THIAGARAJAR COLLEGE OF ENGINEERING: MADURAI 625 015
(An Autonomous Institution Affiliated to Anna University)

MINUTES OF THE SIXTY SEVENTH MEETING OF ACADEMIC COUNCIL

The Sixty Seventh meeting of the Academic Council was held on 25th May 2024 at 10.30 AM in Guest House Conference Hall under the Chairmanship of Dr.M.Palaninatha Raja, Principal i/c. The following members were present.

1.	Dr. M. Ramanathan	Professor and Head, Department of Engineering Design, Indian Institute of Technology, Madras. Chennai
2.	Dr. S. Mary Saira Bhanu	Professor and head, Department of CSE, NIT, Trichy
3.	Dr. S. Sridhar	Professor and Head, Department of Information Science and Technology, CEG Campus, Anna University, Chennai
4.	Dr. S. Sidhardhan	Former Principal, Government College of Engineering, Tirunelveli
5.	Dr. Raviprakash R Salagme	Board Member & Director for Global Industry Program, IUCEE
6.	Dr. S.J. Thiruvengadam	Dean (Academic Process) and Member Secretary
7.	Dr. R. Velkennedy	Dean (Co-curricular and Extracurricular Activities)
8.	Dr. S. Rajaram	Registrar and Head, Dept. of ECE
9.	Dr. S. Chandran	Dean (Students)
10.	Dr. G.K. Raajesh	Dean (Industry Institute Interface)
11.	Dr. K. Sudalaimani	Head, Dept. of Civil Engineering
12.	Dr. A. Valan Arasu	Head, Dept. of Mechanical Engineering
13.	Dr. C.K. Babulal	Head, Dept. of Electrical and Electronics Engineering
14.	Dr. S. Mercy Shalinie	Dean (MIS) and Head, Dept. of CSE
15.	Dr. C. Deisy	Head, Dept. of Information Technology
16.	Dr. S. Jeyabharathi	Head, Dept. of Mathematics
17.	Dr. G. Kanagaraj	Professor, Dept. of Mechatronics
18.	Dr. S. Parthasarathy	Head, Dept. of AMCS
19.	Dr. S. Muthuramalingam	Controller of Examinations
20.	Dr. V.R. Venkatasubramani	Associate Professor, Dept. of ECE
21.	Dr. B. Subbulakshmi	Assistant Professor, Dept. of CSE.
22.	Dr. S. Vijayalakshmi	Professor (CAS), Dept. of Computer Applications
23.	Dr. A. Malini	Associate Professor, Department of CSBS
24.	Ar. S. Thanga Lavanya	Associate Professor, Dept. of Architecture
25.	Dr. C. Jeyamala	Asso. Professor, Department of Information Technology
26.	Dr. B. Ashok Kumar	Asso. Professor, Department of EEE
27.	Dr. D. Anitha	Asst. Professor (Selection Grade), Department of AMCS.
28.	Mrs. S. Pudhumalar	Asst. Professor, Department of Information Technology
29.	Dr. M.S. Govardhanan	Asst. Professor, Department of Mechanical Engineering

The following members had expressed their inability to attend the meeting due to their pre-occupation.

1.	Mr. M.V. Ramana Murthy	Director & Head, R&D Operations, Ericsson R&D, Bengaluru
2.	Dr. D.K.Subramanian	Former Professor, Indian Institute of Science, Bengaluru
3.	Dr.S.Baskar	Dean (Research and Development)
4.	Dr. Jinu Loushidha Kitcheley	Head, Department of Architecture
5.	Dr.M.Mahendran	Head, Department of Physics
6.	Dr.M.Kottaisamy	Head, Department of Chemistry
7.	Dr.R.Sanjay Kumar	Associate Professor, Department of Civil Engineering

The agenda for the meeting:
- To consider the business brought forward by the Boards of Studies and by the Standing Committee of the Academic Council.
- To discuss any other matter pertaining to the academic activities of the college.

67.01 To confirm the minutes of the 66th meeting of the Academic Council held on 16th December 2023.

Resolved to confirm the minutes of the 66th meeting of the Academic Council held on 16th December 2023 as there were no comments on the minutes.

