyalakshmi Professor & HOD, Electronics & Communication Engineering	Member
24.	Dr. C. Kamalakannan Professor and HOD, Electrical & Electronics Engineering	Member
25.	Dr. V. Sudhakar Professor , Food Technology (For HoD-FT)	Member
26.	Dr. P. Valarmathie Professor & HOD, Information Technology	Member
27.	Dr. R.Shanthi Professor & HOD, Mechanical Engineering	Member

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28.	Dr.Ritesh Ramakrishna Bhat Professor & HOD, Mechatronics Engineering	Member
29.	Dr. R. Giri Professor & HOD, Robotics & Automation	Member
30.	Dr. M.Uma Raman, Professor &HOD, Management Studies	Member
31.	Dr.V.Prasanna Kumari, Coordinator - IQAC	Teachers' Representative
32.	Dr. Johanna Rajkumar, Dean , Biotechnology	Teachers' Representative
33.	Mr.I.Philip Praveen, Director (Training & Placement)	Teachers' Representative
34.	Dr. V. Murali Bhaskaran, Dean (Academics)	Member Secretary

The following members expressed their inability to attend the meeting and they were granted leave of absence and their leave of absence was recorded

Dr.R.Senthil Professor, Dept, Civil Engineering, CEG, Anna University, Chennai-600 025	University Nominee
Prof. Satyanarayanan R. Chakravarthy Professor Department of Aerospace Engineering IITM, Chennai	Academician

The Chairman welcomed the members of the Academic Council and invited the Dean (Academics) to present the details of the Agenda items and initiate the discussion.

AC.21.01: Action taken on the Minutes of the earlier meetings:

The following points approved in the 20th Academic Council meeting have been implemented:

As per the decisions made in the 20th Academic Council meeting held on 06.07.2024,

- Courses are being offered as per the curriculum and syllabus for III and IV Semesters, for the 19-UG and 9-PG programmes, based on Regulations 2023 and syllabus for semesters V to VIII for 2 UG programs based on Regulations 2019(Revised)
- In this academic year 2024-25, the sanctioned intake of 18 have been filled for M.Tech. Data Science offered with the support of L&T Mindtree
- Admissions have been made as per approved intake including the increased intake for the 6 UG programmes in the academic year 2024-25.
- For credit transfer, the existing option of choosing 3 online courses with a maximum of 9 credits has been increased to 5 online courses with a maximum of 15 credits. This change is applicable to all students under both Regulations 2019 (Revised) and Regulations 2023
- As per the recommendation given in the 19th Academic Council meeting held on 17.6.2023, the No Objection Certificate has been received from Anna university on 9.10.2023 for offering (3years + 1 year) Twinning programme, with Binghamton University, USA.

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Ac.21.02: Seeking the council's approval for Curriculum and syllabus framed for V to VIII Semesters, for the 19-UG programmes, as per Regulations 2023 in the respective meetings of the Boards of studies including additions to the list of electives offered.

Dean (Academics) presented the curriculum and syllabus and based on regulations 2023 syllabus for the V and VIII semesters for the 18 UG programmes and for B.E. Mechanical Engineering for V an VI semesters only, as recommended by the respective Board of Studies(BoS) from the academic year 2025-26 onwards, including additions to the list of electives offered.

1. B.E. Aeronautical Engineering
2. B.E. Automobile Engineering
3. B.E. Biomedical Engineering
4. B.E. Civil Engineering
5. B.E. Computer Science and Design
6. B.E. Computer Science and Engg.
7. B.E. Computer Science and Engg. (Cyber Security)
8. B.E. Electronics and Communication Engg.
9. B.E. Electrical and Electronics Engg.
10. B.E. Mechatronics Engineering
11. B.E. Robotics and Automation
12. B.Tech. Artificial Intelligence and Machine Learning
13. B.Tech. Artificial Intelligence and Data Science
14. B.Tech. Biotechnology
15. B.Tech. Computer Science and Business Systems
16. B.Tech. Chemical Engineering
17. B.Tech. Food Technology
18. B.Tech. Information Technology
19. B.E. Mechanical Engineering (V and VI only)

Dr. Prabu recommended that maintaining a detailed record of the changes made in Regulations R2023 compared to Regulations R2019 (Revised) would be beneficial for accreditation purposes. Accordingly, HoDs (Chairpersons of Boards of Studies) will prepare a comprehensive description of these changes. The document will be presented to the Academic Council meeting.

