SRI SANKARA ARTS AND SCIENCE COLLEGE

Autonomous

A Unit of Sri Kanchi Kamakoti Peetam Charitable Trust and Affiliated to University of Madras

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18.12.2025

MINUTES OF MEETING OF THE BOARD OF STUDIES

Department:	Computer Science
Venue:	Board Room
Date:	18.12.2025

Agenda:

- To review and approve the revised Regulations and Syllabus for M.Sc. Computer Science and M.Sc. Computer Science and Technology (5-year Integrated) programmes with reference to the latest industry trends.
- To review and approve the list of value-added courses being offered for the PG programmes in association with IIT Bombay Spoken Tutorial.
- To approve the Internship programmes offered for II MSc CS students in collaboration with IIT Bombay Spoken Tutorial.
- To review and approve the mapping of Courses to Employability / Entrepreneurship / Skill Development.
- To review and approve the courses addressing cross-cutting issues related to Gender Equity, Environment and Sustainability, Human Values and Professional Ethics in the curriculum.
- To review and approve the CO-PSO-PO mapping of various courses and their justification.

The following members were present in the meeting:

1. Dr. S. Gopinathan, Professor and Head, Department of Computer Science, University of Madras, Guindy, Chennai-600025 – University Nominee

2. Dr. Ananthi Sheshasaayee,, Associate Professor & HOD, Department of Computer Science, Quaid-E-Millath Government College for Women (Autonomous) Chennai – 600002 – External Subject Expert.

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3. Dr. M. Rameshkumar, Associate Professor and Head, PG & Research Department of Computer Science, Government Arts College (Autonomous), Nandanam, Chennai – 600035 - External Subject Expert.

4. Dr. K. R. Venkatesan, Ph.D., Principal, Sri Sankara Arts and Science College, Enathur, Kanchipuram- Special Invitee.

5. Mr. S. Anand, Program Manager, Dell Technologies Solutions, Bangalore – Member, Industry Representative.

6. Mr. H. Indhar, Senior Database Administrator, Pay Pal India Pvt. Ltd., Chennai – Member, Alumnus.

7. Mr. R. Krishnamurthy, Assistant Professor and Head, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Chairman.

8. Dr. K. Nithyanandan, Assistant Professor, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.

9. Mr. K. Shanmugam, Assistant Professor, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.

10. Dr. S. Muralidharan, Assistant Professor, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.

11. Mr. S. Hariharan, Assistant Professor, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.

12. Dr. R. Karthikeyan, Assistant Professor, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.

13. Mr. M. Arunkumar, Assistant Professor, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.

14. Mr. R. Suresh Kumar, Assistant Professor, Dept. of Computer Science, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.

The following were the transactions of the meeting:

- The Revised Regulations and Syllabus for M.Sc. Computer Science and M.Sc. Computer Science and Technology (5-year Integrated) programmes were reviewed with reference to the latest industry trends.

- The members unanimously approved the revised syllabus for M.Sc. Computer Science and M.Sc. Computer Science and Technology (5-year Integrated) programmes for adoption from the academic year 2026-27.

- The list of Value-added courses being offered for the PG programmes was reviewed with respect to their relevance to the Industry standards and demands. The list of certificate courses being offered is:
    - HTML is offered to IV MSC CST
    - Python 3.4.3 is offered to III MSC CST.

- The members also approved the Internship programmes on the topics Java Business Application and Python 3.4.3, being offered for II MSc CS and V MSc CST students in collaboration with IIT Bombay Spoken Tutorial.

- The members approved the following mapping of Courses to Employability / Entrepreneurship / Skill Development based on the contents with a direct bearing on Employability / Entrepreneurship / Skill Development

MSC Computer Science - Course Classification: Skill Development / Employability / Entrepreneurship

Course Name	Focus Area	Specific Activities Validating Classification
Advanced Python Programming	Skill Development	Advanced scripting; OOP; API integration; automation; real-world problem solving; data handling.
Design and Analysis of Algorithm	Skill Development	Algorithm design; complexity analysis; optimization techniques; solving computational problems.

