

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

Minutes of the Fifty Ninth Meeting of Academic Council

The Fifty Ninth meeting of Academic Council was held on 7th December 2019, Saturday at 10.30 AM in Agilent Communications Laboratory in Electronics and Communication Engineering Department under the Chairmanship of Dr.V.Abhaikumar, Principal. The following members were present.

1.	Dr.D.K.Subramanian	Former Professor, Indian Institute of Science, Bengaluru
2.	Mr.A.M.Rafeek	Special Officer, CDC, DTE, Chennai
3.	Mr. M.V. Ramana Murthy	Director & Head, R&D Operations, Ericsson R&D, Bengaluru
4.	Dr.R.Vasudevan	Dean, Co-curricular and Extracurricular Activities
5.	Dr.M.Palaninatha Raja	Dean, Planning & Admin. and Head, Dept. of Mechatronics
6.	Dr.K.Chockalingam	Registrar and Head, Dept. of Mechanical Engineering
7.	Dr.S.Baskar	Dean (Research and Development)
8.	Dr.S.J. Thiruvengadam	Dean (Academic Process) and Member Secretary
9.	Dr.S.Mercy Shalinie	Dean (Industry Institute Interaction)
10.	Dr.T. Velrajan	Head, Dept. of Civil Engineering
11.	Dr.M.Saravanan	Head, Dept of Electrical and Electronics Engineering
12.	Dr.S.Jeyabharathi	Head, Dept. of Mathematics
13.	Dr.M.Kottaisamy	Head, Dept of Chemistry
14.	Dr.Jinu Loueshidha Kitchley	Head, Dept. of Architecture
15.	Mr.S.Sivakumar	Controller of Examinations
16.	Dr.T.Baskaran	Assistant Professor, Dept. of Civil Engineering
17.	Dr.D.Kavitha	Assistant Professor, Dept. of Elect. & Electronics Engg.
18.	Dr.V.R.Venkatasubramani	Assistant Professor, Dept. of Electronics & Commn. Engg
19.	Mrs.B.Subbulakshmi	Assistant Professor, Dept. of Computer Science and Engg.
20.	Dr.S.Pudumalar	Assistant Professor, Dept. of Information Technology
21.	Dr. S.Vijayalakshmi	Assistant Professor, Dept. of Computer Applications
22.	Dr. G.Kanagaraj	Associate Professor, Dept. of Mechatronics
23.	Dr.S.Rajathi	Associate Professor, Department of Physics
24.	Dr.S.Rajkumar	Assistant Professor, Department of Chemistry
25.	Dr.I.Chandramathy	Professor, Dept. of Architecture
26.	Mr.S.Vignesh Raja	Student, M.E. (Structural Engineering)
27.	Mr.G.Kalidass	Student, B.E.(Mechatronics)

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.Rajeev Sukumaran	Senior Advisor, Teaching Learning Centre, IIT Madras
3.	Dr.V.Chelladurai	Principal, Coimbatore Institute of Technology, Coimbatore
4.	Dr.N.Kamaraj	Dean, Students
5.	Dr.S.Rajaram	Head, Dept, of Electronics and Communication Engineering
6.	Dr.P.Chitra	Head, Dept, of Computer Science and Engineering
7.	Dr.C.Deisy	Head, Dept. of Information Technology
8.	Dr.R.Vasuki	Head, Dept. of Physics
9.	Dr.S.Parthasarathy	Head, Dept. of Computer Applications
10.	Dr. PL.K.Palaniappan	Associate Professor, Dept. of Mechanical Engineering
11.	Dr. G.Jothilakshmi	Associate Professor, Dept of Mathematics
12.	Ms.T.Indhuja Meenakshi	Student, B.E. (Electrical and Electronics Engineering)
13.	Ms N. Praneeth Marella	Student, B.E. (Computer Science and 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.

59:01 To confirm the minutes of the 58th meeting of the Academic Council held on 15.06.2019.

Resolved to confirm the minutes of the 58th meeting of the academic council held on 15th June 2019 as there were no comments on the minutes.

59:02 To review the action taken on the Minutes of the 58^h meeting held on 15.06.2019.

