# KPR Institute of Engineering and Technology
## (Autonomous)

KPRIET
Learn Beyond

**10th ACADEMIC COUNCIL**

**MINUTES OF THE MEETING**

Venue: The Legend, Imperial Hall, KPRIET (Hybrid Mode)

Date: 25 May 2024

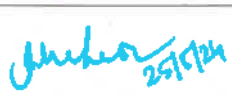
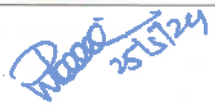
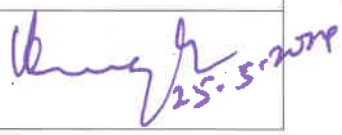
Time: 10.30 am

Meeting ID: https://zoom.us/j/92411260441?pwd=RkcrQVE5M1FFNzhxTUlvS0RDZ3pxZz09

**Members Present:**

| S. No | Name of the member | Category | Signature |
|---|---|---|---|
| 1. | Dr. D. Saravanan, Principal | Chairman | 25/5/24 |
| 2. | Dr. V. Manikandan<br>Professor, Department of EEE<br>Coimbatore Institute of Technology<br>Coimbatore | Anna University Nominee | 25/5/24 |
| 3. | Dr. P. Sathiya<br>Professor, Department of Production Engineering,<br>National Institute of Technology<br>Trichy | Anna University Nominee | 25/5/24 |
| 4. | Dr. C. Santhi<br>Professor and Head<br>Department of Electronics and Communication Engineering<br>Government College of Technology<br>Coimbatore | Anna University Nominee | 25/5/24 |
| 5. | Dr. P. Ramkumar<br>Associate Professor<br>Department of Mechanical Engineering, IIT Madras Chennai | Academic Expert | ONLINE |
| 6. | Dr. Vijay Natarajan<br>Department of Computer Science and Automation<br>Indian Institute of Science<br>Bangalore | Academic Expert | ONLINE |
| 7. | Mr. R. Balasubramanian<br>Advisor, Lead SME – Civil Engg.<br>College Connect, L&T EduTech<br>Chennai | Industry Expert | ONLINE |

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|---|---|---|---|
| 8. | Dr. Arun Kumar Kaushik<br>Associate Dean for Academic Affairs and Professor of Economics<br>O.P. Jindal Global University<br>Private university in Sonipat Haryana. | Economist | |
| 9. | Dr. A. M. Natarajan<br>Chief executive | Management Representative | |
| 10. | Dr. S. V. Sudha<br>Professor & HoD<br>Artificial Intelligence and Data Science | Member | 25/5/24 |
| 11. | Dr. D. Ganeshkumar<br>Professor & HoD<br>Biomedical Engineering | Member | 25/05/2024 |
| 12. | Dr. S. Balasubramanian<br>Professor & HoD<br>Chemical Engineering | Member | 25/5/2024 |
| 13. | Dr. G. Anusha<br>Professor & HoD<br>Civil Engineering | Member | 25/5/24 |
| 14. | Dr. R. Devipriya<br>Professor & HoD<br>Computer Science and Engineering | Member | 25/5/24 |
| 15. | Dr. R. Devipriya<br>Professor & HoD<br>Computer Science and Engineering (AI&ML) | Member | 25/5/24 |
| 16. | Dr. A. Bazila Banu<br>Professor & HoD<br>Computer Science and Business Systems | Member | 25/5/24 |
| 17. | Dr. M. Kathirvelu<br>Professor & HoD<br>Electronics and Communication Engineering | Member | 25/5 |
| 18. | Dr. K. Mohanasundaram<br>Professor & HoD<br>Electrical and Electronics Engineering | Member | |
| 19. | Dr. T. Sivakumar<br>Associate Professor & HoD<br>Information Technology | Member | 25/5/24 |
| 20. | Dr. S. Ramesh Babu<br>Professor & HoD<br>Mechanical Engineering | Member | 25/5/24 |
| 21. | Dr. R. Kiruba Shankar<br>Professor & HoD<br>Mechatronics Engineering | Member | 25/5/24 |

