



Management Review System Formats

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| Doc. No. | QR/M5-02 |
| Rev. No. | 00 |
| Date | 14-06-2004 |
| Page No. | 2 of 4 |

MINUTES OF THE MEETING

Date of the meeting: 29.04.2023

Name of the meeting: Board of Studies

Attended by: Dr. S. Mercy Shalinie, HDCSE, Dr. A. Shankar, Professor, PSG Tech (Anna University Nominee) (BSM1), Dr. Chandrasekar Ramanathan, IIIT, Bangalore (BSM2), Dr.S.Karthick, NIT, Andra Pradesh (BSM3), Dr. P. Balamurugan, IIT, Bombay (BSM4), Mr. Mari Ganesh Kumar, Applied scientist, Amazon, (BSM5) Mr. Jeshuren Chelladurai, Applied Scientist, Amazon (BSM6) and CSE department Faculty Members

| Sl. No. | Points discussed | Action plan | Responsibility | Target date |
|---------|---|--|--|-------------|
| 1. | <p>Dr. S.Mercy Shalinie, Head of CSE Department gave a presentation about the PEOs, POs, Program Specific Outcomes (PSOs) for B.E(CSE) Programme, The suggestions given by the experts are</p> <ul style="list-style-type: none">• Relook on Vision statement• Relook on the PEO stating Innovation, change it as Research and Innovation• Move the cloud computing course under vertical 2 of Honors electives• Introduce a new elective course on Quantum Computing• Introduce an audit course on Engineering and Professional Ethics | The suggestions will be considered | Head of Department and TLP Coordinator | 08.05.2023 |
| 2. | <p>22CS520 – Theory of Computation</p> <ul style="list-style-type: none">• Dr. K. Sundarakantham from CSE Department gave brief description of the syllabus. The suggestions given by the experts are<ul style="list-style-type: none">○ Increase the number of credits to 3○ Some titles can be excluded membrane computing, DNA computing, quantum computing models | The suggestions have been incorporated in the syllabus | Dr. K. Sundarakantham Mr. D. Nagendra Kumar | 08.05.2023 |
| 3. | <p>22CS510 – Modelling and Optimization</p> <ul style="list-style-type: none">• Dr. C.S. Senthilkumar from Maths Department gave brief description of the syllabus. The suggestions given by the experts are<ul style="list-style-type: none">○ Include BFGS, LBSTs○ Include semi definitive programs○ Include modeling based on probability, statistics and simulation○ Include discrete event simulation analytics model and simulation analytical modeling | The suggestions have been incorporated in the syllabus | Dr. C.S. Senthilkumar Dr. P. Victor | 08.05.2023 |

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| | <ul style="list-style-type: none"> ○ Check for overlapping contents on ACO, PSO with AI course | | | |
| 4. | <p>22CSL10 Essentials of Probability and Statistics</p> <ul style="list-style-type: none"> ● Dr. C.S. Senthilkumar from Maths Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Include exponential, uniform distribution under discrete probability distribution ○ Include geometric distributions under continuous probability distribution ○ Mention about sample statistics and population statistics ○ Include in-equivalences ○ Mandatory component in discrete mathematics prescribed by AICTE to be covered in the syllabus | The suggestions have been incorporated in the syllabus | Dr. C.S. Senthilkumar Dr. P. Victor | 08.05.2023 |
| 5. | <p>22CS530 Artificial Intelligence</p> <ul style="list-style-type: none"> ● Dr. M.Suguna from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Include Bayesian markov model ○ Under the Learning module, content is extensive, supervised and reinforcement learning alone can be retained ○ Hidden variable learning is quite complex and can be excluded ○ AI models for language, vision, control, and its applications, use cases for automation can be added ○ Advanced game playing use cases can be covered | The suggestions have been incorporated in the syllabus | Dr. M.Suguna Dr. K. Sundarakantham | 08.05.2023 |
| 6. | <p>22CS560 Software Engineering</p> <ul style="list-style-type: none"> ● Dr. N.Shivakumar from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Reduce the content on software project planning ○ Include requirements, design, coding and testing ○ Lab content: <ul style="list-style-type: none"> ○ Modern software management elements such as version control, devops can be added ○ Reorganization in the content to be done regarding design, coding and testing | The suggestions have been incorporated in the syllabus | Dr. N.Shivakumar Dr. S. Prasanna | 08.05.2023 |
| 7. | <p>22CS580 AI Lab</p> <ul style="list-style-type: none"> ● Dr. M.Suguna from CSE Department gave brief description of the | The suggestions have been incorporated in the syllabus | Dr. M.Suguna Dr. K. Sundarakantham | 08.05.2023 |

