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

## MINUTES OF THE SIXTY FIFTH MEETING OF ACADEMIC COUNCIL

The Sixty Fifth meeting of the Academic Council was held on 27<sup>th</sup> May 2023 Saturday at 10.30 AM in Online Mode under the Chairmanship of Dr. M. Palaninatha Raja, Principal i/c. The following members were present.

1.	Dr.D.K.Subramanian	Former Professor, Indian Institute of Science, Bengaluru
2.	Dr.K.Palanivelu	Professor, Centre for Environmental Studies, Anna University, Chennai
3.	Dr. K. Malathy	Professor, Department of ECE, Anna University, Chennai
4.	Dr.P.Latha	Principal i/c, Government College of Engineering, Tirunelveli
5.	Dr.Raviprakash Salagame	Board Member & Director for Global Industry Program, IUCEE
6.	Mr. M.V. Ramana Murthy	Director & Head, R&D Operations, Ericsson R&D, Bengaluru
7.	Dr.S.Chandran	Dean (Students)
8.	Dr.R.Velkennedy	Dean (Extracurricular Activities)
9.	Dr.S.J. Thiruvengadam	Dean (Academic Process) and Member Secretary
10.	Dr.S.Rajaram	Registrar (Academics) and Head, Dept, of ECE
11.	Dr.K.Sudalaimani	Head, Dept. of Civil Engineering
12.	Dr.G.K. Raajesh	Dean (Industry Institute Interaction)
13.	Dr.A.Valan Arasu	Head, Dept. of Mechanical Engineering
14.	Dr.C.K.Babulal	Head, Dept. of Electrical and Electronics Engineering
15.	Dr.S.Mercy Shalinie	Dean (MIS) and Head, Dept. of CSE
16.	Dr.P.Chitra	Head, Dept, of Computer Applications
17.	Dr.C.Deisy	Head, Dept. of Information Technology
18.	Dr.S.Jeyabharathi	Head, Dept. of Mathematics
19.	Dr.G.Kanagaraj	Professor, Dept. of Mechatronics
20.	Dr.M.Mahendran	Head, Dept. of Physics
21.	Dr.S.Parthasarathy	Head, Dept. of AMCS
22.	Dr.Jinu Loushidha Kitcheley	Head, Dept. of Architecture
23.	Dr.S.Muthuramalingam	Controller of Examinations
24.	Dr.T.Baskaran	Professor (CAS), Dept. of Civil Engineering
25.	Dr.S.Saravana Perumaal	Assistant Professor, Dept. of Mechanical Engineering
26.	Dr.V.R.Venkatasubramani	Assistant Professor, Dept. of ECE
27.	Dr.B.Subbulakshmi	Assistant Professor, Dept. of Computer Science and Engg.
28.	Dr.S.Vijayalakshmi	Professor (CAS), Dept. of Computer Applications
29.	Dr.A.Malini	Assistant Professor, Department of CSBS
30.	Dr.I.Chandramathy	Assistant Professor, Dept. of Architecture
31.	Dr.C.Jeyamala	Associate Professor, Department of Information Technology
32.	Dr.B.Ashok Kumar	Assistant Professor, Department of EEE
33.	Dr.D.Anitha	Assistant Professor (Selection Grade), Department of AMCS.
34.	Mrs.S.Pudumalar	Assistant Professor, Department of Information Technology

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

1.	Dr.N.Vedachalam	ISRO Distinguished Professor, ISRO, Trivandrum
2.	Dr.S.Baskar	Dean (Research and Development)
3.	Dr.M.Kottaisamy	Head, Department of Chemistry
4.	Dr.K.Chockalingam	Registrar (Admin)

## 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.
- 65.01 To confirm the minutes of the 64<sup>th</sup> meeting of the Academic Council held on 11<sup>th</sup> January 2023

Resolved to confirm the minutes of the 64th meeting of the Academic Council held on 11th January 2023 as there were no comments on the minutes.

65.02 To review the action taken on the minutes of the 64<sup>th</sup> meeting of the Academic Council held on 11<sup>th</sup> January 2023

The Chairman presented the actions taken on the suggestions made during the 64<sup>th</sup> meeting of the Academic Council. The Council resolved to ratify the actions taken as presented.

65.03 To consider the recommendations of the Board of Studies of Civil Engineering to introduce detailed syllabus for second to Eighth semesters courses of B.E.(Civil Engineering) Degree Programme as given in **Annexure–A.** 

Resolved to approve the detailed syllabus for the second to Eighth semesters courses of 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.