Advanced Python Programming Lab	Skill Development	Implementing real-time programs; automation tasks; debugging; hands-on data processing.
LaTeX	Skill Development	Document preparation; research paper formatting; technical report creation using LaTeX environment.
Theory of Computation	Skill Development	Formal languages; automata design; problem-solving foundations.
Machine Learning using Python Lab	Skill Development	Hands-on ML coding; dataset processing; algorithm implementation.
Optimization Techniques	Skill Development	Linear/non-linear optimization; solving quantitative decision problems.
Principles Of Compiler Design	Skill Development	Lexical/syntax analysis; code generation; compiler construction.
Deep Learning using Python Lab	Skill Development	DL coding; training deep models; GPU-based experiments.
Data Visualization Lab	Skill Development	Visualization tools; dashboards; storytelling with data.
Advanced Computer Architecture	Skill Development	Pipeline design; multiprocessor architecture; performance analysis.
Network Security	Employability	Firewall configuration; IDS/IPS; secure network setup; encryption protocols; cybersecurity practices.
Advanced Software Engineering	Employability	Design patterns; SDLC; architecture modelling; project documentation; industry practice alignment.
Cryptography	Employability	Implementing encryption algorithms; secure key management; applied cybersecurity problem solving.
Information Security	Employability	Risk assessment; vulnerability analysis; compliance standards; enterprise security practices.

Ethical Hacking / Agile Project Management	Employability	Penetration testing; threat modelling; ethical hacking tools; agile sprint planning & workflows.
Machine Learning	Employability	ML algorithms; model training & evaluation; real-world dataset applications.
Data Mining and Warehousing	Employability	Pattern extraction; OLAP; business intelligence; large-scale data handling.
Digital Image Processing	Employability	Image filtering; feature extraction; medical/industrial applications.
Computer Vision	Employability	Object detection; image recognition; real-time computer vision tasks.
Advanced Operating Systems	Employability	Distributed OS concepts; concurrency; resource management.
Human Computer Interaction	Employability	UI/UX design; usability testing; prototyping.
Multimedia and Its Applications	Employability	Multimedia content creation; compression; streaming technologies.
Artificial Neural Network and Deep Learning	Employability	Neural network design; CNN/RNN; deep learning modelling.
Natural Language Processing	Employability	Text processing; sentiment analysis; NLP model development.
Reinforcement Learning	Employability	Agent design; reward models; real-world RL applications.
Health Care Data Analytics	Employability	Medical data analysis; predictive models; healthcare decision systems.
Time Series Analytics with Forecasting	Employability	ARIMA; forecasting models; financial/environmental applications.
Artificial Intelligence	Employability	Search algorithms; knowledge representation; intelligent system design.
Social Media Analytics	Employability	Social data mining; sentiment analytics; digital marketing insights.

Parallel Computing	Employability	Parallel algorithms; GPU/CPU parallelism; high-performance computing.
Data Science with Analytics	Employability	Data analysis; statistical modelling; visualization; end-to-end workflow.
Summer Internship	Employability	Industry exposure; real-world project execution; professional skill building.
Block Chain Technology	Entrepreneurship	Smart contracts; decentralized apps; blockchain prototype development.
Embedded System	Entrepreneurship	Microcontroller programming; sensor integration; prototype development; IoT product creation.
Project Work and Viva-Voce	Entrepreneurship	Innovation development; prototype building; industry/problem-oriented projects.

MSC CST (5-Year Integrated) - Course Classification: Skill Development / Employability / Entrepreneurship:

Course Name	Focus Area	Specific Activities Validating Classification
Python Programming	Skill Development	Coding assignments, problem-solving, industry-oriented Python programs
Python Programming Lab	Skill Development	Practical coding, debugging, mini-projects
Office Automation Lab	Skill Development	Practical document creation and data handling
Data Structures and Algorithms Lab	Skill Development	Algorithm implementation and optimization
.Net Lab	Skill Development	Hands-on application building
Data Analytics using R Lab	Skill Development	Hands-on data analytics projects