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| | <p>syllabus. The suggestions given by the experts are</p> <ul style="list-style-type: none"> ○ Bayesian model, heuristic methods can be implemented in Bayesian network ○ EM algorithm in Ex.no 10 can be replaced by language, vision, game play model experiments ○ Prompt engineering – smart AI models in lab session ○ Instead of Tic Tac Toe game program, new and recent gaming techniques can be implemented ○ Include API based tools ○ Give new assessment pattern for lab ○ Include mini projects in this lab | | | |
| 8. | <p>22CS610 Cryptography and Network Security</p> <ul style="list-style-type: none"> ● Dr. M.Suguna from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Add prerequisite: discrete mathematics ○ Instead of real life applications, mention it as real world applications | The suggestions have been incorporated in the syllabus | Dr. M.Suguna Dr. M.P.Ramkumar | 08.05.2023 |
| 9. | <p>22CS620 Distributed Computing</p> <ul style="list-style-type: none"> ● Mr. D. Nagendra Kumar from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Contents should cover distributed algorithms, framework, practical approaches ○ Remove distributed systems concepts ○ Reorganize the contents towards the title “Distributed Computing” | The suggestions have been incorporated in the syllabus | Dr. R. Leena Sri Mr. D. Nagendra Kumar | 08.05.2023 |
| 10. | <p>22CS630 Compilers</p> <ul style="list-style-type: none"> ● Dr. K. Sundarakantham from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Give a review of CFG, Proceed with ambiguity ○ Include Circularity disambiguation in attribute definition and attribute evaluation ○ Include Type checking, Algorithms for type resolution ○ Include Back patching, Aho Johnson, Sethy Ullman algorithms ○ Optimality in algorithm, Optimal code for machine architecture | The suggestions have been incorporated in the syllabus | Dr. K. Sundarakantham Dr.B.Subbulakshmi | 08.05.2023 |

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| | <ul style="list-style-type: none"> o to be covered o Reference compilers from standford can be used o Objectives for Code optimization, register allocation can be explicitly mentioned | | | |
| 11. | <p>22CS720 Human Computer Interaction</p> <ul style="list-style-type: none"> • Dr. M.Suguna from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> o Add personalization o Add assistive technology for special people, o Add W3C standards o Add menus-usability time of menus o Back end issues and scalable user interfaces to be discussed o Visualization –fundamental aspects can be added o VR, AR can possibly be included to some extent o Maps can be discussed | The suggestions have been incorporated in the syllabus | Dr. M.Suguna Ms. C.Santhiya | 08.05.2023 |
| 12. | <p>22CSPA0 Data Warehousing and Data mining</p> <ul style="list-style-type: none"> • Dr. B.Subbulakshmi from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> o Data warehouse contents includes dimensional modeling - star schema, ETL, OLAP operations o Include some data visualization content such as visualization using TABLEAU o Real time mining can be added o Overlapping contents between ML course to be avoided o Syllabus only covered DM, reorganize the contents for the title Data warehousing and mining | The suggestions have been incorporated in the syllabus | Dr. B.Subbulakshmi Dr. M. Nirmala Devi | 08.05.2023 |
| 13. | <p>22CSRA0 Deep learning</p> <ul style="list-style-type: none"> • Dr. K. Sundarakantham from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> o Include GANs, GRU based architecture o Include 2 broad applications - NLP, computer vision to be covered (Graph neural network for NLP and CV) o Variations of auto encoders to be covered, complex algorithms to be covered | The suggestions have been incorporated in the syllabus | Dr. K. Sundarakantham Mr. S. Santhana Hari | 08.05.2023 |