65:04 To consider the recommendations of the Board of Studies of Civil Engineering to introduce the '22CEL10 Partial Differential Equations and Probability' for B.E. (Civil Engineering) Degree Programme as given in Annexure—B.

Resolved to approve the introduction of '22CEL10 Partial Differential Equations and Probability' for B.E. (Civil Engineering) Degree Programme as presented in the Academic Council

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

65:05 To consider the recommendations of the Board of Studies of Civil Engineering to introduce verticals for B.E.(Civil Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Eco-Friendly Constructions as given in <a href="Manuerue-C.">Annexure-C.</a>

Resolved to approve the introduction of verticals for B.E.(Civil Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Eco-Friendly Constructions as presented in the Academic Council

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

65:06 To consider the recommendations of the Board of Studies of Civil Engineering to revise the 'Scheduling of Courses" and introduce new courses 23SE120 Analysis and Design of Reinforced Concrete Structures and 23SEPA0 Finite Element Method for M.E. (Structural Engineering) Degree Programmes as given in Annexure—D.

Resolved to approve the revision of the "Scheduling of Courses" and the introduction of new courses 23SE120 Analysis and Design of Reinforced Concrete Structures and 23SEPA0 Finite Element Method for M.E. (Structural Engineering) Degree Programmes as presented in the Academic Council.

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

65:07 To consider the recommendations of the Board of Studies of Mechanical Engineering to introduce verticals for B.E.(Mechanical Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Mechanical Engineering as given in <a href="mailto:Annexure-E">Annexure-E</a>.

Resolved to approve the introduction of verticals for B.E. (Mechanical Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Mechanical Engineering as presented in the Academic Council.

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

65:08 To consider the recommendations of the Board of Studies of Mechanical Engineering to introduce detailed syllabus for elective courses for B.E. (Mechanical Engineering) Degree Programme, verticals for honors in B.E. (Mechanical Engineering) Degree Programme and Vertical for B.E. and B.Tech. Degree Programmes with Minor in Mechanical Engineering as given in <a href="mailto:Annexure-F">Annexure-F</a>.

Resolved to approve the detailed syllabus for elective courses for B.E. (Mechanical Engineering) Degree Programme, verticals for honors in B.E. (Mechanical Engineering) Degree Programme and Vertical for B.E. and B.Tech. Degree Programmes with Minor in Mechanical Engineering as presented in the Academic Council.

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

65:09 To consider the recommendations of the Board of Studies of Mechanical Engineering to introduce the courses 22MA310 Essentials of Matrices and Calculus and 22MEL10 Numerical Methods and Operations Research as given in Annexure-F1.

Resolved to approve the introduction of courses 22MA310 Essentials of Matrices and Calculus and 22MEL10 Numerical Methods and Operations Research as presented in the Academic Council.

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

65:10 To consider the recommendations of the Board of Studies of Electrical and Electronics Engineering to introduce verticals for B.E. (Electrical and Electronics Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Electrical and Electronics Engineering as given in Annexure—G.

Resolved to approve the introduction of verticals for B.E. (Electrical and Electronics Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Electrical and Electronics Engineering as presented in the Academic Council.

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

65:11 To consider the recommendations of the Board of Studies of Electrical and Electronics Engineering to introduce elective courses for B.E. (Electrical and Electronics Engineering) Degree Programme, verticals for honors in B.E. (Electrical and Electronics Engineering) Degree Programme and a vertical for B.E. and B.Tech.Degree Programmes with Minor in Electrical and Electronics as given in Annexure—H.

Resolved to approve the introduction of elective courses for B.E. (Electrical and Electronics Engineering) Degree Programme, verticals for honors in B.E. (Electrical and Electronics Engineering) Degree Programme and a vertical for B.E. and B.Tech.Degree Programmes with Minor in Electrical and Electronics as presented in the Academic Council.

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

65:12 To consider the recommendations of the Board of Studies of Electrical and Electronics Engineering to introduce the course '22EEL10 Numerical Methods, Probability and Complex Variables' for B.E. (Electrical and Electronics Engineering) Degree Programme as given in Annexure-1.

Resolved to approve the introduction of the course '22EEL10 Numerical Methods, Probability and Complex Variables' for B.E. (Electrical and Electronics Engineering) Degree Programme as presented in the Academic Council.

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

65:13 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce verticals for B.E.(Electronics and Communication Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Electronic Systems as given in Annexure—J.

Resolved to approve the verticals for B.E. (Electronics and Communication Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Electronic Systems as presented in the Academic Council.

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

65:14 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce revised scheduling of courses, scheme of examinations and detailed syllabus for Third and Fourth Semesters of B.E. (Electronics and Communication Engineering) Degree Programme as given in Annexure–K.

