Board of Studies Meeting

Department of Computer Technology

The minutes of the 22nd meeting of the Board of Studies held on 26.10.2026 at 10.00 a.m. through online mode.

Members Present:

S.NO.	NAME	Category
1.	Dr. M. Rathi, Professor and Head	Chairman
2.	Dr. G. Sumalatha, Assistant Professor, Department of Computer Technology and Data Science, Sri Krishna Arts and Science College, Coimbatore.	VC Nominee
3.	Dr. S. Chandia, Assistant Professor, M.Sc. Decision and Computing Sciences Coimbatore Institute of Technology, Coimbatore.	Subject Expert
4.	Dr. P.Vijayakumar, Assistant Professor, Department of Computer Applications, Kongu Engineering College, Erode.	Subject Expert
5.	Mrs. Saranya Ramakrishnan, Staff Programme Manager, Kovai.Co, Coimbatore	Industry Expert
6.	Mr. Siddhartha VJ, Senior Test Analyst, Cognizant Technology Solutions, Coimbatore.	Alumni
7.	Dr. N. Kuppuchamy, Associate Professor and Head, Department of Tamil	Co-opted Member
8.	Dr. A. Hazel Verbina, Professor and HoD Department of English	Co-opted Member
9.	Dr. S. Gokilamani, Associate Professor and Head i/c Department of Mathematics	Co-opted Member
10.	Dr. C. Balakrishnan, Associate Professor and Head Department of Commerce B&I	Co-opted Member
11.	Mr. G. Vishnudev III CT A	Student Representative
12.	Dr. B. Leelavathi, Professor	Member
13.	Dr. T. R. Anand, Associate Professor	Member
14.	Dr. C. Mohanapriya, Associate Professor	Member
15.	Dr. V. Manimekalai, Associate Professor	Member
16.	Mrs. P. Vanitha, Assistant Professor	Member

17.	Mrs. K. Vanitha, Assistant Professor	Member
18.	Dr. D. Geethamani, Assistant Professor	Member
19.	Mr. R. Vijay Anand, Assistant Professor	Member
20.	Mrs. I. Ajitha, Assistant Professor	Member
21.	Ms. S. Leena Sylviya, Assistant Professor	Member

The HoD and Chairman of the Department of Computer Technology welcomed and introduced all the members and appreciated them for their continuous support and contribution for the development of academic standard and enrichment of the syllabus.

The items of the agenda were taken one by one for discussion and the following resolutions were passed.

Item 22.1

*To review and approve the minutes of the previous meeting held on **01.04.26**.*

The chairman of the Board presented the minutes of the previous meeting held on **01.04.26** and requested the members to approve.

After a brief discussion the following resolution was passed.

Resolution:

Resolved to approve the minutes of the previous meeting held on 01.04.26.

Item 22.2:

To review and approve the Scheme and Syllabi for the II Semester for the students admitted in UG during the academic year 2026-27.

The chairman of the board presented the detailed scheme and syllabi for the II Semester for the students admitted in UG during the academic year 2026-27.

The members deliberated in detail and approved the syllabus.

After discussion the following resolution was passed.

Resolution:

Resolved to approve the syllabus for the II Semester for the students admitted during the academic year 2026-27.

Item 22.3:

To review and approve the Scheme and Syllabi for the IV Semester for the students admitted in UG during the academic year 2025-26.

The chairman of the board presented the detailed scheme and syllabi for the IV Semester for the students admitted in UG during the academic year 2025-26.

Changes Made:

Course Code	Course	Changes & Reason
25CTU4CB	Core: Web Application Development	Dr. P. Vijayakumar suggested to include advanced node.js concepts to equip students with server-side scripting skills.
25CTU4SP	SEC Practical: Web Programming	

After discussion the following resolution was passed.

Resolution:

Resolved to approve the Syllabi with the above modifications for the IV Semester for the students admitted during the academic year 2025-26.

Item 22.4:

To review and approve the Scheme and Syllabi for the VI Semester for the students admitted in UG during the academic year 2024-25.

The chairman of the board presented the detailed scheme and syllabi for the VI Semester for the students admitted in UG during the academic year 2024-25.