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| 14. | 22CSPB0 Interactions design for XR <ul style="list-style-type: none"> • Dr. N.Shivakumar from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Include metaverse | The suggestions have been incorporated in the syllabus | Dr. N.Shivakumar Ms. G. Bhavani | 08.05.2023 |
| 15. | 22CSPC0-Cloud Computing <ul style="list-style-type: none"> • Dr. G.Madhu Priya from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Different types of storage to be mentioned ○ Include utility computing models –how a p2p application is orchestrated , how cloud computing service orchestration is done as a cloud service ○ Include federated computing –case studies in the context of AI setup cloud and edge services ○ Virtualization to be mentioned | The suggestions have been incorporated in the syllabus | Ms. C.Santhiya | 08.05.2023 |
| 16. | 22CSPD0 - Kernel Programming <ul style="list-style-type: none"> • Dr. G.Madhu Priya from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Linux kernel vs OS synchronization | The suggestions have been incorporated in the syllabus | Dr. G.Madhu Priya | 08.05.2023 |
| 17. | 22CSPF0 IoT and its Applications <ul style="list-style-type: none"> • Dr. M.Vijayalakshmi from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Add role of digital twins in healthcare ○ Include IIOT as case study ○ Include federated computing | The suggestions have been incorporated in the syllabus | Dr. M.Vijayalakshmi Dr. G. S. R. Emil Selvan | 08.05.2023 |
| 18. | 21CSR00 - Graph Analytics <ul style="list-style-type: none"> • Dr. M.Nirmala Devi from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Temporal graph and graph enumeration to be covered ○ Consider distributed path trace algorithm under big graph processing ○ Fundamental graph problems to be covered | The suggestions have been incorporated in the syllabus | Dr. M.Nirmala Devi Dr. B.Subbulakshmi Dr.M.K.Kavitha Devi | 08.05.2023 |

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| 19. | 21CSRF0 - Cyber Security and Cyber Law <ul style="list-style-type: none"> • Dr. C.Senthilkumar from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Adjunct faculty member may also be involved in course delivery ○ Can be offered as flipped classroom mode | The suggestions have been incorporated in the syllabus | Dr. C.Senthilkumar Dr. M.Vijayalakshmi | 08.05.2023 |
| 20. | 21CSRG0 - Cyber Physical System <ul style="list-style-type: none"> • Dr. G.Madhu Priya from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Some modules can be handled by EEE/Mech faculty ○ Suggested Flipped class room delivery for some modules ○ Digital twins can be discussed | The suggestions have been incorporated in the syllabus | Dr. G.Madhu Priya Mr. D. Nagendra Kumar | 08.05.2023 |
| 21. | 21CSRE0 - Agile Project Development using Scrum <ul style="list-style-type: none"> • Dr. N.Shivakumar from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Link it with engineering practices ○ Continuous integration and deployment (CI/CD) ○ Include release management | The suggestions have been incorporated in the syllabus | Dr. N.Shivakumar Ms. Rajalavanya Ms. G. Bhavani | 08.05.2023 |
| 22. | 21CSQA0 - AI for Everyone <ul style="list-style-type: none"> • Mr. S. Santhana Hari from CSE Department gave brief description of the syllabus. The suggestions given by the experts are <ul style="list-style-type: none"> ○ Building AI projects, methodology, CRISP DL ○ Change the course title as "AI for Engineers" ○ Non-technical (can be omitted) ○ Accommodate NN principle for all domain students ○ object detection, framework can be included | The suggestions have been incorporated in the syllabus | Dr. K. Sundarakantham Dr. M. Suguna Mr. S. Santhana Hari | 08.05.2023 |
| 23. | The following courses are passed for approval in Academic council meeting without change <ul style="list-style-type: none"> • 22CS570 Network Programming Lab • 22CS590 Project - I • 22CS670 Distributed Computing Lab • 22CS690 Project - II | - | - | - |

