

Dr.B.Sathiyabhama

Chairperson, Board of Studies

Department of Computer Science and Engineering

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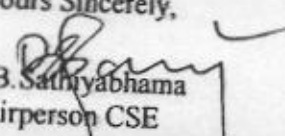
Date: 09.06.2021

Sub: Sona College of Technology - 15th Meeting of the Board of Studies in Computer Science and Engineering held on 09th June 2021 - Minutes - Communicated.

I thank the members for their presence and valuable suggestions in the 15th Meeting of the Board of Studies in Computer Science and Engineering held on 09th June 2021 at 10.30.am online in Team Meet.

Please find enclosed copy of minutes of the 15th meeting of the Board of Studies in Computer Science and Engineering.

Yours Sincerely,


Dr.B.Sathiyabhama
Chairperson CSE

Encl: Minutes of the meeting / 15th Board of Studies/ CSE

To

1. Dr. S.R.R. SenthilKumar, Principal, Sona College of Technology & Chair, Academic Council
2. Dr.R.Shivakumar, Professor, Academic Council Member Secretary, Sona College of Technology, Salem.
3. Dr.K.Vani, ASP/ IT, Anna University nominee, Anna University Chennai.
4. Dr.G.Sudha Sadasivam, Associate Professor, PSG College of Technology, Coimbatore.
5. Dr. B.Sivaselvan, Assistant Professor, IITDM, Kanchipuram.
6. Mr. Udaykumar Rajendran, Director of Software Development , Checktronix India Pvt Ltd..
7. Mr Ravi Subramainam, Director, Originovate Systems, Bangalore
8. Mr.K.Basker, Manager Software Development at Sabre holdings
9. Prof.B.Saravanan, Placement Director , Sona College of Technology, Salem
10. Mr. Oswald Assistant Professor, VIT Vellore
11. Dr.B.Sathiyabhama, Sona College of Technology, Salem.
12. Prof.A.C.Kaladevi, Professor, Sona College of Technology, Salem.
13. Dr.S.Sakthivel, Professor, Sona College of Technology, Salem.
14. Prof.J.Jayanthi, Associate Professor, Sona College of Technology, Salem.
15. Prof.D.Balamurugan, Associate Professor, Sona College of Technology, Salem.
16. Dr. R.Sivakami, Associate Professor, Sona College of Technology, Salem.
17. Dr. V.Sathiyamoorthy, Associate Professor, Sona College of Technology, Salem.
18. Prof. R. C. Narayanan, Associate Professor, Sona College of Technology, Salem.
19. Prof.V.Nandini, Associate Professor, Sona College of Technology, Salem.
20. Prof. D.Vidhyabharathi, Associate Professor, Sona College of Technology, Salem.
21. Prof.T.Sathiya, Assistant Professor(SG), Sona College of Technology, Salem
22. Dr. A.Prithiviraj, Assistant Professor(SG), Sona College of Technology, Salem.
23. Dr S.Anitha Elavarasi, Assistant Professor(SG), Sona College of Technology, Salem
24. Prof R.Reena Devi, Assistant Professor(SG), Sona College of Technology, Salem
25. Prof N Basker, Assistant Professor(SG), Sona College of Technology, Salem
26. Prof M.Marimuthu, Assistant Professor(SG), Sona College of Technology, Salem

Sona College of Technology (Autonomous)
Department of Computer Science and Engineering
Minutes of 15th Board of Studies Meeting on 09.06.2021

Present:

Chairperson:

Dr.B.Sathiyabhama
Professor/HoD,
Sona College of Technology,
Salem 636 005

Members:

1. Dr.B.Sathiyabhama, Prof & Head/CSE, Sona College of Technology, Salem
2. Prof.A.C.Kaladevi, Professor, Sona College of Technology, Salem.
3. Dr.S.Sakthivel, Professor, Sona College of Technology, Salem.
4. Prof.J.Jayanthi, Associate Professor, Sona College of Technology, Salem.
5. Prof.D.Balamurugan, Associate Professor, Sona College of Technology, Salem.
6. Dr. R.Sivakami, Associate Professor, Sona College of Technology, Salem.
7. Dr.V.Sathiyamoorthy, Associate Professor, Sona College of Technology, Salem.
8. Prof. R. C. Narayanan, Associate Professor, Sona College of Technology, Salem.
9. Prof.V.Nandini, Associate Professor, Sona College of Technology, Salem.
10. Prof. D.Vidhyabharathi, Associate Professor, Sona College of Technology, Salem.
11. Prof.T.Sathiya, Assistant Professor(SG), Sona College of Technology, Salem
12. Dr. A.Prithviraj, Assistant Professor(SG), Sona College of Technology, Salem.
13. Dr. S.Anitha Elavarasi, Assistant Professor, Sona College of Technology, Salem
14. Prof R.Reena Devi, Assistant Professor, Sona College of Technology, Salem
15. Prof N Basker, Assistant Professor, Sona College of Technology, Salem
16. Prof M.Marimuthu, Assistant Professor, Sona College of Technology, Salem