Dr. Suceendran emphasized that dedicating only one unit to 'sustainability goals' within the Environmental Science and Engineering subject is insufficient; he recommended for a comprehensive course on sustainability across all programs. The Principal agreed to address this proposal in the upcoming Board of Studies meetings for all departments.

After a detailed discussion of the various points, the council RESOLVED TO APPROVE the proposed curriculum and syllabus of the various programmes including additions to the list of electives offered.

AC.20.03 Seeking the Council's recommendation for offering (3 years + 1 years) twinning Programme with Arizona State University(ASU), USA, for the following UG programmes , from the academic year 2025-26 onwards:

1. B.E. - Aeronautical Engineering -60 seats
2. B.E. - Computer Science and Engineering – 60 seats
3. B.E. - Electronics and Communications Engineering- 60 seats
4. B.Tech.- Information Technology -60 Seats

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The Boards of Studies of the above programmes have recommended and minutes of the BoS meeting for these programme, MoA (Memorandum of Agreement) between REC and Arizona State University ASU, USA, and Curriculum mapping are submitted for the Council's perusal.

The Principal mentioned that the college has already got No Objection Certificate from Anna University, Chennai to offer for 3+1 twinning programme for B.E. Computer Science and Engineering programme with Binghamton University, USA. We have taken efforts to offer for 3+1 twinning programme with Arizona State University(ASU), USA, also so that cohort admitted for twinning programme will now have two options viz., either Binghamton University, USA or Arizona State University(ASU), USA.

The Council resolved to recommend the starting of the twinning programmes with Arizona State University (ASU), USA and said that necessary permission can be obtained from the Anna University, Chennai for the same.

AC.21.04 : Seeking the Council's recommendations for increase in the intake in the following programmes, from the academic year 2025-26 onwards:

Dean (Academics) presented to the Council the details on the increase in intake for the following programmes applied for the academic year 2025-26

- B.Tech.-Artificial Intelligence and Data Science 300 to 360
- B.E.-Automobile Engineering from 30 to 60
- B.E.-Computer Science and Engineering from 540 to 720
- B.E.-Computer Science and Engineering (Cyber Security) from 120 to 180
- B.E.-Electronics and Communication Engineering from 360 to 480
- B.E.-Mechatronics Engineering from 60 to 120
  Totally 510 seats are proposed to be increased (2970 to 3480) in UG programmes.
- No change in the intake of PG programmes. Intake details of PG courses are given below:

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Dr. Prabu enquired about the steps required for additional faculty, infrastructure, such as laboratories and class rooms to accommodate the increased intake of the students. The Principal responded that faculty recruitment and the development of additional facilities have been completed and are prepared for approval from AICTE and affiliation from Anna University, Chennai.

The Council recommended the increase in the intake in the above mentioned UG programmes.

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AC.21.05 Reporting the following recent developments and achievements:

Dean Academics presented the following recent developments and achievements to the Council.

i. **Established the TANSAM (Tamil Nadu Smart and Advanced Manufacturing Centre) Innovation Center focusing on emerging fields:**
- AR/VR, IoT, and Data Analytics,
- providing access to latest resources,
- advanced laboratories, and expert guidance.
- It enables students to participate in workshops, training programs and projects centered on product development, digital transformation, and sustainable practices.

ii. **NBA Expert Committee visited for the first-time accreditation of**
- B.Tech. Chemical Engineering and
- B.Tech. Food Technology during 24-26 May, 2024.
- Accredited for THREE years - Valid till JUNE 2027

iii. **NBA Expert Team visit for data verification on compliance report for the following 9 UG Programmes, and it is scheduled during Feb 22-23, 2025**

