

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

Minutes of the Meeting of the Forty Ninth Academic Council

The Forty Ninth meeting of Academic Council was held on 4th December 2014, Thursday at 10.00 AM in the Conference Hall at Guest House under the Chairmanship of Dr.V.Abhaikumar, Principal. The following members were present.

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| 1. Dr.P.V.Vaidyanathan | Former Vice-Chancellor, Annamalai University |
| 2. Dr.D.K.Subramanian | Former Professor, Indian Institute of Science, Bengaluru |
| 3. Dr. M.Alagar | Professor of Chemical Engineering., AC Tech. AU, Chennai |
| 4. Mr.A.M.Rafeek | Special Officer, CDC, DTE, Chennai |
| 5. Dr.R.Vasudevan | Dean, Co-curricular and Extracurricular Activities |
| 6. Dr.N.Jawahar | Dean, Research and Development |
| 7. Dr.K.Arunachalam | Head, Dept of Civil Engineering |
| 8. Dr.C.Muruganantham | Head, Department of Mechanical Engineering |
| 9. Dr.S.Raju | Head, Department of Electronics and Commn. Engineering. |
| 10. Dr.N.Kamaraj | Head, Dept. of Electrical & Electronics Engineering. |
| 11. Dr.S.Mercy Shalinie | Head, Dept. of Computer Science & Engineering |
| 12. Dr.S.Muthuramalingam | Head, Dept. of Information Technology |
| 13. Dr.Jinu Loueshidha Kitchley | Head, Dept. of Architecture |
| 14. Dr.S.Parthasarathy | Head, Dept. of Computer Applications |
| 15. Dr.K.Radha | Head, Dept of Chemistry |
| 16. Dr.T. Velrajan | Professor, Dept. of Civil Engineering |
| 17. Dr. PL.K.Palaniappan | Associate Professor, Dept. of Mechanical Engineering |
| 18. Dr.S.Charlesraja | Assistant Professor, Dept. of Elect. & Electronics Engg. |
| 19. Mrs.B.Subbulakshmi | Assistant Professor, Dept. of Computer Science and Engg. |
| 20. Mrs.K.V.Uma | Assistant Professor, Dept. of Information Technology |
| 21. Dr. S.Vijayalakshmi | Asst. Professor, Dept. of Computer Applications |
| 22. Dr. G.Jothilakshmi | Associate Professor, Dept of Mathematics |
| 23. Dr.S.Rajathi | Associate Professor, Department of Physics |
| 24. Dr.M.Kottaisami | Professor, Department of Chemistry |

Members of Pedagogy Group

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| 1. Dr.S.J Thiruvengadam | Professor, Dept. of Electronics and Communication Engg. |
| 2. Dr.G.Chitra | Associate Professor, Department of Civil Engineering |
| 3. Dr.S.Saravana Perumaal | Asst. Professor, Department of Mechanical Engineering |
| 4. Dr.S.Padmavathi | Associate Professor, Dept. of Computer Science and Engg. |
| 5. Mr.B.Ashok Kumar | Asst. Professor, Department of EEE |
| 6. Mrs.C.Jeyamala | Asst. Professor, Department of Information Technology |
| 7. Mr.A.L.Subramanian | Asst. Professor, Department of Physics |
| 8. Mr.S.Rajkumar | Asst. Professor, Department of Chemistry |
| 9. Ms.D.Anitha | Asst. Professor, Department of Computer Applications |
| 10. Dr.M.Sivananda Saraswathy | Asst. Professor, Department of Mathematics |

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

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| 1. Dr.N.Vedachalam | ISRO Distinguished Professor, ISRO, Trivandrum |
| 2. Dr.R.Rudramurthy | Principal, PSG College of Technology, Coimbatore |
| 3. Dr.Aloknath De | Senior Vice President and CTO, Samsung, Bengaluru |
| 4. Dr.V.Mohan | Dean, Planning and Administration |
| 5. Dr.R.Vasuki | Head, Dept. of Physics |
| 6. Dr.S.Kanthamani | Associate Professor, Dept. of Electronics & Commn. Engg |
| 7. Mrs.R.Shanthi Priya | Asst. Professor, Dept. of Architecture |
| 8. Dr.M.Palanimatha Raja | Registrar- Ex-Officio Secretary |

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.

49:01 To confirm the minutes of the 48th meeting of the Academic Council held on 19th July 2014.

Resolved to confirm the minutes of the 48th academic council held on 19th July 2014 as there were no comments on the minutes.

49:02 To review the action taken on the Minutes of the 48th meeting held on 19th July 2014.

The Chairman presented the Action Taken Report on the suggestions made during the 48th academic Council meeting. The Council resolved to ratify the actions taken and accepted the time requested for implementation of few suggestions...

