



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

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)
(Approved by Government of Tamil Nadu & Accredited by NAAC with A++ Grade (3rd Cycle - 3.64 CGPA)
Dr. N.G.P. -Kalapatthi Road, Coimbatore - 641 048, Tamil Nadu, India
Web : www.drngpasc.ac.in | Email : info@drngpasc.ac.in | Phone : +91-422-2369100

BoS

15th

MINUTES OF THE FIFTEENTH BOARD OF STUDIES MEETING

Faculty: Computer Science

Board: Computer Science

The Meeting of Board of Studies (BoS) was held as given below:

Name of the Body	Board of Studies (BoS)
Department	Computer Science
Meeting No.	15
Date and Time	10.06.2023 @ 10.00 a.m.
Venue	Room No:402
Members Attended	The details are given in the ANNEXURE -I
AGENDA	
1.	Discussion on curriculum and syllabi for Part III - Core Courses for third semester UG - 2022-25Batch
2.	Discussion on syllabus for Part III- Inter Disciplinary Course (IDC) offered by other departments
3.	Discussion on Part I (Tamil III /Hindi III /French III /Malayalam III) offered by Language department in semester III for 2022-25Batch
4.	Discussion on Part II (Professional English III) offered by English Department in semester III for 2022-25Batch
5.	Discussion on curriculum and syllabi following R5 Regulations for Part III - Core Courses for first semester UG - 2023-26Batch
6.	Discussion on syllabus for Part III- Inter Disciplinary Course (IDC) offered by other departments.
7.	Discussion on Part I (Tamil I/Hindi I/French I/Malayalam I) offered by Language department in semester I for 2023-26Batch
8.	Discussion on Part II (English I) offered by English Department in semester I for 2023-26Batch
9.	Discussion on Part IV (AECC) Environmental Studies for 2023-26 Batch
10.	Discussion on credits for Part V - Extension Activity for 2023-26 Batch
11.	Discussion on curriculum and syllabi for third semester courses PG - 2022-24 Batch
12.	Discussion on curriculum and syllabi following R5 Regulations for first semester courses PG 2023-25 Batch
13.	Discussion on curriculum and syllabi of B.Sc. Computer Science with Cyber Security for Part III - Core Courses of first semester UG - 2023-26Batch
14.	Discussion on VACC for the batch 2023 - 26 and onwards
15.	Any Other Matters





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MINUTES OF THE FIFTEENTH BOARD OF STUDIES MEETING

Faculty: Computer Science

Board: Computer Science

The Chairman of BoS welcomed all the Panel members for the meeting. The items listed in the agenda were taken for discussion.

The following are the minutes of the meeting:

Item - 01	Discussion on curriculum and syllabi for Part III - Core Courses for third semester UG - 2022-25Batch
Discussion	224CA1A3CA: Database Management Systems <ul style="list-style-type: none">The unified syllabus approved by Board of Studies in Computer Applications was placed for endorsement. 224CS1A3CA: Operating Systems <ul style="list-style-type: none">Dr. Ramya Chitra suggested to include Case Study in Linux and Mobile operating system in Unit V as per the industry requirements. 224CT1A3CA: Java Programming <ul style="list-style-type: none">The unified syllabus approved by Board of Studies in Computer Technology was placed for endorsement. 224CS1A3CP: Java Programming <ul style="list-style-type: none">The applications such as online auction and Search engine operations are included as per the proposed practical exercises of DBT STAR Scheme.
Resolution	The Board approved the syllabi for the above courses
Item-02	Discussion on syllabus for Part III- Inter Disciplinary Course (IDC) offered by other departments
Discussion	225CR1A3IB: Cyber Law <ul style="list-style-type: none">The unified syllabus approved by Board of Studies in B.Com. Corporate Secretaryship was placed for endorsement.
Resolution	The Board approved the syllabus
Item -03	Discussion on Part I (Tamil III /Hindi III /French III /Malayalam III) offered by Language department in semester.III for 2022-25 Batch
Discussion	2221TL1A3TA –Tamil-III 221TL1A3HA – Hindi-III 221TL1A3FA – French-III 221TL1A3MA - Malayalam – III <ul style="list-style-type: none">The unified syllabus approved by the Board of Studies in Languages was placed for endorsement.
Resolution	The Board unanimously approved the syllabus.