The Chairman presented the actions taken on the suggestions made during the 58th Meeting of the Academic Council. The Council resolved to ratify the actions taken as presented and accepted the time requested for implementation of few suggestions. .

59:03 To consider the recommendations of Board of Studies of Civil Engineering to introduce Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.E. (Civil Engineering) Degree Programme as given in **Annexure–A** (Page No. 1 to 254).

Resolved to approve the introduction of Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.E.(Civil Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

59:04 To consider the recommendations of Board of Studies of Civil Engineering to introduce Industry Supported Courses for B.E. (Civil Engineering) Degree Programme as given in **Annexure–B** (Page No. 255 to 281).

Resolved to approve the introduction of 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 2018-19 onwards.

59:05 To consider the recommendations of Board of Studies of Civil Engineering to introduce General Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–C** (Page No. 282 to 304).

Resolved to approve the introduction of General 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 2018-19 onwards.

- 59:06** To consider the recommendations of Board of Studies of Civil Engineering to introduce an Open Elective Course '18SEGB0 Finance for Engineers' for M.E. Degree Programmes as given in **Annexure–D** (Page No. 305 to 307).

Resolved to approve the introduction of an Open Elective Course '18SEGB0 Finance for Engineers' for M.E. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:07** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.E. (Mechanical Engineering) Degree Programme as given in **Annexure–E** (Page No. 308 to 355).

Resolved to approve the introduction of Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.E. (Mechanical Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:08** To consider the recommendations of Board of Studies of Mechanical Engineering to revise the syllabi for the industry supported course '14ME2A1 Digital Twin Technology' and introduce industry supported courses '14ME1S0 Lean Six Sigma' and '14ME2C0 Digital Factory for Systems Engineering' for B.E. (Mechanical Engineering) Degree Programme as given in **Annexure–F** (Page No 556 to 563).

Resolved to approve the revision of the syllabi for the industry supported course '14ME2A1 Digital Twin Technology' and introduction of industry supported courses '14ME1S0 Lean Six Sigma' and '14ME2C0 Digital Factory for Systems Engineering' for B.E. (Mechanical Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:09** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce General Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–G** (Page No 564 to 593).

Resolved to approve the introduction of General 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 2018-19 onwards.

- 59:10** To consider the recommendations of Board of Studies of Mechanical Engineering to revise the syllabus for the course ‘18ME331 Metal Joining Processes and Manufacturing Practices’ for B.E. (Mechanical Engineering) Degree Programme as given in **Annexure–H** (Page No 594 to 598).

Resolved to approve the revision of the syllabus for the course ‘18ME331 Metal Joining Processes and Manufacturing Practices’ for B.E. (Mechanical Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2019-20 onwards.

- 59:11** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce an audit course ‘14MEAC0 Modern Manufacturing: Basic Knowledge and Skills’ for B.E. (Mechanical Engineering) Degree Programme as given in **Annexure–I** (Page No 599 to 602).

Resolved to approve the introduction of an audit course ‘14MEAC0 Modern Manufacturing: Basic Knowledge and Skills’ for B.E. (Mechanical Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2015-16 onwards.

- 59:12** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce an audit course ‘18MEAC0 Modern Manufacturing: Basic Knowledge and Skills’ for B.E. (Mechanical Engineering) Degree Programme as given in **Annexure–J** (Page No 603 to 606).

Resolved to approve the introduction of an audit course ‘18MEAC0 Modern Manufacturing: Basic Knowledge and Skills’ for B.E. (Mechanical Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:13** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.E. (Electrical and Electronics Engineering) Degree Programme as given in **Annexure–K** (Page No. 607 to 753).

Resolved to approve the introduction of Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.E. (Electrical and Electronics Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:14** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce industry supporting courses for B.E. (Electrical and Electronics Engineering) Degree Programme as given in **Annexure–L** (Page No. 754 to 773).

Resolved to approve the introduction of industry supporting courses for B.E. (Electrical and Electronics Engineering) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:15** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce General Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–M** (Page No. 774 to 797).

Resolved to approve the introduction of General 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 2018-19 onwards.

- 59:16** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce Programme Elective Courses for B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure–N** (Page No 798 to 859).

Resolved to approve the introduction of Programme Elective 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 2018-19 onwards.