49:03 To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for II Semester B.E (Electrical and Electronics Engineering) Degree Programme as given in **Annexure–A** (Page No.1 to 54).

Resolved to approve the Courses of Study, Scheme of Examinations, syllabi for II 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 2014-15 onwards.

49:04 To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce the new elective subjects 'EC5 Industrial Electrical and Electronics', 'EC6 Manufacturing of Automotive Electrical and Electronics Parts' and 'EC7 Testing & Certification of Automotive Electrical and Electronic Systems' of B.E. (Electrical and Electronics Engineering) Degree Programme as given in **Annexure – B** (Page No.55 to 70).

Resolved to approve the introduction of the new elective subjects 'EC5 Industrial Electrical and Electronics', 'EC6 Manufacturing of Automotive Electrical and Electronics Parts' and 'EC7 Testing & Certification of Automotive Electrical and Electronic Systems' of 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 2011-12 onwards.

- 49:05** To consider the recommendations of Board of Studies of Civil Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for II Semester B.E (Civil Engineering) Degree Programme as given in **Annexure-C** (Page No.71 to 108).

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for II 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 2014-15 onwards.

- 49:06** To consider and approve the recommendations of Board of Studies of Information Technology to introduce Courses of Study, Scheme of Examinations and Syllabi for II Semester to VIII Semester B.Tech. (Information Technology) Degree Programme as given in **Annexure – D** (Page No. 109 to 347).

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for II Semester to VIII 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 2014-15 onwards.

- 49:07** To consider the recommendations of Board of Studies of Information Technology to introduce the One Credit Courses '14ITP10/T1G Internet of Things' and '14ITP20/T1H Big Data Platform and Technologies' for B.Tech. (Information Technology) Degree Programme as given in **Annexure –E** (Page No 348 to 355).

Resolved to approve the introduction of one credit courses '14ITP10/T1G Internet of Things' and '14ITP20/T1H Big Data Platform and Technologies' 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 2012-13 onwards.

- 49:08** To consider the recommendations of Board of Studies of Information Technology to introduce the Courses of Study, Scheme of Examinations, Syllabi for the Core and Elective Courses of II Semester M.E (Computer Science and Information Security) Degree Programme as given in **Annexure-F** (Page No.356 to 408)

Resolved to approve the Courses of Study, Scheme of Examinations, Syllabi for the Core and Elective Courses of II Semester M.E (Computer Science and Information Security) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:09** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for II Semester B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure –G** (Page No.409 to 447).

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for II Semester 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 2014-15 onwards.

- 49:10** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce new elective course 'DCW Control Systems' for B.E. (Electronics and Communication Engineering) Degree Programme as given in **Annexure –H** (Page No.448 to 454).

Resolved to approve the introduction of new elective course 'DCW Control Systems' 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 2012-13 onwards.

- 49:11** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for II Semester B.E. (Mechanical Engineering) Degree Programme as given in **Annexure –J** (Page No.455 to 498).

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for II 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 2014-15 onwards.

- 49:12** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for II Semester B.E. (Mechatronics) Degree Programme as given in **Annexure –K** (Page No 499 to 545).

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for II Semester B.E. (Mechatronics) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:13** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for II Semester M.E. (Mechatronics) Degree Programme as given in **Annexure –L** (Page No 546 to 590).

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for II Semester M.E. (Mechatronics) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:14** To consider the recommendations of Board of Studies of Information Technology to introduce Courses of Study, Scheme of Examinations and Syllabi for II Semester to VIII Semester B.E. (Computer Science and Engineering) Degree Programme as given in **Annexure–M** (Page No.591 to782)

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for II Semester to VIII 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 2014-15 onwards.

- 49:15** To consider the decision of Standing Committee of this academic council to introduce the new regulation for B.E./B.Tech Degree Programme as given in **Annexure - N** (Page No. 783 to 803)

Resolved to approve and ratify the introduction of the new regulation 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 2014-15 onwards.

- 49:16** To consider the recommendations of Board of Studies of Architecture to introduce the Courses of Study, Scheme of Examinations and Syllabi for I Semester B.Arch. Degree Programme as given in **Annexure –P** (Page No.804 to 852).

Resolved to approve the Courses of Study, Scheme of Examinations and Syllabi for I Semester B.Arch. Degree Programme as presented in the academic council.