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Item -04	Discussion on Part II (Professional English III) offered by English Department in semester III for 2022-25 Batch
Discussion	231EL1A3EA : Part II: Professional English III <ul style="list-style-type: none">The unified syllabus approved by the Board of Studies in English was placed for endorsement.
Resolution	The Board approved the syllabus.
Item -05	Discussion on curriculum and syllabi following R5 Regulations for Part III - Core Courses for first semester UG - 2023-26 Batch
Discussion	234AI1A1CA: Problem Solving and Programming in C <ul style="list-style-type: none">The unified syllabus approved by Board of Studies in Artificial Intelligence and Machine Learning was placed for endorsement. 234IT1A1CA : Digital Computer Fundamentals <ul style="list-style-type: none">The unified syllabus approved by Board of Studies in Information Technology was placed for endorsement.
Resolution	The Board approved the syllabus
Item - 06	Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered by other departments
Discussion	232MT1A1IC - Numerical Methods and Statistics <ul style="list-style-type: none">Syllabus approved by the Mathematics Board of Studies was placed for endorsement.
Resolution	The Board unanimously approved the syllabus
Item - 07	Discussion on Part I (Tamil I/Hindi II/French II/Malayalam II) offered by Language department in semester I for 2023-26 Batch
Discussion	2321TL1A1TA – Tamil-III 231TL1A1HA – Hindi-III 231TL1A1FA – French-III 231TL1A1MA - Malayalam – III <ul style="list-style-type: none">The unified syllabi approved by the Board of Studies in Languages were placed for endorsement.
Resolution	The Board unanimously approved the syllabus
Item - 08	Discussion on Part II (English) offered by English Department in semester I for 2023-26 Batch





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Discussion	231EL1A1EA: Part II: English I <ul style="list-style-type: none">The unified syllabus was approved by the Board of Studies in English was placed for endorsement.
Resolution	The Board approved the same.
Item -09	Discussion on Part IV (AECC) Environmental Studies for 2023-26 Batch
Discussion	233MB1A1AA: Environmental Studies The unified syllabus was approved by the Board of Studies in Microbiology was placed for endorsement.
Resolution	The Board approved the syllabus
Item -10	Discussion on credits for Part V - Extension Activity for 2023-26 Batch
Discussion	One credit to be awarded for participation in YRC/RCC//NSS/ RRC/Yoga/Sports/Clubs
Resolution	The Board approved awarding one credit for extension activity.
Item - 11	Discussion on curriculum and syllabi for third semester courses PG - 2022-25 Batch
Discussion	224CS2A3CA–Data Science Essentials (Core) 224CS2A3CB - Advanced Operating Systems (Core) 224CS2A3CC–Distributed Computing (Core) 224CS2A3CD–Research Methodology (Core) 224CS2A3CP-Data Science Essentials (Practical) 224CS2A3CQ -Advanced Operating Systems (Practical) 224CS2A3DA –Natural Language Processing (DSE) 224CS2A3DB –Business Analytics (DSE) 224CS2A3DC –Network Security (DSE) 224CS2A3DB- Business Analytics Dr. Blessy suggested to include decision analysis in Unit V to enrich decision making analysis in business. 224CS2A3CA - Data Science Essentials Dr.Ramya Chitra suggested to include the implementation of Naïve Bayes in Unit V to have more practical knowledge.
Resolution	After due deliberations, the board approved the syllabus
Item - 12	Discussion on curriculum and syllabi following R5 Regulations for first semester courses PG 2023-26 Batch
Discussion	234CS2A1CA-Advanced Data Structures (Core) 234CS2A1CB - Advanced Java Programming (Core)





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Discussion	234CS2A1CA-Advanced Data Structures(Core) 234CS2A1CB - Advanced Java Programming (Core) 234CS2A1CC: Information Security (Core) 234CS2A1CD-Software Project Management (Core) 234CS2A1CP-Advanced Data Structures(Practical) 234CS2A1CQ -Advanced Java (Practical) 234CS2A1DA -Digital Image Processing(DSE) 234CS2A1DB -Advanced Data Mining (DSE) 234CS2A1DC -Computer Communication Networks (DSE)
Resolution	After due deliberations, the board approved the syllabus
Item - 13	Discussion on curriculum and syllabi of B. Sc. Computer Science with Cyber Security for Part III - Core Courses for first semester UG - 2023-26 Batch
Discussion	234AI1A1CA:Problem Solving and Programming in C <ul style="list-style-type: none">The unified syllabus approved by Board of Studies in Artificial Intelligence and Machine Learning was placed for endorsement. 234IT1A1CA : Digital Computer Fundamentals <ul style="list-style-type: none">The unified syllabus approved by Board of Studies in Information Technology was placed for endorsement.
Resolution	The Board unanimously approved the syllabus
Item - 11	Discussion on VACC for the batch 2022 - 25 and onwards
Discussion	The VACC syllabi of Full Stack Development was discussed
Resolution	The Board unanimously approved the syllabus
Item - 15	Any Other Matters
Discussion	The board members discussed and recommended the Panel of Examiners
Resolution	The Board approved the same

The Chairman of Board of Studies (BoS) thanked all the members for their active participation and providing their valuable suggestions.