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| | <ul style="list-style-type: none"> • 22CS710 Engineering Economics • 22CS790 Project - III • 22CS890 Project - IV • 22CSPE0 Wireless Networks • 18CS1P0 Security Threats and Vulnerabilities • 18CS1Q0 Cloud Computing with AWS | | | |
| 24. | <p>The assessment pattern for following courses have been revised: 22CS160 Foundations of Computer Programming, 22CS260 Engineering Graphics and Extended Reality and are passed for approval in Academic council meeting with the following revised codes.</p> <ul style="list-style-type: none"> • 22CS161 Foundations of Computer Programming • 22CS261 Engineering Graphics and Extended Reality | - | - | - |

Prepared by B. Suleed Date 8/5/23 Approved by [Signature] Date 8/5/2023

THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI-625015
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date of Board of Studies: 29-04-2023

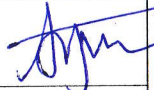



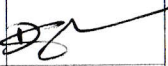

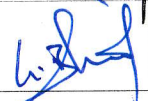
Ref No: CSE/BOS/2023

Date: 29-04-2023

The Members of Board of Studies (Hybrid mode) for the B.E. Computer Science and Engineering to be held on 29.04.2023 (Saturday).

| S.No | Name of the Member | Position of the member | Name of the Organization/ Institution of the member | Address of the member | Position in BOS | Signature |
|------|--------------------------------|---|--|--|---|---------------|
| 1. | Dr. S. Mercy Shalinie | Professor & Dean (MIS) | Thiagarajar College of Engineering | HDCSE, Department of CSE, TCE, Madurai | Chairman | |
| 2. | Dr. Chandrasekar Ramanathan | Professor and Dean(Academics) | IIT, Bangalore | IIT, Bangalore | Academic Representative | <i>online</i> |
| 3. | Dr. A. Sankar | Professor | PSG Tech, Coimbatore | PSG Tech, Coimbatore | Anna University Nominee | <i>online</i> |
| 4. | Dr.S.Karthick | Assistant Professor and Dean(Student Career, Alumni & International Relations) | NIT, Andhra Pradesh | NIT, Andhra Pradesh | Academic Representative and Alumnus | <i>online</i> |
| 5. | Dr. P. Balamurugan | Assistant Professor | Industrial Engineering and Operations Research IIT Bombay | Industrial Engineering and Operations Research IIT Bombay | Academic Representative and Alumnus | <i>online</i> |
| 6. | Mr. Mari Ganesh Kumar | Applied Scientist II | Amazon | Bangalore | Industry Representative | <i>online</i> |

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| 7. | Jeshuren Chelladurai, | Applied Scientist | Amazon | Bangalore | Industry Representative | Online |
| 8. | Dr. C. Sridharan | Associate Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff | C. Sridharan |
| 9. | Prof. M. Sivakumar | Associate Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff | M. Sivakumar |
| 10. | Dr. K. Sundarakantham | Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff | K. Sundarakantham |
| 11. | Dr. C.Senthilkumar | Associate Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff | C. Senthilkumar |
| 12. | Dr.M.K.Kavitha Devi | Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff | — |
| 13. | Dr. B.Subbulakshmi | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff | B. Subbulakshmi |
| 14. | Dr. G.S.R. Emil Selvan | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff | G.S.R. Emil Selvan |
| 15. | Dr.M.Vijayalakshmi | Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff | M. Vijayalakshmi |
| 16. | Dr. S. Prasanna | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff | — |
| 17. | Dr. N.Shivakumar | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff | N. Shivakumar |
| 18. | Dr. M. P. Ramkumar | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff | M. P. Ramkumar |
| 19. | Dr.G.MadhuPriya | Associate Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff | G. MadhuPriya |

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| 20. | Dr. K. Narasimamallikarjunan | Associate Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff |  |
| 21. | Dr.M.Suguna | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff |  |
| 22. | Dr.R.LeenaSri | Associate Professor, CSE | Thiagarajar College of Engineering | Madurai | Internal Staff |  |
| 23. | Dr. M. Nirmala Devi | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff |  |
| 24. | Ms.Raja Lavanya | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff | — |
| 25. | Ms. C. Santhiya | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff | — |
| 26. | Mr. D Nagendra Kumar | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff |  |
| 27. | Mr. S. Santhana Hari | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff |  |
| 28. | Ms. G. Bhavani | APCSE | Thiagarajar College of Engineering | Madurai | Internal Staff |  |


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