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

- 49:17** To consider the recommendations of Board of Studies of Civil Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Structural Engineering) Degree Programme as given in **Annexure–Q** (Page No.853 to 904).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Structural Engineering) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:18** To consider the recommendations of Board of Studies of Civil Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Infrastructure Engineering and Management) Degree Programme as given in **Annexure–R** (Page No.905 to 934).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Infrastructure Engineering and Management) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:19** To consider the recommendations of Board of Studies of Civil Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Environmental Engineering) Degree Programme as given in **Annexure–S** (Page No.953 to 970).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Environmental Engineering) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:20** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Manufacturing Engineering) Degree Programme as given in **Annexure–T** (Page No.971 to 1017).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Manufacturing Engineering) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:21** To consider the recommendations of Board of Studies of Mechanical Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Industrial Engineering) Degree Programme as given in **Annexure–U** (Page No.1018 to 1054).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Industrial Engineering) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:22** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Control and Instrumentation) Degree Programme as given in **Annexure-V** (Page No.1055 to 1092).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Control and Instrumentation) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:23** To consider the recommendations of Board of Studies of Electrical and Electronics Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Power System Engineering) Degree Programme as given in **Annexure-W** (Page No.1093 to 1128).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Power System Engineering) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:24** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Communication Systems) Degree Programme as given in **Annexure-Y** (Page No.1129 to 1166).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Communication Systems) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:25** To consider the recommendations of Board of Studies of Electronics and Communication Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Wireless Technology) Degree Programme as given in **Annexure-Z** (Page No.1167 to 1205).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Wireless Technology) Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:26** To consider the recommendations of Board of Studies of Computer Science and Engineering to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester M.E (Computer Science and Engineering) Degree Programme as given in **Annexure-AA** (Page No.1206 to 1241).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – IV Semester 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 2014-15 onwards.

- 49:27** To consider the recommendations of Board of Studies of Computer Applications to introduce the Courses of Study, Scheme of Examinations and Syllabi for I – VI Semester Master of Computer Applications Degree Programme as given in **Annexure-AB**(Page No.1242 to 1294).

Resolved to approve and ratify the Courses of Study, Scheme of Examinations and Syllabi for I – VI Semester Master of Computer Applications Degree Programme as presented in the academic council.

This comes into effect for the students admitted from the academic year 2014-15 onwards.

- 49:28** To consider the recommendations of Board of Studies of Computer Applications to introduce the One Credit Courses 'TIE SPM using MSF and Agile Scrum Technology' and 'TIF Cloud Computing' for B.Tech. (Information Technology) Degree Programme as given in **Annexure-AC**(Page No.1295 to1302).

Resolved to approve the introduction of One Credit Courses 'TIE SPM using SF and Agile Scrum Technology' and 'TIF Cloud Computing' for B.Tech. (Information Technology) Degree Programme as presented in the academic council.

This comes into effect from the odd semester of the academic year 2014-15 onwards

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

Institution:

- On line learning resources like NPTEL,QEEE coursera, EDX, QEEE may be used as supplementary materials.
- UG students with good academic record may be offered Research assistantship/ Teaching assistantship.
- Process is to be developed to create innovation lab to implement ideas from both faculty and students.

- Courses/workshops/Conferences are to be organized in collaboration with reputed Universities and professional bodies.
- Multidisciplinary projects are to be carried out by students of different departments.
- Courses may be offered with the help of industries (2 credits course by faculty and 1 credit course industry personnel)
- Programme Educational Objectives (PEO) of M.E. Degree Programmes are to be revised such that they provide in-depth knowledge, research opportunities in specialized area and facilitate analytical approach.
- Improvement in the learning process may be evaluated using the Balanced Score card technique.

Departments:

Mechanical Engineering

- The focus of the M.E. Degree Programme on 'Industrial Engineering' may be changed towards services industry, logistics and outsourcing.
- Relevance of optimization is to be addressed in manufacturing/scheduling.

Electrical and Electronics Engineering

- A Course on 'Harmonics' may be introduced in M.E Degree Programme on 'Power Systems'.

Electronics and Communication Engineering

- The courses like Antenna Technologies and Design, Modeling and Simulation of Communication Systems in M.E. Degree Programmes on 'Communication Systems' and 'Wireless Technology' may be offered as Theory cum Practical Courses.

Computer Science and Engineering

- The Curriculum of M.E Computer Science and Engineering Degree programme is to be revised. Many core courses in the existing curriculum may be moved into Electives.

Information Technology

- The syllabi of the course '14IT220 Problem Solving and Programming' is to be revised
- The syllabi for the Practical courses are to be reworked for applications such as hospital, transport, payroll, water supply, waste management. are developed
- The syllabi of the courses '14IT240 Information Systems' and '14IT270 Free Open Source Software: Practice' are to be revised.

Computer Applications

- Courses on C and C++ may be combined as single course
- The Curriculum of M.E Computer Science and Engineering Degree programme is to be revised.

S. J. Thiruvengadam

Prepared by: **Dr.S.J. Thiruvengadam**
Pedagogy Group Coordinator

V. Abhaikumar

Approved by: **Dr.V.Abhaikumar**
Principal