Date: 10.06.2023


(Dr. B. Rosiline Jeetha)

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





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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS1A3CA – OPERATING SYSTEMS

Unit	Course Content
I	Introduction to Operating Systems: Computer System Organization - Computer System Architecture - Operating System Structure - Distributed Systems - Open Source Operating Systems – Operating System Generation.
II	Process Scheduling: Process Concepts - Operations on Processes. Basic Concepts - Scheduling Criteria - Scheduling Algorithms: First-Come First-Served Scheduling - Shortest-Job-First Scheduling - Priority Scheduling - Round-Robin Scheduling - Multilevel Queue Scheduling. Synchronization: Background - The Critical - Section Problem - Semaphores.
III	Deadlocks: Deadlocks: Deadlock Characterization - Methods for Handling Deadlock - Deadlock Prevention - Deadlock Avoidance: Safe State - Resource-Allocation Graph Algorithm - Banker's Algorithm - Deadlock Detection - Recovery from Deadlock.
IV	Memory Management: Memory Management: Swapping - Contiguous Memory Allocation - Paging – Structure of Page Table - Segmentation. Virtual Memory: Demand Paging - Page Replacement: Basic Page Replacement - FIFO Page Replacement - Optimal Page Replacement - LRU Page Replacement.
V	Storage Management: Secondary-Storage Structure : Disk Structure - Disk Scheduling: FCFS Scheduling - SSTF Scheduling SCAN Scheduling-C-SCAN Scheduling-LOOK Scheduling- Selection of a Disk Scheduling Algorithm - RAID structure. Case Studies: Linux System, Mobile Operating System.

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input checked="" type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS2A3CA- DATA SCIENCE ESSENTIALS

Unit	Course Content
I	Benefits and uses of Data Science and Big Data- Facets of Data- The Data Science Process - The Big Data Ecosystem and Data Science. Overview of the Data Science Process- Defining research goals and creating a project charter- Retrieving Data- Cleansing, Integrating and transforming Data- Exploratory Data Analysis- Build the models
II	History, Features and Importance of R- Advantages and Disadvantages of R-Applications of R-The R Script File-Comments-Operators-Variables-Basic Data types-Data Structures-Vector-List- Matrices.
III	Data Frames- Factors- Arrays-The if, if...else, if...else ladder-Basic Loop Structures- The Break, Next and Repeat Loop-R Functions-The return Function- Built in Functions-Variable Scope and Lifetime- Recursive Functions - Reading and Writing Data into Files - Reading Data from Excel - Reading HTML and XML Files.
IV	Plotting a Histogram- Plotting a Bar Graph- Plotting a Line Chart- Plotting a Scatter Plot- Plotting Boxplot Graphs- Density Plots- Saving a plot in R- Customising Text in a Graph- Advanced plots with ggplot
V	Simple Linear Regression-k- Nearest Algorithm - Decision Trees - K-means Algorithm- Naïve Bayes Classification - Support Vector Machine. Case Study: Facebook Mining and Web Scraping

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS2A3CB – ADVANCED OPERATING SYSTEMS

Unit	Course Content
I	Overview – Functions of Operating Systems - Design Approaches - Types of Operating Systems - Synchronization Mechanisms – Concept of a Process - Concurrent Process -Semaphores -Processes Deadlocks: Preliminaries - Models of Deadlocks -Deadlock Detection-Deadlock Prevention-Deadlock Avoidance
II	Issues in Distributed Operating System – Architecture – Communication Primitives –Lamport’s Logical clocks – Causal Ordering of Messages – Distributed Mutual Exclusion Algorithms – Centralized and Distributed Deadlock Detection Algorithms – Agreement Protocols
III	Distributed File Systems – Design Issues - Distributed Shared Memory: Algorithms for Implementing Distributed Shared memory–Issues in Load Distributing – Components Load Distributing Algorithm– Fault Tolerance: Two-Phase Commit Protocol – Nonblocking Commit Protocol
IV	Introduction - Preliminaries - The Access Matrix Model - Implementation of Access Matrix Model- Advanced Models of Protection - A Model of Cryptography - Private Key Cryptography: Data Encryption Standard - Public Key Cryptography- Multiple Encryption - Authentication in Distributed Systems Case Studies : The UNIX Operating System - Hydra Kernel - Amoeba
V	Multiprocessor System Architectures- Basics of Multi Processor Architecture Systems - Interconnection Networks for Multiprocessor Systems - Caching - Multiprocessor Operating Systems - Operating Systems Design Issues - Threads - Process Synchronization - Process Scheduling - Memory Management.