Student Members:

1. Ajanyantheesawar -IV
2. S.Kalaiarasan -IV
3. Nandavanam Venkata Sai kausik -IV
4. Shama -IV
5. Kavinraj M- III
6. Jayashree,III
7. Aparna Shree,III
8. Rahul Ganesh,II
9. Harshitha S -II
10. Mohammed Abhutahhir Khan,II
11. Rahul Ganesh,II

In attendance:

1. Dr.S.R.R.Senthilkumar, Principal, Sona College of Technology, Salem
2. Dr.K.Akilandeswari, Academic Dean, Sona College of Technology, Salem
3. Dr R.Shivakumar, Member Secretary, Academic Council, Sona College of Technology, Salem
4. Dr S.Jayabharathi, Professor/Maths, Sona College of technology
5. Dr A.Saravanan, Assistant Professor/Maths, Sona College of Technology
6. Dr.K.C.Rajeswari, Assistant Professor(SG), Sona College of Technology, Salem
7. Mr.J.Dhayanithi, Assistant Professor, Sona College of Technology, Salem
8. Ms.S.Theetchenya, Assistant Professor, Sona College of Technology, Salem
9. Ms.P.Ramya, Assistant Professor, Sona College of Technology, Salem
10. Dr.G.Kirubasri, Assistant Professor, Sona College of Technology, Salem
11. Dr.S.Sankar, Assistant Professor, Sona College of Technology, Salem
12. Dr.S.Kiruthika, Assistant Professor, Sona College of Technology, Salem
13. Mr.M.R.Sundarakumar, Assistant Professor, Sona College of Technology, Salem
14. Ms. S.Vidhushavarshini, Assistant Professor, Sona College of Technology, Salem
15. Ms.R.Priyadharshini, Assistant Professor, Sona College of Technology, Salem
16. Ms. V.Vinodhini, Assistant Professor, Sona College of Technology, Salem
17. Ms.T.Revathy, Assistant Professor, Sona College of Technology, Salem
18. Ms A.P.Lavanya, Assistanat Professor, Sona College of Technlogy, Salem

Detailed Agenda for 15th BOS meeting – June 2021

Department: Computer Science and Engineering

15.1 The Chairperson welcomed all the members, and all the others present in the meeting.

Agenda:

S.No	Approval / Correction / Updation proposed
1	Approval of Curriculum (Regulation 2019) and Syllabi – V Semester for B.E Computer Science and Engineering
2	Discussion on Elective courses for Semester V and VI of B.E. CSE - Regulation 2019
3	(Proposing) Changes/ modifications B.E. CSE - Regulation 2015R and PG Course (M.E(Computer Science and Engineering) and M.Tech Data Science)
3	Suggestions / discussions on Vision, Mmission, Program Outcome (PO), Program Educational Objectives (PEO) and Program Specific Outcome (PSO) for B.E Computer Science and Engineering
5	Any other matter of interest

15.2 The chairperson has requested the members of the board to confirm the minutes of the 14th Board of Studies meeting held on 14-12-2020 and the board approved the same

15.3 B.E. Computer Science and Engineering (CSE)

The board discussed the 2019 Regulations Fifth semester courses' syllabi. The following are the discussion points.

1. Chairperson briefed about the syllabus framed for the course **Computer Networks**. Dr D. Balamurugan shared that the course syllabus is framed based on the top down approach. Dr Vani suggested that specific topics to be included in the fifth unit like the other units. Mr. Udayakumar suggested that the topics HTTP2 and HTTP3 to be covered in unit 1. Dr. Oswald and Dr. Vani suggested adding the following book as a textbook.

- Behrouz A.Ferouzan,"Data Communications and Networking", Fifth Edition, Tata McGraw-Hill Publication, 2013.