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|---|---|---|---|
| 22. | Dr. M. Hema<br>Associate Professor & HoD<br>Science & Humanities | Member |  |
| 23. | Dr. K. Karthikeyan<br>Professor & HoD<br>Mathematics | Member |  |
| 24. | Dr. S.Ananth<br>Professor & HoD<br>Physics | Member |  |
| 25. | Dr. M.S. Karthikeyan<br>Professor & HoD<br>Chemistry | Member |  |
| 26. | Dr. T. Jayasudha<br>Assistant Professor (Sl.G) & HoD<br>English | Member |  |
| 27. | Dr. R. Maheswar<br>Director, CFRD | Senior Faculty |  |
| 28. | Dr. B. Thamaraikannan<br>Director<br>Career Development Centre | Senior Faculty |  |
| 29. | Dr. R. Manjula devi<br>Head, IQAC | Senior Faculty |  |
| 30. | Dr. D. Venugopal<br>Professor<br>Electronics and Communication Engineering | Senior Faculty |  |
| 31. | Dr. P. Narayanasamy<br>Professor<br>Electrical and Electronics Engineering | Controller of Examinations |  |
| 32 | Dr. A. Balamurugan<br>Director<br>Centre for Academic Courses | Member Secretary |  |

The Industry Expert members Mr. D. Suresh, Centre Head, Spark MINDA Technical Centre (SMIT), Pune, Mr. Prem Narayanan, Engineering Manager, GCP, Google India Pvt Ltd, Hyderabad, could not attend the meeting due to their prior commitments and unavoidable circumstances.

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**Minutes of the 10th Academic Council Meeting held on 25.05.2024:**

Welcome address was delivered by the Chairman of Academic Council and outlined the various agenda points to be presented in the meeting. The Institute Vision and Mission were disseminated.

The Chairman of Academic Council requested the Director, Centre for Academic Courses to move the following agenda items.

**1. Institute's accomplishments and facilities**

The Director, Centre for Academic Courses presented the Institute's accomplishments and available facilities. The key topics discussed during the meeting include:

- Vision and Mission of the Institute
- Staff and Students details
- Scholarship details
- Students' performance
    - Placement details
    - Higher Studies
- Research and Development
- Notable achievements
- Foreign University collaborations
- Higher studies
- Faculty participation in FDP / STTP

**2. Confirmation of the minutes of 9th Academic Council Meeting:**

The Academic council members confirmed the minutes of 9th academic council meeting held on 05.01.2024.

**3. Action taken on the minutes of the 9th Academic Council Meeting:**

The minutes of the 9th Academic Council Meeting and the action taken thereon were approved.

| S. No. | Minutes of 9th ACM | Action taken |
|---|---|---|
| 1. | Suggested to provide outcomes of collaborations with foreign universities | Presented |
| 2. | Suggested to include QS ranking of foreign universities where the students shall pursue their higher studies | Presented |
| 3. | Suggested to include details of faculty members attending FDP and STTP | Presented |

**4. Amendments in Regulations 2021 (UG Programme)**

The Director, Centre for Academic Courses presented the following amendments in Regulations 2021.

**4.1. Amendments in Clause 15.2.4 Honours and Minor degree:**

**Existing:**

For the category B.E. / B. Tech. Honours (Specialization in the same discipline) and B.E. / B. Tech. Honours, the students will be permitted to register the courses from **5th semester onwards** provided the marks earned by the students until 3rd semester should be of CGPA 7.50 and above and cleared all the courses in the first attempt.

For the category B.E. / B. Tech. (Minor in other specialization), the students will be permitted to register the courses from **5th semester onwards** provided the marks earned by the students until 3rd semester should be of CGPA 7.50 and above.

**Amended:**

For the category B.E. / B. Tech. Honours (Specialization in the same discipline) and B.E. / B. Tech. Honours, the students will be permitted to register the courses from **3rd semester onwards** provided the students continue to maintain a CGPA of 7.50 and above throughout their course of study and clear all the courses in the first attempt.

For the category B.E. / B. Tech. (Minor in other specialization), the students will be permitted to register the courses from **3rd semester onwards** provided students continue to maintain a CGPA of 7.50 and above throughout their course of study.