- 59:17** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce Industry Supported Courses for B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure–O** (Page No 860 to 865).

Resolved to approve the introduction of 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 2015-16 onwards.

- 59:18** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce General Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure–P** (Page No 866 to 885).

Resolved to approve the introduction of General 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 2018-19 onwards.

- 59:19** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce an Elective Course '18CNPZ0 Remote Sensing for Vegetation' for M.E. (Communication Systems) Degree Programme as given in **Annexure-Q** (Page No 886 to 889).

Resolved to approve the introduction of an Elective Course '18CNPZ0 Remote Sensing for Vegetation' 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 2018-19 onwards.

- 59:20** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure-R** (Page No. 890 to 1049).

Resolved to approve the introduction of Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester 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 2018-19 onwards.

- 59:21** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce a course '19CS490 Project Management' for B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure-S** (Page No 1050 to 1055).

Resolved to approve the introduction of a course '19CS490 Project Management' 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 2019-20 onwards.

- 59:22** To consider the recommendations of 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 - T** (Page No. 1056 to 1071).

Resolved to approve the introduction of 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 2016-17 onwards.

- 59:23** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce General Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure – U** (Page No. 1072 to 1101).

Resolved to approve the introduction of General 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 2018-19 onwards.

- 59:24** To consider the recommendations of Board of Studies of Computer Science and Engineering to revise the syllabus for the course ‘18CGPUI Software Defined Networking’ for M.E. (Computer Science and Engineering) Degree Programme as given in **Annexure – V** (Page No. 1102 to 1106).

Resolved to approve the revision of the syllabus for the course ‘18CGPUI Software Defined Networking’ for M.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 2019-20 onwards.

- 59:25** To consider the recommendations of Board of Studies of Computer Science and Engineering to revise the Assessment Patterns for the courses in B.E. (Computer Science and Engineering) and M.E. (Computer Science and Engineering) Degree Programmes as given in **Annexure–W** (Page No.1107 to 1109).

Resolved to approve the revision of the Assessment Patterns for the courses in B.E. (Computer Science and Engineering) and M.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 2019-20 onwards.

- 59:26** To consider the recommendations of Board of Studies of Information Technology to introduce Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.Tech.(Information Technology) Degree Programme as given in **Annexure–X** (Page No.1110 to 1286).

Resolved to approve the introduction of Scheduling of Courses and detailed syllabi for Fifth to Eighth Semester B.Tech.(Information Technology) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:27** To consider the recommendations of Board of Studies of Information Technology to introduce General Elective Courses for B.E. Degree Programmes as given in **Annexure–Y** (Page No 1287 to 1323).

Resolved to approve the introduction of General Elective Courses for B.E. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:28** To consider the recommendations of Board of Studies of Information Technology to revise the Assessment Pattern for the courses in B.Tech. (Information Technology) Degree Programme as given in **Annexure -Z** (Page No 1324 to 1325).

Resolved to approve the revision of the Assessment Pattern for the courses in B.Tech. (Information Technology) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2016-17 onwards.

- 59:29** To consider the recommendations of Board of Studies of Mechatronics to introduce the scheduling of Courses and detailed syllabi for Fifth to Eighth semester B.E. (Mechatronics) Degree Programme as given in **Annexure –AA** (Page No. 1326 to 1443).

Resolved to approve the introduction of scheduling of Courses and detailed syllabi for Fifth to Eighth semester B.E. (Mechatronics) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:30** To consider the recommendations of Board of Studies of Mechatronics to introduce General Elective Courses for B.E./B.Tech. Degree Programmes as given in **Annexure –AB** (Page No. 1444 to 1459).

Resolved to approve the introduction of General 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 2018-19 onwards.

- 59:31** To consider the recommendations of Board of Studies of Mechatronics to revise the syllabus of the course ‘18MT271 Electrical Machines Laboratory’ of B.E. (Mechatronics) Degree Programme as given in **Annexure –AC** (Page No. 1460 to 1461).

Resolved to approve the revision of the syllabus of the course ‘18MT271 Electrical Machines Laboratory’ of B.E. (Mechatronics) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2019-20 onwards.