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS2A3CC- Distributed Computing

Unit	Course Content
I	Scheduling of Divisible Loads on Heterogeneous Distributed Systems - Introduction - The System Model - Analysis of Optimal Solution - Analysis of Two-Slave System -The Sport Algorithm
II	Distributed System Architecture - Fault Tolerance Systems - Basic Concept of Fault Tolerance System - Fault Tolerance Mechanism in Distributed System - Real-Time Network Simulation - Supporting Real-Time Performance - Applications and Case Studies
III	Introduction - The Platform for Research Collaborative Computing – Prototyping Optimal Design Platform For Engineering - A Performance-Driven Approach For Restructuring Distributed Object-Oriented Software - Restructuring Scheme
IV	Introduction - Analysis and Interaction in DPP System - Requirements of DPP System - Design of DPP System - High Voltage Power Grid Optimization Models - An Asynchronous Distributed Algorithm for Stochastic Unit Commitment
V	Assigning Real-Time Tasks in Environmentally Powered Distributed Systems -Introduction - Preliminaries - ACO Solution - Cloud/Fog Computing System Architecture and Key Technologies for South-North Water Transfer Project safety

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS2A3CP – DATA SCIENCE ESSENTIALS

S:no	Content
1	Loading a data file of different formats into R environment and perform various data processing tasks.
2	Perform various Data Exploratory Techniques on the processed data.
3	Create a simple calculator using R Operators and Variables.
4	Create a 3 X 3 matrix in R and perform various matrix operations.
5	Demonstrate reading and writing data of different file formats in R.
6	Create matrix to store the results of five players in three matches. Compare each players performance in matches played by them and find out whether their performance has improved comparing to previous matches.
7	An employee's total weekly pay is calculated by multiplying the hourly wage and number of regular hours plus any overtime pay, which in turn is calculated as total overtime hours multiplied by 1.5 times of hourly wage. Write a program that takes as input the hourly wage, total regular hours and total over time hours and prints an employee's total weekly pay.
8	Implement an R program to perform the following i. Calculate Fibonacci Series ii. Calculate the factorial of a given number. iii. Find the GCD of two numbers.
9	i. Create a stacked bar graph and a pie chart to display the marks obtained by students in different Subjects. ii. Create a stacked bar graph depicting temperature and rainfall received for five consecutive days in an area. iii. Create a data frame of random values for gender and height. Draw a density plot and a line which highlights the mean value.
10	Create a simple linear regression model using the mtcars dataset and evaluate the performance of the model using the various evaluation metrics.
11	Use the tidy verse, mlbench and caret packages to predict the diabetes from Pima Indian Diabetes dataset.
12	Download the boston.csv dataset from kaggle and create a regression tree to predict the price of a house medv.

PERCENTAGE OF SYLLABUS REVISED: 100 %





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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS2A3CQ – ADVANCED OPERATING SYSTEMS

S:no	Course
1	Write programs using the following system calls of UNIX operating system: fork, exec, getpid, exit, wait, close, stat, opendir, readdir
2	Write programs using the I/O System calls of UNIX operating system (open, read, write, etc.).
3	Write C programs to simulate UNIX commands like ls, grep, etc.
4	Given the list of processes, their CPU burst times and arrival times. Display/print the Gantt chart for FCFS and SJF. For each of the scheduling policies, compute and print the average waiting time and average turnaround time.
5	Given the list of processes, their CPU burst times and arrival times. Display/print the Gantt chart for Priority and Round robin. For each of the scheduling policies, compute and print the average waiting time and average turnaround time.
6	Develop application using Inter-Process Communication (using shared memory, pipes or message queues).
7	Write a C programs to implement UNIX system calls and file management
8	To synchronize producer and consumer processes using semaphore.
9	To demonstrate communication between process using shared memory.
10	To implement demand paging for a reference string using LRU method
11	To implement file allocation on free disk space in a contiguous manner.
12	Write a C program to simulate Bankers Algorithm for Deadlock Avoidance.