1. B.E. Aeronautical Engineering
2. B.E. Automobile Engineering
3. B.E. Biomedical Engineering
4. B.E. Computer Science and Engg.
5. B.E. Electrical and Electronics Engg.
6. B.E. Mechanical Engineering
7. B.E. Mechatronics Engineering
8. B.Tech. Biotechnology
9. B.Tech. Information Technology

iv. **Subsequently, for the another 3 UG & 1 PG programmes, the team visit is expected in March/April 2025**

1. B.E. Civil Engineering
2. B.E. Electronics and Communication Engg.
3. B.Tech. Computer Science and Business Systems (First Time)
4. M.Tech. Biotechnology

v. **Improvements in faculty research publications for 2023 and 2024, consultancy activities taken up, Patents awarded and sponsored projects secured**

A. Publications Details:

Year	Scopus	SCI
2023	676	160
2024	1073	203

B. Consultancy Activities : Total amount received for consultancy work for the year

Year	Consultancy Amount
2023	Rs.16,08,370/-
2024	Rs.27,17,538/-

C. **Patent Details :**

PATENTS	2023	2024
Total IPR filed	145	212
Patent Granted	5	14
Design registered	18	123
Copyright filed	--	5
Copyright granted	3	3

D. **Research Grants (Total amount received Rs.166.47 lakhs in the year 2024)**

S.No	Title of the project	Investigators	Funding Agency	Fund (in Lakhs.)	Duration (years)
1	Integrated Magneto- Acousto-Dielectrophoresis based microfluidics for the sorting of sperm spermatozoa	Dr. L. Sujatha Prof/ECE	DBT	61.47	2
2	Simulation, Optimization and Validation of Microheaters for low- power Alkali Vapor Cell Assembly	Dr. L. Sujatha Prof/ECE	DRDO-CARS	47	21 months
3	Digitally fusing the traditional knowledge gap to foster the potential use of millets as a nutritious alternative to mitigate the micronutrient deficiencies	Dr. S. Nivethitha Dept of Food Technology	DST- SHRI	58	3

Dr. Prabu suggested that efforts could be taken to obtain 6 years of accreditation from NBA.

The members appreciated the academic developments and the several achievements of the institution.

AC.21.06 : Any other Points with the permission of the chairman

A. **Partial modification in the continuous assessment pattern for theory courses for both Regulations 2019 revised and 2023 for UG Students for improved learning:**

   Existing Clause: 12 in UG Regulations 2019 revised and 2023

12. **Procedure for awarding marks for Continuous Assessment Tests**

   The weightage for continuous assessment for

   - theory subject - 40 %,
   - laboratory 60% ,
   - integrated course (Theory and Laboratory) - 50% and
   - project work 40 % marks.

The marks for these continuous assessments shall be awarded as per the following procedure:

12.1 Theory Courses

Three assessments shall be conducted during the semester. The total marks obtained in all Continuous Assessment Tests (CATs) put together out of 200, shall be proportionately reduced for 40 marks and rounded off to the nearest integer

CAT-I	CAT-II	CAT-III	Other Assessments	Total
Written Test for Unit-1&2	Written Test for Unit-3	Written Test for Unit-4&5	MCQ/Individual Assignment / Case Study / Seminar / Mini Project	Internal Assessment
60	30	60	50	200

Modification in the Clause 12 in UG Regulations 2019 revised and 2023 for approval of the Academic Council

12. Procedure for awarding marks for Continuous Assessment Tests

The weightage for continuous assessment for

- theory subject - 40 %,
- laboratory 60% ,
- integrated course (Theory and Laboratory) - 50% and
- Project work 40 % marks.