- 59:32** To consider the recommendations of Board of Studies of Mechatronics to introduce Industry Supported Course '14MT2C0 Musical Parameters and MIDI' for B.E. (Mechatronics) Degree Programme as given in **Annexure –AD** (Page No. 1462 to 1464).

Resolved to approve the introduction of Industry Supported Course '14MT2C0 Musical Parameters and MIDI' for B.E. (Mechatronics) Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2015-16 onwards.

- 59:33** To consider the recommendations of Board of Studies of Science to introduce Foundation Elective courses for B.E. and B.Tech. Degree Programmes as given in **Annexure –AE** (Page No.1465 to 1522).

Resolved to approve the introduction of Foundation Elective courses for B.E. and B.Tech. Degree Programmes as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:34** To consider the recommendations of Board of Studies of Architecture to revise the Courses of Study of M.Arch. Degree Programme as given in **Annexure –AF** (Page No.1523).

Resolved to approve the revision of the Courses of Study of M.Arch. Degree Programme as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2018-19 onwards.

- 59:35** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce B.E. (Computer Science and Business Systems) Degree Programme along with the respective Curriculum and Syllabus as given in **Annexure–AG** (Page No.1524 to 1528).

Resolved to approve the introduction of B.E. (Computer Science and Business Systems) Degree Programme along with the respective Curriculum and syllabus as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2020-21 onwards.

- 59:36** To consider the recommendations of the Standing Committee of this academic council to revise the minimum CGPA requirements for Classification for the award of the B.E./B.Tech./M.E./M.Tech./B.Arch./MCA degree programme as given in **Annexure – AH** (Page No.1529 to 1531).

Resolved to approve the revision of the minimum CGPA requirements for Classification for the award of the B.E./B.Tech./M.E./M.Tech./B.Arch./MCA degree programme as presented in the Academic Council.

This comes into effect for the students passed out from the academic year 2018-19 onwards.

- 59:37** To consider the recommendations of the Standing Committee of this academic council to introduce a clause in B.E./B.Tech. Regulations for Research Publications in SCI/SCI-expanded/SCOPUS indexed Journals as given in **Annexure – AI** (Page No.1532).

Resolved to approve the introduction of a clause in B.E./B.Tech. Regulations for Research Publications in SCI/SCI-expanded/SCOPUS indexed Journals as presented in the Academic Council.

This comes into effect for the students passed out from the academic year 2018-19 onwards.

- 59:38** To consider the recommendations of the Standing Committee of this academic council to modify internship clause in B.E./B.Tech. Regulations as given in **Annexure – AJ** (Page No.1533).

Resolved to approve the modification of internship clause in B.E./B.Tech. Regulations as presented in the Academic Council.

This comes into effect for the students passed out from the academic year 2018-19 onwards.

- 59:39** To consider the recommendations of Board of Studies of Architecture to introduce Bachelor of Design (Interior Design) Degree Programme along with the respective Curriculum and syllabus as given in **Annexure–AK** (Page No.1534 to 1559).

Resolved to approve the introduction of Bachelor of Design (Interior Design) Degree Programme along with the respective Curriculum and syllabus as presented in the Academic Council.

This comes into effect for the students admitted from the academic year 2020-21 onwards.

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

1. Vision Statement of Civil Engineering Department is to be modified so that it includes Research, not just built environment.
2. The course '*18ME770 Finite Element Analysis Lab*' being offered in Mechanical Engineering Department is to be converted as Theory Cum Practical course
3. The syllabus for the industry supported course '*14EC1H0 Programming in JAVA*' is to be reviewed and to be placed again for approval.
4. As curriculum development is a continuous Process, discussions about it should be made at periodic intervals and the minutes are to be communicated to the external members of Board of Studies (BoS). Framework is to be built for all the courses in a Programme.
5. Action Plan is to be prepared for the effective utilization of T.S.Srinivasan Centre for Automotive Research (TSSCAR) and steps are to be taken to appoint Research Interns at TSS CAR
6. Leadership in Energy and Environmental Design (LEED) and Green Building Certifications are to be initiated.
7. Familiarity in Open Source Software is to be given to students of all the Departments.

Prepared by:

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

Approved by:

Dr.V.Abhaikumar
Principal