2. Chairperson briefed about the syllabus framed for the course **Software Engineering**. Dr. Sudha Sadhasivam and Dr. Sivaselvan recommended including object oriented concepts in the case studies. Mr. Baskar suggested that object oriented testing can be added in unit 4. Mr. Udayakumar suggested including the topics such as component based design and subscription based release instead of perpetual licensing and usage at the end of unit 3. He also suggested the following Software Engineering tools like Aha, Jira, Tello, Jenkins, Teamcity, Github, Project Libre for requirement tracking need to be explored by the students for better understanding.

3. Chairperson briefed about the syllabus framed for the course **Theory of Computation**. Dr. Sivaselvan suggested that adding one more hour either tutorial or extra hour for practicing more problems. Dr. Sudha Sadhasivam recommended moving some concepts from Unit 4 to Unit 3 and expanding the Turing machine concepts even further. Dr. Oswald suggested that the topic Rice Theorem can be added in unit 5. In addition, all of the experts suggested that reference book 1 should be mentioned as an e-book at the end.

1. Micheal Sipser, "Introduction of the Theory and Computation", Thomson Brokecole, 1997. (e-book)

4. Chairperson briefed about the syllabus framed for the course **Embedded System Design**. Dr. Vani suggested including the topic such as static and dynamic scheduling at the end of unit 2. She asked to remove unit-3 and suggested including the advanced microcontrollers, namely 8051, PIC, ARM for the rest of the three units and the recommended textbook mentioned below.

Mazidi, Muhammad Ali, Mazidi, Janice G., McKinlay, Rolin D, "The 8051 Microcontroller and Embedded Systems", Pearson Prentice Hall, Second Edition, 2005.

5. Chairperson briefed about the syllabus framed for the course **Computer Networks Laboratory**. Mr. Udayakumar suggested including experiments based on load balancing at the transport and application layers.

6. Chairperson briefed about the syllabus framed for the course **Software Development Laboratory**. Dr. Sivaselvan and Dr. Vani proposed that case studies should be included instead of listing the projects.

The board discussed the changes proposed in Regulations 2019 Sixth semester syllabus and discussed the points.

1. Chairperson briefed about the syllabus framed for the course **Principles of Compiler Design**. Dr. Sudha Sadhasivam asked to include more about designing a lexical analyser in the second unit of the syllabus and to shift the topic 'Syntax directed definition' after the topic 'Intermediate languages' in unit 4. Mr. Oswald suggested adding the topic 'type checking' in Syntax analysis. Dr. K. Vani suggested adding the following book in the reference.

AW Appel, M Ginsburg, Modern Compiler Implementation in C, Cambridge University Press, 2004.

2. Chairperson briefed about the syllabus framed for the course **Full Stack Software Development**. Mr. Ravi Subramaniam advocated that this course should kindle the self-learning capability. Dr. B. Sathiyabhama explained that it is difficult for the average students to have the course as self-study since the subject is heavy. Dr. Sivaselvan suggested reworking the course credits by providing more credit for practical and less credit for lecture.

3. Chairperson briefed about the syllabus framed for the course **Artificial Intelligence**. Mr. Bhaskar asked to add Machine Learning concepts. Dr. K. C. Rajeswari explained that Machine Learning is offered as an elective course. Dr. Sivaselvan suggested providing basic introduction to Machine Learning in the AI course. Mr. Oswald suggested the following reference from IITB for the course Artificial Intelligence and Machine Learning.

- <https://www.cse.iitb.ac.in/~shivaram/teaching/old/cs337+335-s2019/index.html>

4. Chairperson explained about the syllabus framed for the course **Compiler Design Laboratory**. The BoS Committee approved the syllabus.

5. Chairperson suggested about the syllabus framed for the course **Artificial Intelligence Laboratory**. Dr. Sivaselvan suggested having some exercises as beyond the classroom activity. Dr. Sudha Sadhasivam insisted to add exercises based on designing rules and inferring on that.

The board discussed the Regulations 2019 Fifth and Sixth Semester Electives syllabi.

1. Chairperson briefed about the elective list framed for the 5th and 6th semester. The members suggested to offer the elective courses in tracks so that students can choose from each track. Dr. K. Vani and Mr. Oswald suggested including Natural Language Processing course in the list of electives.