New Courses introduced:

Course Code	Course	Changes & Reason
24CTU6CA	Core: Network Programming	To strengthen understanding of network-based application development, socket programming and client–server communication.
24CTU6SP	SEC Practical: Network Programming and Modelling	To develop skills in network application development, analysis and troubleshooting. The board members suggested to change the title from "Network Programming and Simulation" to "Network Programming and Modelling".

Changes Made:

Course Code	Course	Changes & Reason
24CTU6DB	DSE: Cloud Computing and Virtualization	Dr. Chandia suggested to include Containerization and Orchestration concepts in Unit IV to develop skills in modern cloud-native application deployment and management.
24CTU6DD	DSE: Big Data Tools and Technologies	Dr. G. Sumalatha suggested to include fault tolerant concepts in Unit II to ensure data reliability, system recovery in big data environments. Mrs. Saranya suggested the inclusion of Spark and Flink in Unit III to understand fast, scalable and distributed big data processing.

After discussion the following resolution was passed.

Resolution:

Resolved to approve the scheme and syllabi with the above modifications for the VI semester for the students admitted during the academic year 2024-25.

Item 22.5

To review and approve the self study courses offered during III Semester for the students admitted during the academic year 2026-27.

Self Study Courses Offered:

Course Code	Course
26CTUSSA	Prompt Engineering
26CTUSSB	Introduction to Data Science

After discussion, the following resolution was passed.

Resolution:

Resolved to approve the self-study courses for the students admitted during the academic year 2026-27.

Item 22.6:

To review and approve the Student Skill Development Courses (SSDC) / NPTEL courses equivalent to course curriculum / Domain Specific Skill Courses.

The board discussed and approved the following SSDC courses.

NPTEL/SWAYAM:

- Introduction to IoT
- Cyber Security and Privacy
- Cloud Computing
- Java Programming
- Fundamentals of Object-Oriented Programming
- Blockchain and its applications
- Introduction to Artificial Intelligence
- Software Engineering

Resolution:

Resolved to approve the Student Skill Development Courses (SSDC) / NPTEL courses equivalent to course curriculum / Domain Specific Skill Courses

Item 22.7:

To approve the panel of examiners

The Chairman presented the panel of examiners for question paper setting, question paper scrutiny, conduct and evaluation of practical and theory examinations and the same shall be submitted to CoE for the even semester during the academic year 2026-27.

Resolution:

Resolved to approve the panel of examiners for the even semester during the academic year 2026-27.

Item 22.8:

To consider and approve any other item brought forward by the Chairman and the members of the board.

The board discussed and approved the courses offered by NPTEL that are equivalent to the courses offered in the curriculum in the V and VI semesters.

NPTEL Courses	Equivalent Courses	Semester
Software Engineering	Software Engineering	V
Introduction to IoT	Fundamentals of Internet of Things	VI
Blockchain and its Applications	Blockchain Technology Essentials	VI

Finally, the Chairman thanked all the members for their cooperation and contribution in enriching the syllabus with active participation in the meeting and sought the same spirit in the future also. The meeting was closed with a formal vote of thanks proposed by Dr. M. Rathi, Chairman - Department of Computer Technology.

26/10/26

(Dr. M. Rathi)

BoS Chairman/HoD
Department of Computer Technology
Dr. N. G. P. Arts and Science College
Coimbatore – 641 048

Date: 26.10.2026

Faculty: Computer Science
Programme: B.Sc.
Course Code/ Name: 25CTU4CB - Web Application Development

