



SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution | Accredited 'A' Grade by NAAC)





PULLOOR, KARIAPATTI – 626 115

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING BOARD OF STUDIES

MINUTES OF THE MEETING


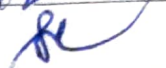
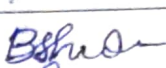


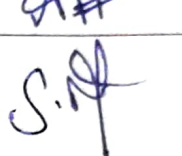
The seventh meeting of the Board of Studies of Department of Computer Science and Engineering was held on 13.09.2019 in the CSE Seminar Hall, Sethu Institute of Technology, Pulloor, Kariapatti at 10.00 A.M.

The following members were present,

S.No	Members	Name	Designation	Signature
1.	Chairman	Dr. C. Callins Christiyana	Professor & Head, Department of CSE, Sethu Institute of Technology, Pulloor.	
2.	University Nominee	Dr.D. Manjula	Professor, Department of CSE, CEG Campus, Anna University, Chennai	
3.	Academic Expert	Dr.P. Deepalakshmi	Dean, School of Computing, Kalasalingam University, Krishnankoil	
4.	Academic Expert	Dr. P. Subathra	Professor & Head, Department of Information Technology, Kamaraj College of Engineering and Technology, SPGC Nagar, Virudhunagar	

5.	Industry Nominee	Mr.C.Rajkumar	Director (Chief Architect), Cognizant Technology Solutions, Chennai, India	<i>C. Rajkumar</i>
6.	Alumni Nominee	Mr.V.Muneeswaran	Associate Professor, Department of Computer Science and Engineering, Sri Krishna College of Engineering & Technology, Coimbatore.	<i>V. Muneeswaran</i>
7.	Faculty Members	Dr.S.Subashini	Professor	<i>S. Subashini</i> 13/9/19
8.		Dr.M.Parvathy	Professor	<i>M. Parvathy</i> 13/9/19
9.		Dr.M.M.Gowthul Alam	Professor	<i>M. M. Gowthul Alam</i> 13/9/19
10.		Mr.P.Suresh	Associate Professor	<i>P. Suresh</i> 13/9/19
11.		Mr.N.AlangudiBalaji	Associate Professor	<i>N. Alangudi Balaji</i> 13/9/19
12.		Mr.K.Sathish Kumar	Associate Professor	<i>K. Sathish Kumar</i> 13/9/19
13.		Ms.D.Abithakumari	Associate Professor	<i>D. Abithakumari</i> 13/9/19
14.		Mr.R.Rajaguru	Associate Professor	<i>R. Rajaguru</i> 13/9/19
15.		Dr.M.Malathi	Associate Professor	<i>M. Malathi</i> 13/9/19
16.		Dr.T.Sampradeepraj	Associate Professor	<i>T. Sampradeepraj</i> 13/9/19
17.		Dr.C.Yesubai Rubavathi	Associate Professor	<i>C. Yesubai Rubavathi</i> 13/9/19
18.		Dr.P.Ithayarani	Associate Professor	<i>P. Ithayarani</i> 13/9/19
19.		Dr.P.Senthil Pandian	Associate Professor	<i>P. Senthil Pandian</i> 13/9/19
20.		Dr.R.Rubesh Selvakumar	Associate Professor	<i>R. Rubesh Selvakumar</i> 13/9/19
21.	Dr.A.R.Rajeswari	Associate Professor	<i>A. R. Rajeswari</i> 13/9/19	
22.	Dr.E.Sivajothi	Associate Professor	<i>E. Sivajothi</i> 13/9/19	