**4.2. Addition in Clause 4.1: (Micro Specialization)**

Students may optionally undergo Micro Specialization. The students should have earned a minimum of 12 credits additionally in any one of the following verticals from 3rd semester. Upon Successful completion of the courses, it will be indicated in the semester grade sheet and in the consolidated grade sheet. In this 10th Academic Council Meeting, following Specialisations were proposed.

Vertical I : Motors for Engineering Applications

Vertical II : Water and Water Treatment

Vertical III : Long Term English

**4.3. Addition in Clause 4.1: Capsule Courses - Non-Mandatory Non-Credit Courses:**

Students may optionally undergo Capsule Courses (6 – 8 hours). Upon completion of the course, it will be indicated in the semester grade sheet and in the consolidated grade sheet.

1. Blog Writing
2. Story Telling for Image Building

**4.4. Addition in Clause 11.9: Credits for National / International Professional Certifications:**

Students may optionally undergo National/International professional certification courses, and if a student successfully completes the course, 1 / 2 / 3 credits may be allotted with prior approval from the Head of the Institution and the Centre for Academic Courses. If the student earns three credits, the student may drop one Professional Elective.

Otherwise, the credits earned by the student will be indicated in the semester grade sheet and in the consolidated grade sheet as additional credits. These additional credits will not be considered for GPA/CGPA calculations.

Members of the council reviewed and approved the above amendments under Regulations 2021. They also suggested conducting a series of awareness and counseling sessions about the significance and flexibility of Honours and Minor degrees, and Micro specializations, for the students.

**5. Presentation by Chairpersons of various Board of Studies**

Board of Studies meeting was conducted for various programmes in hybrid mode as mentioned below:

| Sl. No | Name of the Board | Meeting Number | Date of the meeting |
|---|---|---|---|
| 1 | Artificial Intelligence and Data Science | 09 | 11.05.2024 |
| 2 | Biomedical Engineering | 10 | 09.05.2024 |
| 3 | Chemical Engineering | 10 | 10.05.2024 |
| 4 | Civil Engineering | 11 | 10.05.2024 |
| 5 | Computer Science and Engineering | 11 | 11.05.2024 |
| 6 | Computer Science and Engineering (AI & ML) | 05 | 11.05.2024 |
| 7 | Computer Science and Business Systems | 05 | 11.05.2024 |
| 8 | Electronics and Communication Engineering | 11 | 08.05.2024 |
| 9 | Electrical and Electronics Engineering | 10 | 09.05.2024 |
| 10 | Information Technology | 05 | 11.05.2024 |
| 11 | Mechanical Engineering | 11 | 08.05.2024 |
| 12 | Mechatronics Engineering | 05 | 11.05.2024 |
| 13 | Science and Humanities | 10 | 10.05.2024 |

The 10th Standing Committee Meeting was held on 17.05.2024 at The Legend. The Standing Committee reviewed the recommendations of the above Bboards of Studies presented by the respective chairperson and forwarded the same to the academic council for approval.

Chairpersons of various boards presented the following recommendations:

**Dr. S. V. Sudha, Chairperson, Artificial Intelligence and Data Science** moved the following items recommended by the Board of Studies of Artificial Intelligence and Data Science.

1. The inclusion of Industry offered one credit course U21OAD06 - Building Dashboards using Streamlit under Regulations 2021.

2. The inclusion of following value-added courses under Regulations 2021
    1. U21VAD01 - Data Visualization using PowerBI and Tableau
    2. U21VAD02 - Fundamentals of DevOps

**Dr. D. Ganesh Kumar, Chairperson, Biomedical Engineering** moved the following items recommended by the Board of Studies of Biomedical Engineering:

1. The inclusion of new Professional Elective vertical VI - Medical Systems with the following courses under Regulations 2021.
    1. U21BMP41 - Ophthalmology Systems
    2. U21BMP42 - Pulmonology Systems
    3. U21BMP43 - Gynaecology and Obstetrics Systems
    4. U21BMP44 - Neurology Systems
    5. U21BMP45 - Orthopedics Systems
    6. U21BMP46 - Urologic and Nephralgic Systems
    7. U21BMP47 - Chemotherapy Techniques
    8. U21BMP48 - Pediatric Systems
2. The inclusion of following Industry offered one credit course under Regulations 2021
    1. U21OBM03 - Medical Coding
    2. U21OBM04 - Design and Implementation of Biomedical Circuits