Resolved to approve the introduction of revised scheduling of courses, scheme of examinations and detailed syllabus for Third and Fourth Semesters of 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.

65:15 To consider the recommendations of the Board of Studies of Electronics and Communication Engineering to introduce elective courses 21CNRD0 Soft Robotics and Control, 21CNRE0 Biomedical Signal Processing for M.E. (Communication Systems) Degree Programme as given in Annexure—L.

Resolved to approve the introduction of elective courses 21CNRD0 Soft Robotics and Control, 21CNRE0 Biomedical Signal Processing 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 2022-23 onwards.

65:16 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce verticals for B.E.(Computer Science and Engineering)

Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Artificial Intelligence as given in Annexure—M.

Resolved to approve the introduction of elective courses verticals for B.E.(Computer Science and Engineering) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Artificial Intelligence as presented in the Academic Council.

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

65:17 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce detailed syllabus for the core and elective courses for B.E. (Computer Science and Engineering) Degree Programme as given in <a href="Annexure-N">Annexure-N</a>.

Resolved to approve the detailed syllabus for the core and elective courses 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 2022-23 onwards.

65:18 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce industry supported courses 18CS1PO Security Threats and Vulnerabilities and 18CS1QO Cloud Computing with AWS for B.E. (Computer Science and Engineering) Degree Programme as given in Annexure—O.

Resolved to approve the introduction of industry supported courses 18CS1P0 Security Threats and Vulnerabilities and 18CS1Q0 Cloud Computing with AWS 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 2020-21 onwards.

65:19 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce the course 22CSL10 Essentials of Probability and Statistics for B.E. (Computer Science and Engineering) Degree Programme as given in Annexure-P.

Resolved to approve the introduction of industry supported courses 18CS1P0 Security Threats and Vulnerabilities and 18CS1Q0 Cloud Computing with AWS for B.E. (Computer Science and Engineering) Degree Programme as presented in the Academic Council.

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

65:20 To consider the recommendations of the Board of Studies of Computer Science and Engineering to introduce the courses 22CS161 Foundations of Computer Programming and 22CS261 Engineering Graphics and Extended Reality and revised scheduling of courses for B.E. (Computer Science and Engineering) Degree Programme as given in Annexure—Q.

Resolved to approve the introduction of 22CS161 Foundations of Computer Programming and 22CS261 Engineering Graphics and Extended Reality and revised scheduling of courses 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 2023-24 onwards.

65:21 To consider the recommendations of the Board of Studies of Information Technology to introduce detailed syllabus for Fifth to Eighth Semesters of B.Tech.(Information Technology) Degree Programme as given in <u>Annexure–R</u>.

Resolved to approve the introduction of detailed syllabus for Fifth to Eighth Semesters of B.Tech.(Information Technology) Degree Programme Degree Programme as presented in the Academic Council.

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

65.22 To consider the recommendations of the Board of Studies of Information Technology to introduce the course 22ITL10 Discrete Mathematics and Probability for B.Tech.(Information Technology) as given in Annexure—S.

Resolved to approve the introduction of the course 22ITL10 Discrete Mathematics and Probability for B. Tech. (Information Technology) as presented in the Academic Council.

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

65:23 To consider the recommendations of the Board of Studies of Information Technology to introduce verticals for B.Tech.(Information Technology) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Data Science as given in <u>Annexure-T</u>.

Resolved to approve the introduction of the verticals for B.Tech.(Information Technology) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Data Science as presented in the Academic Council.

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

65.24 To consider the recommendations of the Board of Studies of Information Technology to introduce the courses 23IT250 Digital System Design and 22IT161 Problem Solving using Computers for B.Tech.(Information Technology) as given in Annexure—U.

Resolved to approve the introduction of the courses 23IT250 Digital System Design and 22IT161 Problem Solving using Computers for B.Tech. (Information Technology) as presented in the Academic Council.

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

65:25 To consider the recommendations of the Board of Studies of Mechatronics to introduce verticals for B.E. (Mechatronics) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Mechatronics as given in Annexure–V.

Resolved to approve the verticals for B.E. (Mechatronics) Degree Programme with honors and a vertical for B.E. and B.Tech. Degree programmes with minor in Mechatronics as presented in the Academic Council.

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

65.26 To consider the recommendations of the Board of Studies of Mechatronics to introduce detailed syllabus for Fourth and Fifth semester syllabus for B.E. (Mechatronics) Degree Programme as given in <u>Annexure-W</u>.

Resolved to approve the detailed syllabus for Fourth and Fifth semester syllabus 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.