23.	Ms.M.Mathinakani	Asst. Professor (S.G)	M. Math
24.	Ms.B.Pandeeswari	Asst. Professor (S.G)	B. Pandeeswari
25.	Ms.G.Vairasuganthi	Asst. Professor (S.G)	G. Vairasuganthi
26.	Ms.M.Poomani@Punitha	Asst. Professor (S.G)	P. Poomani
27.	Ms.C.Jeyalakshmi	Asst. Professor (S.G)	C. Jeyalakshmi
28.	Ms.S.Meenakshi	Asst. Professor (S.G)	S. Meenakshi
29.	Ms.S.Selvi	Asst. Professor (S.G)	S. Selvi
30.	Mr.B.Guruprakash	Asst. Professor (S.G)	B. Guruprakash
31.	Ms.K.Nagalakshmi	Asst. Professor (S.G)	K. Nagalakshmi
32.	Mr.R.Umesh	Asst. Professor (S.G)	R. Umesh
33.	Ms.B.Lalitha	Asst. Professor (S.G)	B. Lalitha
34.	Mr.G.Karpaga Kannan	Asst. Professor (S.G)	G. Karpaga Kannan
35.	Mr.T.Siva	Asst. Professor	T. Siva
36.	Ms.S.Priyadharsini	Asst. Professor	S. Priyadharsini
37.	Mrs.S.Gospelina Christiana	Asst. Professor	S. Gospelina Christiana
38.	Ms.S.Sangeetha	Asst. Professor	S. Sangeetha
39.	Mr.K.Peer Mohamed	Asst. Professor	K. Peer Mohamed
40.	Mr.H.Mathew Joel Arulanandhan	Asst. Professor	H. Mathew Joel Arulanandhan
41.	Mr.K.A. Mohammed Faiz	Asst. Professor	K.A. Mohammed Faiz
42.	Mr.S.Sathish Kumar	Asst. Professor	S. Sathish Kumar
43.	Ms.K.Nithya	Asst. Professor	K. Nithya
44.	Ms.V.VijayaPriya	Asst. Professor	V. VijayaPriya

45.	Mr.I.Noor Mohamed	Asst. Professor	
46.	Mr.S.DuraiPandi	Asst. Professor	
47.	Mr.B.Sivananthan	Asst. Professor	
48.	Ms.M.Sanmugapriya	Asst. Professor	
49.	Ms.C.Abinaya Devi	Asst. Professor	
50.	Ms.S.Madhu Sangeetha	Asst. Professor	

The BoS meeting was started with the warm welcome from the Chairman of the Board.

The Chairman gave a brief presentation on autonomous status conferred to the Institution and NAAC accreditation with 'A' grade. She then highlighted the University ranks, programs organized, performance of students and faculty in NPTEL online courses, grants received and SITWARE, the student association of the Department of Computer Science and Engineering.

1.0 B.E Computer Science and Engineering

Agenda 1: Revision of Department Vision, Mission, PEOs, POs and PSOs

Vision and Mission statements of the Institution and the Department were presented to the members of the Board. The Chairman demonstrated the alignment of vision and mission statements of the Department to the Institutional vision and mission statements.

Dr.D.Manjula, suggested to modify the Mission statement 3 into **"Cultivating interpersonal traits, problem solving skills, critical and rationale thinking capabilities for the development of students leading to innovators, leaders and entrepreneurs"** since the term "comprehensive personality development" in the early statement was more general. The BoS resolved to accept the Vision and Mission statements of the Department with the changes proposed by Dr.D.Manjula.

The Programme Educational Objectives (PEO), Programme Outcome (PO) aligned with Graduate Attributes, and Programme Specific Outcome (PSO) were presented by the Chairman of the Board.

Dr.D.Manjula, suggested to implement slight modification to the PEO 3 on Lifelong Learning by changing the terms “by engaged” into “engaging” since the early term gave a meaning in past tense. The updated PEO 3 on Lifelong Learning is ,

PEO 3: Graduates will hone their professional expertise engaging in research and sustained learning activities.

The BoS resolved to accept modification in PEO 3. The modified statements are given in Annexure.I.

Agenda 2: Analysis of the stakeholders’ feedback on curriculum and syllabi

The Chairman put forth draft curriculum for the regulation R-2019. She pointed out that the AICTE model curriculum, NASSCOM technology forecast, CII technology forecast, Programme Specific Criteria by ABET, SIT CSE R-2015 curriculum and stake holders feedback were utilized as the design references for drafting the R-2019 curriculum.

The feedback from the stakeholders, viz. employers, alumni, faculty from other Institutions, parent, internal faculty, and students and the corresponding resolutions made in the Programme Assessment Committee (PAC) meetings were presented by the Chairman of the Board. The same has been given in Annexure II. After a brief discussion on the feedback and PAC resolutions, the BoS resolved to accept the PAC resolutions.

- Either one of C++ and Java can be given as a programming course in object oriented programming principles.
- Mobile Applications Development can be conducted as Lab course.

Agenda 3: Approval of improvements made in the syllabi under R-2015

The Chairman sought for the improvements to be made in the syllabi under the regulation R-2015. The BoS resolved to revise the syllabus for the course **15UCS927 - Machine Learning Algorithms** since the current syllabus does not have sequence in the topics.