**Dr. S. Balasubramanian, Chairperson, Chemical Engineering** moved the following items recommended by the Board of Studies of Chemical Engineering:

1. The inclusion of following value-added courses under Regulations 2021
    1. U21VCH04 - Biofertilizers
    2. U21VCH05 - Material Surface Characterization
    3. U21VCH06 - Petroleum and Gas Processing
    4. U21VCH07 - Safety Aspects of Petroleum Product Testing

**Dr. G. Anusha, Chairperson, Civil Engineering** moved the following items recommended by the Board of Studies of Civil Engineering:

1. The inclusion of new Professional Elective vertical VII - Infrastructure Engineering with the following courses under Regulations 2021.
    1. U21OCE11 - Basics of Urban and Rural Infrastructure – Pre-Requisite course for other programmes
    2. U21CEP42 - Infrastructure Planning and Engineering

3. U21CEP43 - Infrastructure Financing
4. U21CEP44 - Project Management for Infrastructure Development
5. U21CEP45 - Remote Sensing and GIS for Infrastructure planning
6. U21CEP46 - EIA for Infrastructure Projects
7. U21CEP47 - Mini Project

2. The inclusion of Micro Specialization in Water and Water Treatment with the following courses under Regulations 2021.
    1. U21MCG01 - Sustainable Water Management: Principles and Practices
    2. U21MCG02 - Water Treatment Essentials: Principles and Practices
    3. U21MCG03 - Plumbing – Theory and Practice
    4. U21MCG04 - Experiential Project
3. The inclusion of industry offered One Credit Course U21OCE10 - Architecture and Visualization for UG Programme under Regulations 2021.
4. The inclusion of Value-Added Course U21VCE05 - Estimating and Costing using Estima Software for UG Programme under Regulations 2021.

**Dr. R. Devipriya, Chairperson, Computer Science and Engineering** moved the following item recommended by the Board of Studies of Computer Science and Engineering:

1. The inclusion of a course U21OCS05 - Data Engineering with Pyspark to the list of industry offered One Credit Courses under Regulations 2021.

**Dr. R. Devipriya, Chairperson, Computer Science and Engineering (AI&ML)** moved the following items recommended by the Board of Studies of Computer Science and Engineering (AI&ML):

1. The inclusion of industry offered One Credit Courses U21OAM03 - Ethical Hacking Tools and Techniques and U21OAM04 - Chatbot Development (Text and voice AI) under Regulations 2021.
2. The inclusion of Value-Added Courses U21VAM02 - Frontend and Backend Frameworks and U21VAM03 - AR/VR Industry Trends and Future Directions under Regulations 2021.

**Dr. A. Bazila Banu, Chairperson, Computer Science and Business Systems** moved the following recommended by the Board of Studies of Computer Science and Business System:

1. The inclusion of industry offered One Credit Courses U21OCB04 - Google Firebase and MIT based IoT Applications and U21OCB05 - Docker on Linux under Regulations R2021.
2. The inclusion of Value - Added Courses U21VCB02 - Cloud Computing and U21VCB03 - Mobile App Development under Regulations R2021.

**Dr. M. Kathirvelu, Chairperson, Electronics and Communication Engineering** moved the following items recommended by the Board of Studies of Electronics and Communication Engineering:

1. The inclusion of the following pre-requisite courses under Professional Elective verticals for the students opting for Minor Degree from other B.E. / B.Tech Programmes under regulations 2021 from the Academic year 2024-2025

1. Vertical 1: VLSI Design
    - U21ECP49 – Introduction to VLSI Design
2. Vertical 3: Sensor Technologies and IoT
    - U21ECP50 - Embedded Controllers
    - U21ECP51 - Introduction to Internet of Things