2. Chairperson briefed about the syllabus framed for the course **Software Project Management and Agile Methodologies**. Mr. Ravi Subramaniam suggested that the topic agile coach is too early for the third year students.
4. Chairperson briefed about the syllabus framed for the course **Software Development and Analysis and Software Testing**. Mr. Bhaskar Kalyanasudnaram path testing and cyclomatic complexity are to be taught in Software Testing. Dr.J.Jayanthi added that these topics regularly are taught to them in this course. Mr.Udayakumar Rajendran told to add J-meter, Selenium grid, Cucumber in load testing and system level testing with a few test cases can be shown demo to students and assignments may also be given to students for better understanding. Mr. Bhaskar and Mr.Udayakumar told to include security testing as secures code is important in Industry and students must learn it. Dr.J.Jayanthi has assured that it would be added in the course.
6. Chairperson briefed about the syllabus framed for the course **Graph Theory and Combinatorics**. Mr. Oswald suggested to add the following reference book.
- J A Bondy and USR Murthy, "Graph Theory with Applications", 2nd Editon,Macmillan Publishers,2001
7. Chairperson briefed about the syllabus framed for the course **Data Warehousing and Data Mining**. Dr. Sivaselvan has asked to rename the unit 2 title as "Preprocessing" and he added that the following book must be included in the text and reference books respectively.
1. Charu Aggarwal, "Data Mining: The Textbook ",Springer,2015
 - 2.Jure Leskovec, Anand Rajaraman, Jeff Ullman,"Mining Massive Data Sets"3rd Edition , Cambrige University Press ,2014
8. Chairperson briefed about the syllabus framed for the course **Database Tuning**. Mr.Udayakumar shared that most of the topics are related to relation database tuning and if possible to add NoSQL, query tuning, full text indexing, storage related to DB tuning concepts.
9. Chairperson briefed about the syllabus framed for the course **Knowledge Engineering**. Dr. Sivaselvan has expressed that few of the Artificial Intelligence course topics are overlapped in this course, and these topics can be appropriately replaced relevant to Knowledge Engineering.
10. Chairperson briefed about the syllabus framed for the courses **Machine Learning, Information Retrieval, Business Intelligence and Big Data Analytics**. Dr. Sudha Sadhasivam asked to change unit -2 title because the unit's name and the course name should not be same. Dr. Sivaselvan suggested to add Apache Hadoop and PySpark which will be much easier for understanding, and he also added that unit title as Querying and Analysis.
14. Chairperson briefed about the syllabus framed for the course **Distributed systems**. Dr. Vani suggested to add Deep Learning topic instead of Image Compression. She also expressed that in unit 5 Image Processing techniques and case studies in Pattern Recognition need to be added. Dr. Sivaselvan added that students should use tools like Open CV, MATLAB and Tensor Flow. He further emphasized that faculty members handling this course must encourage the students to use the tools and assignment problems must be given to practice and get better understanding .
15. Chairperson briefed about the syllabus framed for the course **Mobile computing**. Dr. Sivaselvan and Dr. Vani suggested that Comparison of 3G and 4G Networks in Unit 5 instead of Introduction to 3G and 4G Networks in the Unit 1.
16. Chairperson briefed about the syllabus framed for the course **Cloud Computing**. Dr.A.C.Kaladevi explained this course is purely industry-oriented elective by Infosys.

Mr. Udayakumar suggested that to add Container and Container Orchestration in Virtualization topic in Unit 2. Chairperson also added that it is offered based on the Campus Connect Initiative and students may have an added advantage in placements. Dr. Sudha Sadhasivam and Dr. Sivaselvan suggested that Middle Layer and Cloud Osmotic Computing can also be added in Unit 5.

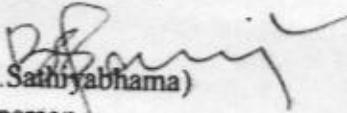
17. Chairperson briefed about the syllabus framed for the course **Deep Learning**. Dr. K. Vani suggested to add advanced techniques at last of unit 5. Mr. Oswald suggested to add book - Neural Networks and Deep Learning: A Textbook Charu Aggarwal, Dr. K. Vani suggested to add any relevant reputed Indian printed book.

18. Chairperson briefed about the syllabus framed for the course **TCP/IP**. The board members expressed that to modernize this course by having modern network implementation and Mr. Ravi Subramanian also added that this course can be renamed as Advanced Network Protocols and change the syllabus accordingly.

19. Chairperson briefed about the syllabus framed for the course **Quantum Computing**.

The Chairperson thanked the Management, Principal, Dean Academics, Academic Coordinator, BoS Committee members and all the faculty members.

The meeting came to an end at 2.30pm.


(Dr. B. Sathiyabhama)

Chairperson

Board of Studies

Department of Computer Science and Engineering

Sona College of Technology