Agenda 4: Mapping of curriculum and syllabi with PSC

Mapping of the curriculum and syllabus of the proposed regulation R-2019 with the Programme Specific Criteria (PSC) was presented to the Board of members by the Chairman and the Board resolved to accept the mapping.

Agenda 5: Classification of courses

The classification of the courses under regulation R-2019 based on having focus to one or more of the categories of employability, entrepreneurship and skill development was presented to the Board by the Chairman. The BoS resolved to accept the classification. The Classification of courses is given in annexure III.

Agenda 6: Approval of value added courses

The Chairman requested the BoS members to suggest suitable courses that will impart transferable and life skills to the students.

Dr. Subathra P, Academic Expert, suggested Personal Finance Management and Mr. Rajkumar Chandrasekar, Industry Nominee, suggested Robot Process Automation as suitable value added courses imparting transferable and life skills. The BoS resolved to include them as value added courses with 30 contact hours. The BoS resolved to accept the courses Ethical Hacking and Server Installation and Configuration which were suggested by the students as the value added courses.

Agenda 7: Approval of list of examiners from other colleges

A list of faculty from other colleges to act as examiners for practical and project viva-voce, question paper setters, external evaluators of answer scripts, and invigilators for end semester examinations was submitted to the BoS by the Chairman. The BoS resolved to approve the list of examiners.

Agenda 8: Approval of curriculum and syllabi under R-2019

The Board members reviewed and recommended the Program Articulation Matrix of R2019 and Course Articulation Matrices framed for first year course of R2019. The Board members conducted discussions on the proposed curriculum under regulation R—2019 and syllabi of the first two semesters.

The Board members suggested the following:

- Dr. Manjula D, University Nominee, suggested to:
 - Introduce C language as a first programming language instead of Python. *BoS resolved to have Python as introductory programming language course.*
 - Reduce the number of programming language courses. *BoS resolved to offer one or two programming language courses with comprehensive coverage core principles of programming languages.*
 - Include a course on security in the core. *BoS resolved to include a course on Cryptography and Network Security in the core.*
- Dr. Deepalakshmi P, Academic Expert, suggested to:
 - Offer the course Mobile Applications Development as pure lab component with full stack programming. *BoS resolved to offer the course as a 1.5 credit laboratory course.*
 - Introduce Cloud Virtualization as an elective that will help to enhance placement opportunities in network engineering domain to the students. *BoS resolved to update the syllabus of the course Cloud Computing.*
 - Include a course on basic electrical and electronics in the first year. *BoS resolved to include basics electrical and electronics as units of study in Digital Electronics course.*
- Dr. Subathra P, Academic Expert, suggested to:
 - Introduce object oriented programming through Java programming language rather than having both C++ and Java as separate courses. *BoS resolved to exclude C++ and have Java as a programming language for Object Oriented Programming concepts.*
 - Increase the lecture hours allocated to the course Operating Systems. *BoS resolved to increase the contact hours for the course.*

- Mr.Rajkumar Chandrasekar, Industry Nominee, suggested to:
 - Change the title of the course Agile Software Methodologies in to Software Engineering Principles and to include the topics of standard Agile and devops. *BoS resolved to modify the title and include topics of standard Agile and devops.*
 - Enforce the students to implement the concepts of data structures in any one of the programming languages. *BoS resolved to implement data structures either in C or Python.*

Based on the suggestions by the members, BoS resolved to include the following new courses for **B.E(CSE) under regulation R-2019**.

- Problem Solving and Python Programming
- Problem solving and Python Programming Laboratory
- Introduction to Computer Science and Engineering
- Software Engineering Practices
- Creative Thinking and Innovation
- Internet of Things Laboratory
- Graph Theory
- Parallel and Distributed Algorithms
- Information theory and Coding
- Embedded Systems
- Fault Tolerant Computing
- Ad Hoc and Sensor Networks
- Expert Systems
- Image Processing
- Digital Signal Processing
- Blockchain Technology
- Cyber Security
- Mobile and Pervasive Computing
- Mixed Reality
- Advanced Java Programming
- XML and Webservices
- Distributed Systems

- **Robotics and Applications**

Agenda 9: Percentage of changes in the Syllabi of R2019 of B.E(CSE):

The BoS resolved to accept the changes in the following courses:

S.No.	Course Code & Name	Changes made in the Syllabi	Percentage of Changes
1	19UCS112 – Engineering Fundamentals Laboratory	Installation of Linux operating system and Installation of software in Linux	33%
2	19UCS206 – Programming using C	File concepts are included in the syllabi at the weightage of one unit	20%

The Board of Department of Computer Science and Engineering approves and recommends the Curriculum and Syllabi of B.E. Computer Science and Engineering under autonomous regulations 2019 with the above modifications. The B.E(CSE) curriculum is given in Annexure IV.