67.02 To review the action taken on the Minutes of the 66th meeting of the Academic Council held on 16th December 2023

The Chairman presented the actions taken on the suggestions made during the 66th meeting of the Academic Council. The Council resolved to ratify the actions taken as presented.

67:03 To consider the recommendations of the Board of Studies of Civil Engineering to introduce Interdisciplinary Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–A.**

Resolved to approve the detailed syllabus for the Interdisciplinary Elective Courses for B.E /B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:04 To consider the recommendations of the Board of Studies of Civil Engineering to introduce Industry Supported Courses for B.E. (Civil Engineering) Degree Programme as given in **Annexure–B**.

Resolved to approve the detailed syllabus for the industry supported courses for B.E (Civil Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:05 To consider the recommendations of the Board of Studies of Civil Engineering to revise the syllabus for the course 21SE171 Structural Engineering Laboratory M.E. (Structural Engineering) Degree programme as given in **Annexure–C**.

Resolved to approve the detailed syllabus for the course 21SE171 Structural Engineering Laboratory M.E. (Structural Engineering) Degree programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2023-24 onwards.

67:06 To consider the recommendations of the Board of Studies of Mechanical Engineering to introduce the Interdisciplinary Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–D.**

Resolved to approve the detailed syllabus for the Interdisciplinary Elective Courses for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted in the academic year 2022-23 onwards.

67:07 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce revised Scheduling of Courses, Syllabus for Fifth and Sixth Semesters, Elective courses for B.E. (Electronics and Communication Engineering) Degree Programme, Guidelines for Project courses and Syllabus for the course *22CHAC0 Essence of Indian Knowledge* for B.E./B.Tech. Degree Programmes as given in **Annexure–E**

Resolved to approve the revised Scheduling of Courses, Syllabus for Fifth and Sixth Semesters, Elective courses for B.E. (Electronics and Communication Engineering) Degree Programme, Guidelines for Project courses and Syllabus for the course 22CHAC0 Essence of Indian Knowledge for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:08 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce the Interdisciplinary Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–F.**

Resolved to approve the detailed syllabus for the Interdisciplinary Elective Courses for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:09 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce the Industry Supported Courses for B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure–G.**

Resolved to approve the detailed syllabus for the Industry Supported Courses for B.E. (Electronics and Communication Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:10 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to revise and introduce new courses for B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure–H.**

Resolved to approve the revision and introduction of new courses for B.E. (Electronics and Communication Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2023-24 onwards.

67:11 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce the courses *24EC240 Digital Circuit Design* and *24EC280 Digital Circuit Design Laboratory* for B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure–I.**

Resolved to approve the introduction of the courses 24EC240 Digital Circuit Design and 24EC280 Digital Circuit Design Laboratory for B.E. (Electronics and Communication Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2024-25 onwards.

67:12 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce the new elective courses for M.E. (Communication Systems) Degree Programme as given in **Annexure–J.**

Resolved to approve the introduction of the new elective courses for M.E. (Communication Systems) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2023-24 onwards.

67:13 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce the curriculum and syllabus for first and second semesters of B.E. Degree Programme in Computer Science and Engineering (AI & ML) as given in **Annexure–K.**

Resolved to approve the introduction of the curriculum and syllabus for first and second semesters of B.E. Degree Programme in Computer Science and Engineering (AI & ML) as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2024-25 onwards.

67:14 To consider the recommendations of the Board of Studies of Computer Science and Engineering to revise the assessment pattern of the course *21CSH10 Accounting and Economics* for B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure–L.**

Resolved to approve the revision of the assessment pattern of the course 21CSH10 Accounting and Economics for B.E. (Computer Science and Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:15 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce the elective course *21CSRL0 Large Language Models* for B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure–M.**

Resolved to approve the introduction of the elective course 21CSRL0 Large Language Models for B.E. (Computer Science and Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:16 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce interdisciplinary elective courses for B.E./B.Tech. Degree Programmes as given in **Annexure–N.**

Resolved to approve the introduction of the interdisciplinary elective courses for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:17 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce industry supported courses for B.E. (Computer Science and Engineering) Degree Programmes as given in **Annexure–O.**