65.27 To consider the recommendations of the Board of Studies of Mechatronics to introduce the course 22MTL10 Probability, Statistics and Fourier Series for B.E. (Mechatronics) as given in <u>Annexure—X</u>.

Resolved to approve the introduction of the course 22MTL10 Probability, Statistics and Fourier Series for B.E. (Mechatronics) as presented in the Academic Council.

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

65:28 To consider the recommendations of the Board of Studies of Computer Science and Business Systems to introduce a detailed Syllabus of Seventh and Eighth Semester and Programme Elective courses for B.Tech. (Computer Science and Business Systems) Degree Programme as given in <a href="Annexure-Y">Annexure-Y</a>.

Resolved to approve the detailed Syllabus of Seventh and Eighth Semester and Programme 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 2020-21 onwards.

65:29 To consider the recommendations of the Board of Studies of Computer Science and Business Systems to introduce industry supported courses 21CB1B0 Version Control System with Git and Github and 21CB2B0 MERN Stack for B.Tech. (Computer Science and Business Systems) Degree Programme as given in Annexure –Z.

Resolved to approve the introduction of industry supported courses 21CB1B0 Version Control System with Git and Github and 21CB2B0 MERN Stack 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.

65:30 To consider the recommendations of the Board of Studies of Computer Science and Business Systems to introduce verticals for B.Tech. (Computer Science and Business Systems) Degree Programme with honors and vertical for B.E. and B.Tech. Degree programmes with minor in Business Data Analytics as given in Annexure –AA.

Resolved to approve the introduction verticals for B.Tech. (Computer Science and Business Systems) Degree Programme with honors and vertical for B.E. and B.Tech. Degree programmes with minor in Business Data Analytics as presented in the Academic Council.

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

65:31 To consider the recommendations of the Board of Studies of Applied Mathematics and Computational Science to introduce a new curriculum and detailed syllabus for the first to fourth semester of M.Sc. (Data Science) Degree Programme as given in Annexure – AB.

Resolved to approve the introduction of new curriculum and detailed syllabus for the first to fourth semester of M.Sc. (Data Science) Degree Programme as presented in the Academic Council.

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

65:32 To consider the recommendations of the Board of Studies of Architecture to introduce the courses 21AR311 Residential Building Services, 21AR431 Vertical Spanning Systems and elective courses for B.Arch. Degree Programme as given in Annexure -AC.

Resolved to approve the introduction of the courses 21AR311 Residential Building Services, 21AR431 Vertical Spanning Systems and 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.

65:33 To consider the recommendations of the Board of Studies of Architecture to introduce the course 22GA211 Integrated Building Systems and elective courses for M.Arch. Degree Programme as given in Annexure –AD.

Resolved to approve the introduction of the courses 22GA211 Integrated Building Systems and elective courses for M.Arch. Degree Programme as presented in the Academic Council.

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

65:34 To consider the recommendations of the *Board of Studies of Science and Humanities* to introduce the course 23PH120 Physics for B.E./B.Tech., Degree Programmes as given in Annexure- AE.

Resolved to approve the introduction of the courses 23PH120 Physics 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 2023-24 onwards.

65:35 To consider the recommendations of the Standing Committee to introduce the syllabus for the courses 22TAAAO Heritage of Tamils and 22TAABO Tamils and Technology for B.E./B.Tech., Degree Programmes as given in Annexure- AF.

Resolved to approve the introduction of the courses 22TAAA0 Heritage of Tamils and 22TAAB0 Tamils and Technology 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.

## IV Any other matter

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

- Connectivity on the courses in each vertical of every programme shall be explored
- Courses under Minors shall be taught in collaborative mode by faculty of different departments.
- Proactive approach for start-ups shall be adopted from second year of undergraduate programmes. Quality of the chosen projects is to be ensured.
- Publications and entrepreneurship activities of the institute during 2022-23 (Even) are highly appreciated. Association with IUCEE for promoting entrepreneurship shall be strengthened.
- Perception and publicity of the institute shall still be improved through social media and networking. Happenings at TCE shall be focused.

- Courses on futuristic technologies, as recommended by ACM and IEEE and other relevant professional societies, shall be included in all programmes.
- Application development using ChatGPT shall be encouraged.
- Case study presentations by students on application of ChatGPT shall be encouraged.
- "Security in Artificial Intelligence" shall be focused.

Prepared by:

Dr.S.J. Thiruvengadam

Dean (Academic Process)

Approved by:

Dr.M.Palaninatha Raja

Principal i/c

NOTE: As the Academic Council is conducted in online mode, there will be no signature of the persons attended the same. However, the minutes are approved in the next Academic Council meet and the same is added in agenda