Agenda 10: Review of CO and PO attainment:

- The direct and indirect tools for the assessment of COs and POs are reviewed and recommended.
- The target of CO attainment of theory and Lab courses for R2015 courses are reviewed and recommended.
- The target of PO attainment for each PO is reviewed and recommended.
- Course Outcome attainment of the courses and corresponding PO attainment in the academic year 2018-2019 Even and the corresponding resolutions in the PAC meeting dated 04.09.2019 are reviewed by the members. The members recommended the suggestions in PAC.
- PO/PSO attainment of the batch 2015-2019 is analyzed. The observations on the attainment and the corresponding action taken to improve the attainment are reviewed and recommended.

2.0 M.E Computer Science and Engineering

The members thoroughly discussed the curriculum and Syllabi for **M.E. Computer Science and Engineering** followed under autonomous regulations 2019 and suggested the following

- Dr. Deepalakshmi P, Academic Expert, suggested to
 - Combine Advanced Data Structures and Advanced Algorithms into a single course and include one more core course in place of the vacant. The BOS resolved to include Advanced Database Technology as the theory and Lab by combining Advanced Data structures and Advanced Algorithms.
- Dr. Manjula D, University Nominee, suggested to:
 - Shift the Soft computing course from core to elective and to include Cloud computing course as theory and lab. The BOS resolved to accept the changes.
- Mr. Rajkumar Chandrasekar, Industry Nominee, suggested to:
 - Include graph concepts in Advanced Data Structures and Advanced Algorithms
 - Give “Blockchain” course as value added courses.

The classification of the courses under Regulation-2019 focused on the following categories of employability, entrepreneurship and skill development courses were presented to the Board by the Chairman. The BoS resolved to accept the classification. The Classification of courses is given in annexure III.

Based on the suggestions by the members, BoS resolved to include the following new courses for M.E(CSE) under regulation R-2019.

- Research Methodology and IPR
- Advanced Data base Technologies
- Advanced Data base Technologies Laboratory
- Image Processing and Analysis Laboratory
- Big Data Analytics
- Data Storage Technologies and Networks
- Web Analytics and Development
- Digital Forensics
- Biometrics

- Soft Computing
- Security in Computing
- Deep Learning Techniques
- Introduction to Intelligent Systems
- Essential of HCI
- Optimization Techniques
- Compiler for HPC
- Cluster and Grid Computing
- Parallel Algorithms
- Wireless Access Technologies
- Embedded Software Development
- Business Analytics

The BoS resolved to accept the changes in the following courses in
M.E(CSE) Syllabus:

S.No.	Course Code & Name	Changes made in the Syllabi	Percentage of Changes
1	19PCS101- Advanced Data Structures and Algorithms	Fundamentals, Geometric Algorithms are removed. Advanced Concurrent Structures, Graph Algorithms, Advanced Algorithms are added	50%
2	19UCS201- Image processing and Analysis	Edge Detection, Morphology are removed. Basic Relationship between Pixels, Feature Extraction, Texture Pattern and Classes are added	35%
3	19PCS103-Advanced Data Structures Laboratory	Convex Hull , Implementation of segment Trees , Parallel Algorithm for Array Max ,Parallel Algorithm for Matrix Multiplication are removed. hashing and concurrent hashing Flow-network algorithms	80%

		Approximation algorithms / randomized algorithms. Parallel sorting algorithms are added.	
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- The Chairman thanked the members for their contribution and suggestions in framing the curriculum and syllabi for B.E. Computer Science and Engineering and M.E Computer Science and Engineering under Autonomous regulations. She thanked the members of the Board on behalf of the Department of Computer Science and Engineering for their wonderful suggestions and contribution to frame the curriculum and syllabi.


Chairman
Board of Studies

Computer Science and Engineering

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