The marks for these continuous assessments shall be awarded as per the following procedure:

12.1 Theory Courses

Three assessments shall be conducted during the semester. The total marks obtained in all Continuous Assessment Tests (CATs) put together out of 250, shall be proportionately reduced for 40 marks and rounded off to the nearest integer

CAT-I First 2½ units	CAT-II Second 2½ units	CAT-III all 5 units	MCQ/Individual/ Assignment / Case Study / Seminar / Mini Project	Total Internal Assessment
75	75	50	50	250

Dean Academics added that there is no change in the continuous assessment of laboratory 60% , integrated courses (Theory and Laboratory) - 50% and Project work 40 % marks and it has been implemented in the academic year 2024-25 onwards,

The COUNCIL RESOLVED to ratify the modification implemented in the **pattern of continuous assessment test for the** *theory courses in UG the programmes as per regulations 2023 and 2019 Revised.*

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B. Revising the Vision and Mission

Existing version	Proposed version
Vision : To be an institution of excellence in Engineering, Technology and Management Education & Research. To provide competent and ethical professionals with a concern for society.	**Vision :** To be a Global Leader in Engineering, Technology and Management education, research and innovation, empowering individuals to drive transformative change and create a sustainable future.
Mission: • To impart quality technical education imbibed with proficiency and humane values • To provide right ambience and opportunities for the students to develop into creative, talented and globally competent professionals. • To promote research and development in technology and management for the benefit of the society.	**Mission :** • To provide a transformative learning experience nurturing innovation, design thinking, lifelong learning for global competence. • To forge cutting-edge research through inter-disciplinary academia and industry collaborations to address sustainability, energy and environmental challenges. • To promote diversity, inclusivity and leadership upholding humane values and ethics
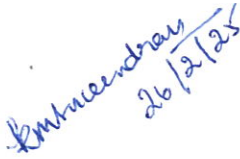
The council reviewed the institution's current vision and mission statements alongside the revised draft that incorporates emerging technologies, prepared by a Committee appointed by the Principal.
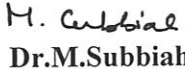
Dr. Prabu recommended that the revised draft be circulated to all the council members via email for their feedback.

The meeting ended with the Chairman & Member Secretary proposing a vote of thanks for the valuable inputs of the Members.

Dr.S.Balasivanandha Prabu
University Representative

Dr.S.R.Devadasan
University Representative
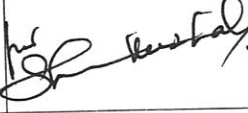
Dr. Suceendran K.M
Industry Representative

Dr.M.Subbiah
Academician
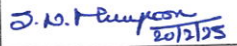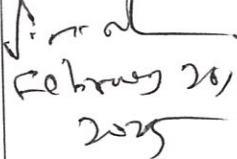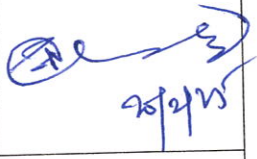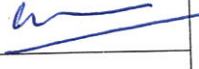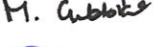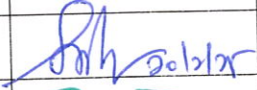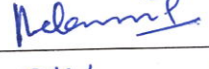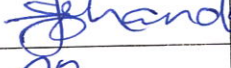
Dr.C.R.Muthukrishnan
Academician
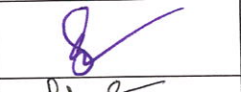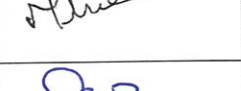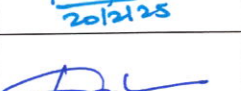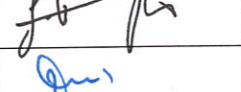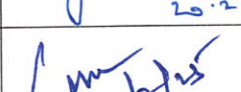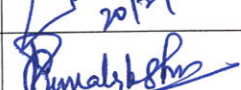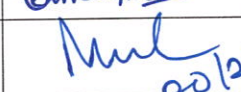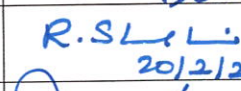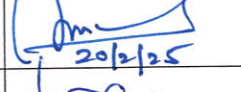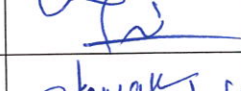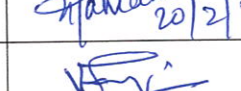
Dr.V.Murali Bhaskaran
Member Secretary