2. The inclusion of the following professional electives for PG programme under Regulations 2023 from academic year 2024-2025.
    1. P23VLP21 - RFIC Design
    2. P23VLP22 - Physical VLSI Design
    3. P23VLP22 - Nanoscale Devices and Circuit Design

**Dr. K. Mohanasundaram, Chairperson, Electrical and Electronics Engineering** moved the following items recommended by the Board of Studies of Electrical and Electronics Engineering:

1. The inclusion of U21EE702 – Electrical Applications Laboratory in semester VII in lieu of U21EE702 - Special Laboratory under Regulations 2021.
2. The inclusion of the following courses as open electives under Regulations 2021:
    1. U21EEX06 - Solar PV system; Installation and Maintenance
    2. U21EEX07 - Optimization Techniques for Engineering Applications
3. The inclusion of Micro Specialization in Motors for Engineering Applications with the following courses under Regulations 2021.
    1. U21MCG09 - Fundamentals of Electric Motors
    2. U21MCG10 - Basics of Motors Design
    3. U21MCG11 - Advanced Electric Motors
    4. U21MCG12 - Motor Controllers for Engineering Applications
4. The inclusion of Value - Added Course U21VEE04 - Home Automation and Simulation Software for Electrical Engineers for UG Programme under Regulations 2021.
5. The inclusion of following Industry offered one credit course under Regulations 2021
    1. U21OEE07 - Electrical System Design for Buildings
    2. U21OEE08 - Introduction to PLC for Electric Drives
6. The inclusion of Ph.D Course work course: P23EEP05 - Energy Forecasting, Modeling and Project Management

**Dr. T. Sivakumar, Chairperson, Information Technology** moved the following items recommended by the Board of Studies of Information Technology:

1. The inclusion of industry offered One Credit Courses U21OIT03 - Bigdata Analytics and U21OIT04 - Programming for Data Analytics under Regulations 2021.
2. The inclusion of Value - Added Courses U21VIT03 - Statistics for Data Science and “U21VIT04 - Social Media Security” under Regulations 2021

**Dr. S. Ramesh Babu, Chairperson, Mechanical Engineering** moved the following items recommended by the Board of Studies of Mechanical Engineering:

1. The inclusion of following Industry offered one credit courses for UG Programme under Regulations 2021
    1. U21OME13 - Introduction to Robotic Welding
    2. U21OME14 - Robot Programming
    3. U21OME15 - Non-Destructive Testing
2. The inclusion of following Valu - Added courses for UG Programme under Regulations 2021
    1. U21VME11 - Multi-body Dynamics Analysis using ADAMS
    2. U21VME12 - Design of Experiments using Minitab
    3. U21VME13 - Plant Layout using Tecnomatix

**Dr. R. Kiruba Shankar, Chairperson, Mechatronics Engineering** moved the following items recommended by the Board of Studies of Mechatronics Engineering.

1. The change of Professional Elective Vertical as mentioned below:

| **Vertical III : Smart Mobility Systems** (**Existing**) | **Vertical III : Automotive Engineering and Technology** (***Revised***) |
|---|---|
| Vehicle Dynamics | Fundamentals of Automotive Engineering and Technology |
| Automotive Electronics | Automotive Electrical, Electronics and Control Systems |
| Automotive Mechatronic Systems | Automotive Thermal Management Systems |
| Smart Mobility and Intelligent Vehicle Systems | Vehicle Body Dynamics |
| Advanced Driver Assistance Systems | Autonomous Vehicle Systems |
| Automotive System Modelling and Simulation | Design Principles of Hybrid and Electric Vehicles |
| Automotive Fault Diagnostics | Energy Storage and Management for Electric Vehicles |
| Vehicle Maintenance and Repair | Automotive Fault Diagnostics |

2. The inclusion of additional industry offered One Credit Courses under Regulations 2021
    1. U21OMI03 - Electric Mobility for Two-Wheelers
    2. U21OMI04 - Robot Streamlining Manufacturing Processes
    3. U21OMI05 - ROS for Absolute Beginners
    4. U21OMI06 - MATLAB Fundamentals
    5. U21OMI07 - MATLAB Programming Techniques

**Dr. M. Hema, Chairperson, Science & Humanities** moved the following items recommended by the Board of Studies of Science & Humanities.