PERCENTAGE OF SYLLABUS REVISED: 100 %





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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name 224CS2A3DA – NATURAL LANGUAGE PROCESSING

Unit	Course Content
I	Origins of NLP – Language and knowledge – The Challenges of NLP – Language and Grammar – Processing Indian Language - NLP Applications – Early NLP Systems – Information Retrieval – Various Grammar-based Language Model - Statistical Language Model.
II	Regular Expressions – Finite-State Automata - Morphological Parsing – Spelling Error Detection and Correction – Words and Word classes – Part-of-speech Tagging - Context-Free Grammar – Constituency - Parsing – Probabilistic Parsing – Indian Languages.
III	Cohesion – Reference Resolution - Discourse Coherence and structure - Architectures of NLG systems – Generation Task and Representations – Applications of NLG
IV	Problems in Machine Translation – Characteristics of Indian Languages – Machine Translation Approaches – Direct Machine Translation – Rule Based Machine Translation – Corpus-based Machine Translation – Semantic or Knowledge-based MT Systems – Translation involving Indian Languages.
V	Design Features of Information Retrieval Systems – Information Retrieval Models – Classical Information Retrieval Models – Non-Classical Models of IR – Alternative Model of IR - Evaluation of IR system – WordNet – FrameNet – Stemmers – Part-of-Speech Tagger – Research Corpora.

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input checked="" type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
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Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS2A3DB- BUSINESS ANALYTICS

Unit	Course Content
I	Business Analytics- Impacts and Challenges- Evolution of Business Analytics- Descriptive, Predictive and Prescriptive Analytics- Data for Business Analytics. Models in Business Analytics: Descriptive Models- Predictive Models- Prescriptive Models-Model Assumptions- Uncertainty and Risk-Problem Solving with Analytics: Recognizing a Problem- Defining the Problem- Structuring the Problem-Analyzing the Problem- Interpreting Results and Making a Decision-Implementing the Solution.
II	Data Visualization: The Value of Data Visualization- Creating Charts in Microsoft Excel-Other Excel Data Visualization Tools. Descriptive Statistics: Metrics and Data Classification-Frequency Distributions and Histograms-Percentiles and Quartiles- Cross Tabulations- Descriptive Statistical Measures.
III	Trend lines and Regression Analysis: Modeling Relationships and Trends in Data-Simple Linear Regression-Building good Regression Models. Forecasting Techniques: Qualitative and Judgmental Forecasting- The Practice of Forecasting. Data Mining: The Scope of Data Mining. Spreadsheet Modeling and Analysis: Analytics in Practice.
IV	Linear Optimization: Optimization Models-Developing Linear Optimization Models- Solving Linear Optimization Models. Integer and Nonlinear Optimization: Integer Linear Optimization Models- Nonlinear Optimization Models. Optimization Analytics: What-If Analysis for Optimization Models. Visualization of Solver Reports.
V	Decision Analysis: Formulating Decision Problems- Decision Strategies Without Outcome Probabilities- Decision Strategies With Outcome Probabilities- Decision Trees- Decisions with Sample Information- Utility and Decision Making.

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input checked="" type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





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(Approved by Government of Tamil Nadu & Accredited by NAAC with A++ Grade (3rd Cycle - 3.64 CGPA)
Dr. N.G.P., -Kalapatti Road, Coimbatore - 641 048, Tamil Nadu, India
Web : www.dmgpsc.ac.in | Email : info@dmgpsc.ac.in | Phone : +91-422-2369100