Syllabus Revision

Board : Computer Technology
Semester: IV

S.No.	Existing	Changes
1	HTML Creating a simple webpage - Marking Up Text: Lists - Content Elements - Inline Element - Div and Span - Adding Links - Adding Images - Table Markup: Table Structure - Spanning Cells - Table Accessibility - Wrapping Up Tables - Forms: Working with Forms - Form Element - Variables and Content - Form Accessibility Features - Form Layout and Design.	
2	Formatting with CSS CSS: Benefits and Working of CSS - Formatting Text - Colors and Background - Box Element - Box dimensions - Padding - Borders - Margins - Box Drop shadows - Floating and Positioning - CSS layout with Flex box and Grid - Responsive Web Design - Web Development tools.	
3	JavaScript Introduction: User Input with Prompt Dialogs - Data Types - Arithmetic - Decision Making - Control Statements: Selection, Repetition – Functions – Arrays.	
4	JavaScript Objects and Events JavaScript Objects: Introduction - Math - String - Date - Boolean - Number - Document - Window - JSON to represent Objects - Document Object Model (DOM): Modeling a Document - DOM Collections - JavaScript Events: Registering Event Handlers - onload and on mouse events - Form Processing Events.	
5	XML and AJAX XML: Introduction - Structuring data - XML namespaces - DTDs - Extensible Style Sheet Language - XSL Transformation. AJAX: Introduction - ~~Web Applications vs AJAX Applications~~ - ~~Rich Internet Applications with AJAX~~ - XMLHttpRequest Object - ~~XML and DOM~~ - Creating AJAX enabled Application - Case Study using Open-Source tools.	Node.js: Introduction and Installation – Events, Listeners, Timers and Callbacks – Creating Web Server - Database Connectivity.

PERCENTAGE OF SYLLABUS REVISED: 11 %

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: B.Sc.
Course Code/ Name: 25CTU4SP - Web Programming

Board : Computer Technology
Semester: IV

S.No.	Existing	Changes
1	Design a webpage to play a promotion video.	
2	Design a web page to submit an application form.	
3	Demonstrate the usage of internal and external style sheet using CSS.	
4	Design a webpage to illustrate positioning and layout options using CSS.	
5	Design a webpage to apply different types of shadow effects to objects using CSS.	
6	JavaScript program for a simple calculator.	i) JavaScript program for a simple calculator. ii) JavaScript program to print squares and cubes of numbers from 1 to 10.
7	JavaScript program to print squares and cubes of numbers from 1 to 10.	JavaScript program to demonstrate sorting and searching operations on arrays.
8	JavaScript program to illustrate the onload and on mouse events.	
9	JavaScript program to design a login form and validate the credential patterns.	
10	Validate an XML document using DTD.	
11	Display XML Data using XSLT.	
12	Fetch information from an XML file with AJAX.	i) Fetch information from an XML file with AJAX. ii) Develop a web application using Node.js to perform CRUD operations on student records.

PERCENTAGE OF SYLLABUS REVISED: 17 %

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: B.Sc.
Course Code/ Name: 24CTU6CA - Network Programming

Board : Computer Technology
Semester: VI

S.No.	Syllabus
1	**Client/Server networking** Internet Protocol - IP addresses - Routing – Packet fragmentation. UDP: Port numbers, Connecting UDP sockets- binding to interfaces - UDP fragmentation – TCP: TCP sockets - TCP client and server - Binding interfaces.
2	**Sockets, Network Data and Errors** Socket names and DNS: Hostnames and sockets - Five socket coordinates - IPv6 – Address Resolution – Binding server to port - DNS protocol - DNS Query. Network Data and Errors: Bytes and strings - Framing and quoting - Pickles and self-delimiting formats - XML, JSON - Compression - Network exceptions.
3	**TLS/SSL, Server Architecture, Caches and Message Queues** TLS/SSL: Generating Certificates – Default contexts – Protocol support. Server Architecture: Protocol – A single threaded server – Threaded and multiprocess servers. Caches and Message Queues: Using Memcached- Hashing and Sharding- Message Queues.
4	**HTTP Client and server** HTTP clients: Python client libraries – Ports, Encryption and Framing – Methods – Paths, Hosts and Status Codes - Caching and Validation – Content Encoding and Negotiation – Authentication – Cookies. HTTP Servers: WSGI – Proxies – Architectures – GET and POST Patterns.
5	**Building and Parsing E-Mail** Building and Parsing E-Mail: E-Mail Message Format - Building an E-Mail Message – Parsing Email Messages - MIME - SMTP Session – SMTP library – Authenticating over SMTP. POP: POP Server Compatibility – Connecting and Authenticating. IMAP – FTP.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: B.Sc.
Board : Computer Technology
Semester: VI
Course Code/ Name: 24CTU6SP - Network Programming and Modelling