Open Source Software Lab	Skill Development	Contribution to open-source projects
Advanced Python Programming Lab	Skill Development	Complex Python projects
LaTeX	Skill Development	Technical documentation
Deep Learning using Python Lab	Skill Development	Hands-on DL projects
Machine Learning using Python Lab	Skill Development	ML model implementation
Data Visualization Lab	Skill Development	Interactive dashboard creation
Fundamentals of Information Technology	Employability	Understanding IT basics for entry-level IT roles
Office Automation	Employability	Hands-on use of Word, Excel, PowerPoint for office jobs
Introduction to HTML	Employability	Website creation, basic freelancing web tasks
Data Structures and Algorithms	Employability	Problem-solving for technical interviews
OOPS and Java Programming Lab	Employability	Object-oriented programming for software jobs
Introduction to Excel Lab	Employability	Data handling, reporting, spreadsheets
.Net	Employability	Enterprise application development
Relational Database Management System	Employability	Database design and SQL skills
Quantitative Aptitude	Employability	Aptitude preparation for competitive exams

Understanding Internet	Employability	Internet usage, email, online tools
Operating Systems	Employability	System-level understanding for IT roles
Data Analytics using R	Employability	Data analysis and interpretation
Grid Computing	Employability	Distributed computing concepts
Computer Organization and Architecture	Employability	Hardware and system knowledge
Big Data Analytics	Employability	Large-scale data processing skills
Introduction to Artificial Intelligence	Employability	AI fundamentals for industry
Computer Networks	Employability	Networking and system administration
Software Engineering	Employability	SDLC, documentation, teamwork
Data Mining	Employability	Pattern discovery and analytics
Biometric Techniques	Employability	Security and authentication systems
Advanced Python Programming	Employability	Advanced scripting and automation
Design and Analysis of Algorithm	Employability	Advanced problem solving
Network Security	Employability	Cybersecurity roles
Object Oriented Analysis and Design	Employability	Software design skills
Agile Project Management	Employability	Agile and Scrum practices
Software Testing	Employability	Quality assurance practices

Machine Learning	Employability	Predictive modeling
Theory of Computation	Employability	Core computer science foundation
Data Science with Analytics	Employability	End-to-end data science skills
Digital Image Processing	Employability	Image analysis applications
Computer Vision	Employability	Vision-based AI systems
High Performance Computing	Employability	Scientific and industrial computing
Distributed Database System	Employability	Scalable data management
Text Mining	Employability	NLP and content analysis
Software Project Management	Employability	Project planning and execution
Advanced Excel	Employability	Business analytics
Ethical Hacking	Employability	Cybersecurity testing
Artificial Neural Network and Deep Learning	Employability	Advanced AI solutions
Principles of Compiler Design	Employability	System software development
Natural Language Processing	Employability	Language-based AI systems
Cryptography	Employability	Secure system design
Information Security	Employability	Security management
Advanced Computer Architecture	Employability	Advanced hardware systems
Human Computer Interaction	Employability	UX/UI design principles
Parallel Computing	Employability	Concurrent programming

Advanced Software Engineering	Employability	Enterprise software practices
Cloud Computing	Entrepreneurship	Cloud deployment, startup solutions
Open Source Software	Entrepreneurship	Startup tools, community projects
Mobile Application Development	Entrepreneurship	App creation, startup ideas
Robotics and its Applications	Entrepreneurship	Automation and robotics startups
Virtual and Augmented Reality	Entrepreneurship	AR/VR application development
E-Commerce	Entrepreneurship	Online business models
Project with Viva Voce	Entrepreneurship	Real-world problem solving
Embedded System	Entrepreneurship	Hardware-software integration
Social Media Analytics	Entrepreneurship	Marketing analytics
Blockchain Technology	Entrepreneurship	Decentralized application development
Internet of Things	Entrepreneurship	Smart device solutions
Multimedia and Its Applications	Entrepreneurship	Content creation and media startups
Project Work and Viva Voce	Entrepreneurship	Capstone project execution
Web Design Lab	Entrepreneurship	Website development, freelancing projects

- The members approved the following description of the courses, which address issues related to Gender Equity, Environment and Sustainability, Human Values and Professional Ethics in the curriculum.

MSC Computer Science – Courses addressing Gender Equity, Environment and Sustainability, Human Values, and Professional Ethics.