Dr.S.N.Murugesan
Chairman- Academic Council

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ATTENDANCE SHEET – 21st MEETING OF THE ACADEMIC COUNCIL
on 20-02-2025 at 11.00 a.m. in the Conference Hall

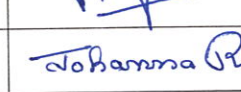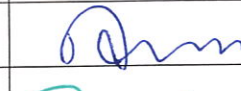| S.No.	Name of the Academic Council Member	Category	Signature
1.	Dr. S.N.Murugesan	Principal & Chairman	J.N. Murugesan 20/2/25
2.	Dr.S.R.Devadasan Professor Department of Production Engineering PSG College of Technology Peelamedu, Coimbatore – 641 004	University Representative	February 20, 2025
3.	Dr.S.Balasivanandha Prabu Professor and Head Department of Mechanical Engineering CEG Campus, Anna University, Chennai – 600 025	University Representative	20/2/25
4.	Dr.R.Senthil Professor, Dept, Civil Engineering, CEG, Anna University, Chennai-600 025	University Nominee	
5.	Prof. Satyanarayanan R. Chakravarthy Professor Department of Aerospace Engineering IITM, Chennai	Academician	
6.	Dr. Suceendran K.M. Techno HR Leader, Digital Evangelist, Head - Academic Alliances TCS, Chennai	Industry Representatives	Ksuceendra
7.	Dr.C.R.Muthukrishnan Advisor, Rajalakshmi Institutions	Academician	
8.	Dr.M.Subbiah, Professor Emeritus, Department of Electrical and Electronics Engineering	Academician	M. Subbiah
9.	Dr. S.P.Srinivasan Vice Principal	Member	20/2/25
10.	Dr. M. Muthusamy COE and HoD H&S	Member	
11.	Dr.M.Palanivelan Director (PG studies)	Member	Palanivel
12.	Dr. Suresh Chandra Khandai HOD, Aeronautical Engineering	Member	Khandai
13.	Dr.J.M.Gnanasekar Professor & HOD Artificial Intelligence and Data Science	Member	
14.	Dr.K.Sekar Professor & HOD Artificial Intelligence and Machine Learning	Member	Sekar

15.	Dr. K. Bhaskar Professor & HOD, Automobile Engineering	Member	
16.	Dr.S.Rajkumar Professor &HOD, Biomedical Engineering	Member	
17.	Dr. M.Sankar Professor & HOD, Biotechnology	Member	
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19.	Dr. S.Geetha Professor & HOD, Civil Engineering	Member	
20.	Dr.K.Devaki Professor & HOD, Computer Science and Business System	Member	
21.	Mr.S.Umamaheswararao Professor & HOD, Computer Science & Design	Member	
22.	Dr. P.Kumar Professor & HOD, CSE	Member	
23.	Mr.Benedict Jayaprakash Nicholas HoD - CSE (Cyber Security)	Member	
24.	Dr.L.Bhagyalakshmi Professor & HOD, Electronics & Communication Engineering	Member	
25.	Dr. C.Kamalakannan Professor & HOD, Electrical & Electronics Engineering	Member	
26.	Dr.K.Ramalakshmi Professor & HOD, Food Technology	Member	
27.	Dr. P.Valarmathie Professor & HOD, Information Technology	Member	
28.	Dr. R.Shanthi Professor & HOD, Mechanical Engineering	Member	
29.	Dr.Ritesh Ramakrishna Bhat Professor & HOD, Mechatronics Engg.	Member	
30.	Dr. R. Giri Professor & HOD, Robotics & Automation	Member	
31.	Dr. M.Uma Raman, Professor &HOD, Management Studies	Member	
32.	Dr.V.Prasanna Kumari, Coordinator - IQAC	Teachers' Representative	
33.	Dr. Johanna Rajkumar, Dean , Biotechnology	Teachers' Representative	
34.	Mr.I.Philip Praveen, Director (Training & Placement)	Teachers' Representative	
35.	Dr. V. Murali Bhaskaran, Dean (Academics)	Member Secretary	