S.No.	Syllabus
1	Implement basic client-server communication using UDP socket programming.
2	Implement a simple TCP client-server application to send and echo back messages.
3	Perform DNS resolution to find the IP address of a domain and reverse DNS lookup for a given IP address.
4	Construct a multi-part MIME email message with headers and parse an incoming email message.
5	Create a secure TLS/SSL socket client connection to a web server.
6	Implement a multi-threaded TCP server that can handle multiple concurrent client connections.
7	Design a basic topology in Packet Tracer to observe TCP and UDP traffic flow between a client and a server.
8	i) Inspect HTTP request methods, path structure, status codes, and payload formats. ii) Capture DNS requests and inspect DNS header coordinates and fields.
9	Program to Inspect TLS Client Hello Details using Wireshark.
10	Discover running mail service daemons and grab server banners across standard mail ports.
11	Use Nmap Scripting Engine (NSE) to inspect supported SSL/TLS versions and ciphers on secure servers.
12	Program to scan open ports on a host using Nmap.

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: B.Sc.
Board : Computer Technology
Semester: VI
Course Code/ Name: 24CTU6DB – Cloud Computing and Virtualization

S.No.	Existing	Changes
1	**Cloud Computing:** Introduction - Applications - Intranets and Cloud - Cloud Service Providers - Benefits - Limitations - Security Concerns - Regulatory Issues. Hardware and infrastructure: Clients, Network - Cloud Platforms - Web APIs.	
2	**Cloud Architecture:** Cloud Architecture - Front End - Back End - Components of Cloud Computing Architecture - Working of Cloud Computing - Applications of Cloud Computing. Scalability and Redundancy: Key features of Scalability - Types of Scalability - Benefits of Scalability - Concepts and benefits of Redundancy.	
3	**Cloud Services:** Introduction - Benefits - Types of Cloud Service Models: Software as a Service - Platform as a Service - Infrastructure as a Service - Network as a Service. Cloud Deployment Models: Public Cloud - Private Cloud - Community Cloud - Hybrid Cloud.	**Virtualization** Virtual Machines – Approaches to Virtualization – Properties of Full Virtualization – Conceptual Organization of VM Systems – Efficient Execution and Processor Privilege Levels – Extending Privilege to A Hypervisor – Levels of Trust – Virtual Device – Advantages and Disadvantages of VMs.
4	~~**Virtualization:** Definition - Features - Benefits - Difference between Cloud Computing and Virtualization - Types of Virtualization: Hardware Virtualization - Software Virtualization - Server Virtualization - Storage Virtualization.~~	**Containerization and Orchestration** Elasticity on Demand - Container Approach – Docker Containers – Docker Terminology and Development Tools – Docker Software Components – Dockerfile. Orchestration: Automation – Kubernetes – Kubernetes Terminology – Nodes and Control Plane – Kubernetes Features.
5	~~**Data Storage and Security:** Cloud Storage basics - Types of Cloud Storage - Advantages and Risks of Cloud Storage - Infrastructure - Data Protection Process - Cloud Security - Measures and Controls in Cloud Security. Cloud Operation and Challenges: Defining Cloud Operations - Management - Benefits - Challenges - Mobile Cloud Computing and Applications. Case Study: Mobile Applications with IoT and Cloud.~~	**Cloud Security and Privacy** Cloud Specific Security Problems – Security in a Traditional Infrastructure – Zero Trust Security Model – Identity Management – Privileged Access Management – AI Driven Cloud Security: Threat Detection and Prevention – Protecting Remote Access – Privacy in a Cloud Environment. Case Study: Impact of Artificial Intelligence on Cloud Computing.

PERCENTAGE OF SYLLABUS REVISED: 50 %

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Computer Science
Programme: B.Sc.
Board : Computer Technology
Semester: VI
Course Code/ Name: 24CTU6DD – Big Data Tools and Technologies