Course Name	Gender Equity	Environment and Sustainability	Human Values	Professional Ethics	Justification
Software Engineering	✓			✓	Teamwork, responsibility, professional conduct in software development
Advanced Software Engineering				✓	Ethical decision-making and adherence to professional standards
Agile Project Management				✓	Respect, collaboration, transparency, ethical project execution
Software Project Management			✓	✓	Leadership values, accountability, stakeholder responsibility
Information Security				✓	Integrity, trust, ethical handling of sensitive information
Network Security				✓	Responsible security practices and ethical defense strategies
Ethical Hacking				✓	Legal compliance, integrity in penetration testing
Cryptography				✓	Privacy protection and ethical secure communication
Introduction to Artificial Intelligence	✓			✓	Bias-free AI, fairness, and ethical AI decision-making

Social Media Analytics	✓			✓	Gender sensitivity and ethical use of social data
E-Commerce				✓	Consumer rights, fairness, and ethical business practices
Open Source Software				✓	Inclusive collaboration, community values
Robotics and its Applications		✓		✓	Sustainable automation and responsible deployment
Internet of Things		✓		✓	Energy efficiency, responsible data collection
Cloud Computing		✓		✓	Green computing and ethical cloud usage
Big Data Analytics		✓		✓	Energy-aware processing and responsible analytics
Embedded System		✓			Low-power and sustainable system design
Biometric Techniques	✓			✓	Consent, privacy, and ethical biometric use
Project Work and Viva-Voce	✓		✓	✓	Real-world societal, ethical, and sustainability issues

MSC Computer Science and Technology (5-Year Integrated) – Courses addressing Gender Equity, Environment and Sustainability, Human Values, and Professional Ethics.

Course Name	Gender Equity	Environmental Sustainability	Human Values	Professional Ethics	Justification
Network Security				✓	Ethical cybersecurity, lawful data protection.
Advanced Software Engineering	✓		✓	✓	Inclusive teams, human-centered design, strong software ethics.
Embedded System		✓		✓	Environment-focused automation; ethical deployment.
Cryptography				✓	Ethical encryption and lawful cryptographic use.
Information Security				✓	Data privacy, compliance, ethical security practices.
Ethical Hacking				✓	Ethical penetration testing;
Agile Project Management				✓	professional Agile conduct.
Block Chain Technology				✓	Integrity, immutability, ethical blockchain usage.
Multimedia and Its Applications				✓	Copyright, privacy, ethical media handling.
Artificial Intelligence		✓		✓	AI for sustainability; transparency and safe AI.

- The members reviewed and approved the CO-PSO-PO mapping of all the PG courses and their justifications.

Signature of members:

1. Dr. S. Gopinathan   -

Dr. S. GOPINATHAN, M.Sc.,Ph.D.,
Professor and Head
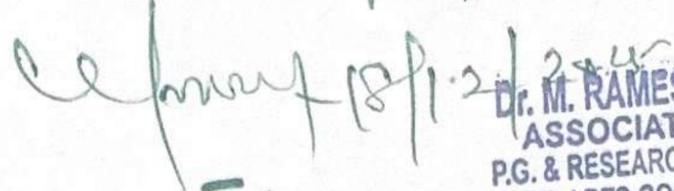Department of Computer Science
University of Madras
Chennai - 600 025

2. Dr. Ananthi Sheshasaayee   -

3. Dr. M. Rameshkumar   -

Dr. M. RAMESHKUMAR, M.Sc., M.Phil., Ph.D.
ASSOCIATE PROFESSOR & HEAD
P.G. & RESEARCH DEPT. OF COMPUTER SCIENC
GOVT. ARTS COLLEGE FOR MEN (AUTONOMOU
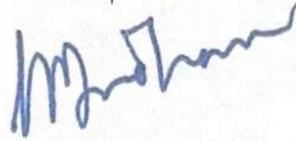NANDANAM, CHENNAI - 600 035

4. Dr. K.R. Venkatesan   -

5. Mr. S. Anand   -

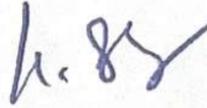6. Mr. H. Indhar   -

7. Mr. R. Krishnamurthy   -

8. Dr. K. Nithyanandan   -

9. Mr. K. Shanmugam   -

10. Dr. S. Muralidharan   -

11. Mr. S. Hariharan   -

12. Dr. R. Karthikeyan   -

13. Mr. M. Arunkumar   -

14. Mr. R. Suresh Kumar   -