Resolved to approve the introduction of the industry supported courses for B.E. (Computer Science and Engineering) Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:18 To consider the recommendations of the Board of Studies of Information Technology to introduce programme elective courses for B.Tech.(Information Technology) Degree Programme as given in **Annexure–P.**

Resolved to approve the introduction of the programme elective courses for B.Tech.(Information Technology) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:19 To consider the recommendations of the Board of Studies of Information Technology to introduce Industry Supported Courses for B.Tech.(Information Technology) Degree Programme as given in **Annexure–Q.**

Resolved to approve the introduction of Industry Supported Courses for B.Tech.(Information Technology) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67.20 To consider the recommendations of the Board of Studies of Information Technology to introduce interdisciplinary elective courses for B.E./B.Tech. Degree Programmes as given in **Annexure–R.**

Resolved to approve the introduction of the interdisciplinary elective courses for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67.21 To consider the recommendations of the Board of Studies of Information Technology to introduce elective courses for Minor of B.E./B.Tech. Degree Programmes in Information Technology as given in **Annexure–S.**

Resolved to approve the elective courses for Minor of B.E./B.Tech. Degree Programmes in Information Technology as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:22 To consider the recommendations of the Board of Studies of Mechatronics to introduce programme elective courses for B.E. (Mechatronics) Degree Programme as given in **Annexure–T.**

Resolved to approve the programme elective courses for B.E. (Mechatronics) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:23 To consider the recommendations of the Board of Studies of Mechatronics to introduce Interdisciplinary Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–U.**

Resolved to approve the Interdisciplinary Elective Courses for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:24 To consider the recommendations of the Board of Studies of Computer Science and Business Systems to introduce elective courses for B.Tech. (Computer Science and Business Systems) Degree Programme as given in **Annexure –V.**

Resolved to approve the elective courses for B.Tech. (Computer Science and Business Systems) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:25 To consider the recommendations of the Board of Studies of Computer Science and Business Systems to introduce industry supported courses for B.Tech. (Computer Science and Business Systems) Degree Programme as given in Annexure –W.

Resolved to approve the industry supported courses for B.Tech. (Computer Science and Business Systems) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:26 To consider the recommendations of the Board of Studies of Computer Science and Business Systems to introduce interdisciplinary elective courses for B.E./B.Tech. Degree Programme as given in Annexure –X.

Resolved to approve the interdisciplinary elective courses for B.E./B.Tech. Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:27 To consider the recommendations of the Board of Studies of Computer Science and Business Systems to revise the assessment pattern for the elective courses of B.Tech. (Computer Science and Business Systems) Degree Programme as given in Annexure –Y.

Resolved to approve the revision of the assessment pattern for the elective courses of B.Tech. (Computer Science and Business Systems) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:28 To consider the recommendations of the *Board of Studies of Computer Applications* to introduce programme elective courses for Master of Computer Applications Degree Programme as given in Annexure- Z.

Resolved to approve the programme elective courses for Master of Computer Applications Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:29 To consider the recommendations of the *Board of Studies of Computer Applications* to revise the syllabus of programme elective courses for Master of Computer Applications Degree Programme as given in **Annexure- AA.**

Resolved to approve the revision of the syllabus of programme elective courses for Master of Computer Applications Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2022-23 onwards.

67:30 To consider the recommendations of the Board of Studies of Architecture to amend the Regulations of B.Arch. Degree Programme as given in **Annexure –AB.**

Resolved to amend the Regulations of B.Arch. Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:31 To consider the recommendations of the Board of Studies of Architecture to revise the prerequisites of the courses *21ARFA0 Vernacular Architecture and 21ARFF0 Computational Design* for B.Arch. Degree Programme as given in **Annexure –AC.**

Resolved to approve the revision of the prerequisites of the courses 21ARFA0 Vernacular Architecture and 21ARFF0 Computational Design for B.Arch. Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:32 To consider the recommendations of the Board of Studies of Architecture to revise the assessment pattern of the course 21AR720 Geometric Modeling and introduce elective foundation and programme elective courses for B.Arch. Degree Programme as given in **Annexure –AD.**

Resolved to approve the revision of the assessment pattern of the course 21AR720 Geometric Modeling and introduction of the elective foundation and progranne elective courses for B.Arch. Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2021-22 onwards.