1. The inclusion of U21PHX03 - Physics of Materials as Open Elective Course for the UG Programme for the IV semester under Regulations 2021
2. The inclusion of Micro Specialization in Long Term English with the following courses under Regulations 2021.
    1. U21MCG05 - Art of Interaction and Eloquence
    2. U21MCG06 - English for Competitive Exams
    3. U21MCG07 - English for Specific Purposes
    4. U21MCG08 - Pronunciation and Articulation
3. The inclusion of P23CYP08 - Applied Electrochemistry and Energy Devices course in PhD course work list under Regulations 2023.
4. The inclusion new vertical VI Mathematics and Statistics for Data Science and Modeling with the following courses under Institute level Minor Degree verticals for UG Programme under Regulations 2021
    1. U21MDG40 - Matrix Theory and Linear Algebra
    2. U21MDG41 - Probability Theory and Distributions
    3. U21MDG42 - Statistical Inference
    4. U21MDG43 - Regression Analysis
    5. U21MDG44 - Design and Analysis of Experiments
    6. U21MDG45 - Optimization Techniques

**Dr. P. Umadevi, Assistant Professor and Assistant Controller of Examinations,** presented the Draft Regulations 2024 and the curriculum for the Master of Business Administration program, which will be introduced from the academic year 2024-2025.

Members of the council reviewed and approved the recommendations of various boards.

**8. Any other matters**

1. Dr. P. Sathya inquired about the students not interested in placement, and the Chairman, Academic Council mentioned options for higher studies and entrepreneurship.
2. Dr. P. Sathya suggested to include the details of funded FDP and STTPs organized in the next ACM.
3. Dr. Arun Kumar Kaushik inquired about the types of consultancy services undertaken by the faculty members. The IIPC Head informed that most of the consultancy services are IT-based.
4. Dr. P. Sathya suggested to include details of professors under whom students are undertaking international internships.
5. Dr. C. Santhi inquired about the details of patents granted. The Director of CFRD informed that there are four design-based patents and four product-based patents have been granted.
6. Members of the council inquired about the commercialization of the granted patent, and the Chairman, Academic Council informed that steps will be taken in due course.
7. Dr. V. Manikandan inquired about the evaluation pattern, and the Controller of Examinations stated that the pattern set by Anna University is followed.

8. Members of the council suggested engaging professionals from outside to handle long-term English micro specialization courses.
9. Members of the council inquired about the faculty expertise to handle different institute-level minor degree courses / Micro specialization courses. The Chairman of the academic council informed them that visiting faculty members have been recruited to handle those courses, and expertise from our arts college can also be utilized if required.
10. Dr. P. Sathya inquired about the types of certifications, and the Chairman of the academic council informed that the certificates are offered by various registered professional bodies and industries such as CCNA certifications, ORACLE Certification, AutoDesk certifications, etc.
11. Dr. C. Santhi suggested to include courses related to Bio - Signal processing and analysis in Medical Systems Professional Elective Verticals for BME UG Programme and Dr. D. Ganeshkumar, Chairperson of BME, explained the related courses included in the core courses.
12. Dr. R. Balasubramanian suggested to include one or two courses in Artificial Intelligence and Machine learning in the Vertical VI - Mathematics and Statistics for Data Science and Modeling.

**9. Closing Remarks by Chairman**

Dr. D. Saravanan, Chairman of the Academic Council, informed the members about the new initiatives for the upcoming semesters:

1. The process for framing new Regulations 2025 has been started for the students of UG and PG programs admitted from the academic year 2025-2026.
2. Installation of supercomputers worth about 1.5 crores in association with IIT Palakkad.

Finally, Dr. A. Balamurugan, Director of the Centre for Academic Courses, thanked all the members for their fruitful discussion and valuable suggestions, and the meeting came to an end.

**Prepared by** 01.12.2024

**Dr. A. Balamurugan, Member Secretory**

01/12/24

**Reviewed By**

**Dr. D Saravanan, Chairman**