S.No.	Existing	Changes
1	**Big Data** Introduction - Classification of Data - Big Data Characteristics and Types - Scalability and Parallel Processing - Data Architecture Design - Data Source - Data Preprocessing and Storing - Big Data storage - Big Data platform - Big Data analytics	
2	**Hadoop and MapReduce** Hadoop Overview - Hadoop Distributed File System (HDFS) - Processing data with Hadoop - Hadoop Yet Another Resource Navigator (YARN) - Hadoop Ecosystem - MapReduce: Mapper - Reducer - Combiner - Partitioner - Searching – Sorting.	Fault Tolerance in Hadoop: HDFS Replication and Failure Recovery – MapReduce Task Recovery – High Availability
3	**Hive, Spark and Flink** Hive: Introduction - Architecture - Data Types - File Formats - Hive Query Language (HQL) - User Defined Functions. ~~Pig: Introduction - Pig on Hadoop - Pig Latin: Statements, Keywords, Identifiers - Data Types - Running Pig - Execution Modes - Relational Operators.~~	Spark: Introduction – Architecture – Features – Resilient Distributed Datasets (RDDs) – Spark SQL – DataFrames – Introduction to PySpark. Flink: Introduction - Stream-processing architecture.
4	**NoSQL** Introduction - NoSQL Data Store - NoSQL Data Architecture Patterns: Key-Value Store - Document Store - Tabular Data - Object Data Store - Graph Database - Managing Big Data – Shared Nothing Architecture.	
5	**MongoDB** Introduction - JSON - Unique Key Generation - Dynamic Queries - Storing Binary Data - Replication - Sharding - Updation - Create, Drop Database - Data Types. MongoDB Query Language: Insert, Save, Update, Remove, Find - Case Study.	

PERCENTAGE OF SYLLABUS REVISED: 17 %

COURSE FOCUSES ON:

✓	Skill Development		Entrepreneurial Development
✓	Employability		Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Dr. N.G.P. ARTS AND SCIENCE COLLEGE

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)
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BoS

22nd

ATTENDANCE OF THE TWENTY SECOND BOARD OF STUDIES MEETING

Faculty: Computer Science **Board: Computer Technology**

Date : 26/10/2026 **Time : 10.00 am**

The following members were present for the board of studies meeting

S.NO.	NAME	CATEGORY	ATTENDANCE
1.	Dr. M. Rathi, Professor and Head	Chairman	Present
2.	Dr. G. Sumalatha, Assistant Professor, Department of Computer Technology and Data Science, Sri Krishna Arts and Science College, Coimbatore.	VC Nominee	Present
3.	Dr. S. Chandia, Assistant Professor, M.Sc Decision and Computing Sciences Coimbatore Institute of Technology, Coimbatore.	Subject Expert	Present
4.	Dr. P.Vijayakumar, Assistant Professor, Department of Computer Applications, Kongu Engineering College, Erode.	Subject Expert	Present
5.	Mrs. Saranya Ramakrishnan, Staff Programme Manager, Kovai.Co, Coimbatore	Industry Expert	Present
6.	Mr. Siddhartha VJ, Senior Test Analyst, Cognizant Technology Solutions, Coimbatore.	Alumni	Present
7.	Dr. N. Kuppuchamy Associate Professor and Head Department of Tamil	Co-opted Member	Present
8.	Dr. A. Hazel Verbina, Professor and HoD i/c Department of English	Co-opted Member	Present
9.	Dr.S.Gokilamani, Associate Professor and Head i/c Department of Mathematics	Co-opted Member	Present

10.	Dr. C.Balakrishnan Associate Professor and Head Department of Commerce B&I	Co-opted Member	Present
11.	Mr.G.Vishnudev III CT A	Student Representative	Present
12.	Dr.B.Leelavathi, Professor	Member	Present
13.	Dr. T. R. Anand, Associate Professor	Member	Present
14.	Dr. C. Mohanapriya, Associate Professor	Member	Present
15.	Dr. V. Manimekalai, Associate Professor	Member	Present
16.	Mrs. P. Vanitha, Assistant Professor	Member	Present
17.	Mrs. K. Vanitha, Assistant Professor	Member	Present
18.	Dr. D. Geethamani, Assistant Professor	Member	Present
19.	Mr. R. Vijay Anand, Assistant Professor	Member	Present
20.	Mrs. I. Ajitha, Assistant Professor	Member	Present
21.	Ms. S. Leena Sylviya, Assistant Professor	Member	Present

26/10/26

(Dr. M.Rathi)

Date: 26.10.2026

BoS Chairman/HoD
Department of Computer Technology
Dr. N. G. P. Arts and Science College
Coimbatore – 641 048