67:33 To consider the recommendations of the Board of Studies of Architecture to Introduce the Curriculum and Regulations for B.Des.(Interior Design) Degree Programme as given in **Annexure –AE.**

Resolved to approve the introduction of the Curriculum and Regulations for B.Des.(Interior Design) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2024-25 onwards.

67:34 To consider the recommendations of the Board of Studies of Architecture to Introduce the Curriculum and Regulations for M.Plan (Urban Planning) Degree Programme as given in **Annexure –AF.**

Resolved to approve the Curriculum and Regulations for M.Plan (Urban Planning) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2024-25 onwards.

67:35 To consider the recommendations of the *Board of Studies of Science and Humanities* to revise the syllabus for the courses *22MA110 Calculus for Engineers* for B.E./B.Tech. Degree Programmes as given in **Annexure-AG.**

Resolved to approve the revision of the syllabus for the courses 22MA110 Calculus for Engineers for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2024-25 onwards.

67:36 To consider the recommendations of the *Board of Studies of Science and Humanities* to revise the syllabus for the courses *22PH180 Physics Laboratory* for B.E./B.Tech. Degree Programmes as given in **Annexure-AH.**

Resolved to approve the syllabus for the courses 22PH180 Physics Laboratory for B.E./B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2024-25 onwards.

IV   Any other matter

During the academic council meeting, the members had suggested the following points:

- **Civil Engineering**
    - Hands on training shall be included in the course on 'Pavement Construction Practices' for B.E. Civil Engineering.
    - PSO Mapping is missing in the industry supported courses and need to be mapped with PSO.
- **Mechanical Engineering**
    - Demonstrations and practical classes shall be included for the course on 'Digital Manufacturing'. In the module on 'IoT and Digital manufacturing', the role of sensors and cloud computing in Digital manufacturing shall be emphasized with applications. Topics of selective laser melting shall be removed. Software tools for Digital manufacturing shall be explored to incorporate it.

- Interdisciplinary course on "Design of Mechanical Components" shall be withdrawn.
- The syllabus for the course 'Six sigma' is to be detailed.
- **ECE**
  - In the course on "Computer Organization and Microprocessor" for B.E (ECE) Microprocessors shall be removed from the title.
  - Laboratory exercises shall be included in the course on 'Sensors and Instrumentation'.
  - Courses such as "Python Programming" and "Data Structures and Algorithms" shall be made as interdisciplinary electives.
- **CSE**
  - Specific AI courses such as "Responsible AI", "Explainable AI" and "Ethics for AI" shall be offered for CS (AI and ML).
  - Course on "Brain and Mind Science" for B.E CS (AI and ML) is need to be moved to higher semester or to the category of interdisciplinary elective. The book on "The Emerging Mind" by Vilayanur Ramachandran may be included as one of the references.
  - For the interdisciplinary course on VR, specific text books are to be included in addition to reference books. Book on 'Virtual Reality' by Steven. M. Lavelle is to be included as text or reference book.
- **IT**
  - It is recommended to offer a fundamental course on 'Quantum Computing' and then to introduce the advance course on 'Quantum Machine Learning' for B.Tech. Information Technology Programme.
- Institute Level
  - Thiagarajar Research Fellowship (TRF) shall be extended for a duration of four years.
  - Pre-requisites and norms for the course on 'Research Practice' may be relaxed.
  - In-lab internships shall be encouraged for students who are not able to get internships at industries. Assessment of individual contributions by students shall be given weightage in assessment.
  - The concept of Interdisciplinary courses is to be revisited. These courses are to be offered jointly by two or more departments. For example, a course on "Embedded Electronic Design" by the department of Mechanical and Electronics and Communication engineering shall be collaboratively designed.
  - Number of courses on Programming Languages is to be limited in IT Programme.
  - Courses with more than 70% similarity shall be offered as common course.
  - Standardized Course design templates shall be followed uniformly for consistency.

Prepared by:

Dr.S.J. Thiruvengadam, Dean (Academic Process)

Approved by:

Dr.M.Palaninatha Raja Principal i/c

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