BoS

15th

Syllabus Revision-New Course

Faculty: Computer Science

Board: Computer Science Semester: III

Course Code / Name: 224CS2A3DC – NETWORK SECURITY

Unit	Course Content
I	Computer Security Concepts - OSI Security Architecture - Security Attacks - Security Services - Security Mechanisms - Fundamental Security Design Principles - Attack Surfaces and Attack Trees - Model for Network Security - Standards. Modular Arithmetic - Prime Numbers - Fermat's and Euler's Theorems.
II	Symmetric Cipher Model - Substitution Techniques - Transposition Techniques - Rotor Machines - Steganography - Traditional Block Cipher Structure - Data Encryption Standard - Strength of DES - Block Cipher Design Principles - Advanced Encryption Standard Finite Field Arithmetic - AES Structure - AES Transformation Functions - AES Key Expansion.
III	Public-Key Cryptography - Principles of Public-Key Cryptosystems - RSA Algorithm - Diffie-Hellman Key Exchange - Elgamal Cryptographic System - Elliptic Curve Arithmetic - Elliptic Curve Cryptography - Pseudorandom Number Generation Based on an Asymmetric Cipher..
IV	Cryptographic Hash Functions - Applications of Cryptographic Hash Functions - Two Simple Hash Functions - Requirements and Security - Hash Functions Based on Cipher Block Chaining - Secure Hash Algorithm - SHA-3 - Message Authentication Requirements - Message Authentication Functions - Requirements for Message Authentication Codes - Security of MACs.
V	Network Access Control - Extensible Authentication Protocol - IEEE 802.1X Port-Based Network Access Control - Cloud Computing - Cloud Security Risks and Countermeasures - Data Protection in the Cloud - Cloud Security as a Service - Addressing Cloud Computing Security Concerns - Wireless Security - Mobile Device Security - S/MIME.

PERCENTAGE OF SYLLABUS REVISED: 100 %

COURSE FOCUSES ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input checked="" type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
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DEPARTMENT OF COMPUTER SCIENCE

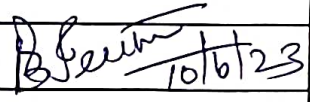
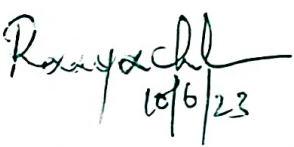
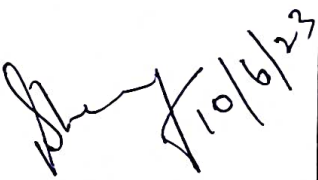
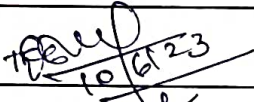
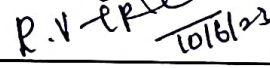

FIFTEENTH BOARD OF STUDIES MEETING

VENUE: A1 Block – Room No. 402

DATE: 10.06.2023

TIME: 10.00 A.M.

The following members were present for the Board of Studies Meeting:

S. No.	NAME	POSITION	SIGNATURE
1	Dr. B. Rosiline Jeetha, Professor and Head	Chairman	
2	Dr. D. Ramya Chitra Associate Professor Department of Computer Science Bharathiar University Coimbatore-641046.	Member (Subject Expert) (Nominated by Vice Chancellor)	
3	Dr. Chandra Blessie E Assistant Professor Department of Artificial Intelligence and Machine Learning Coimbatore Institute of Technology Coimbatore-641046	Member (Subject Expert) (Nominated by Academic Council)	
4	Dr. Radhika N Professor School of Computing Amrita Vishwa Vidyapeetham Coimbatore-641112.	Member (Subject Expert) (Nominated by Academic Council)	ABSENT
5	Mr. Kousik Rajendran 1D, Mist Block, Mount Raindrop Apartment Nehru Nagar West, Kalapatti Coimbatore-641048.	Member (Industrial Expert)	ABSENT
6	Ms. V. Divya Bharathi Transaction Risk Investigator Amazon, Bangalore	Alumni	ABSENT
7	Part I (Two Semester Language) Dr. N. KUPPUSAMY, Tamil	Co-Opted Member	
Part II (Two Semester Language) Dr. R. Vidhya Prabha, English			
IDC Dr. R. Sowrirajan, Mathematics			

8	Dr.V.Shobana, Assistant Professor and Head, Department of Computer Science with Cyber Security		<i>Shobana</i> 10/6/23
9	Dr. M. Savithri , Associate Professor	Member	<i>Savithri</i> 10/6/23
10	Dr. M. Sangeetha , Asst. Professor	Member	<i>M. Sangeetha</i> 10/6/23
11	Mr. V.S. Jagadeeswaran , Asst. Professor	Member	<i>V.S. Jagadeeswaran</i> 10/6/23
12	Mr. N. Kumar , Asst. Professor	Member	<i>N. Kumar</i> 10/6/23
13	Mrs. S. Revathi , Asst. Professor	Member	<i>S. Revathi</i> 10/6/23
15	Mrs. P. Usha , Asst. Professor	Member	<i>P. Usha</i> 10/6/23
14	Mrs. S. R. Kalaiselvi , Asst. Professor	Member	<i>S. R. Kalaiselvi</i> 10/6/23
15	Mrs. S. Saranya , Asst. Professor	Member	<i>S. Saranya</i> 10/6/23
16	Mrs.R.Kavitha,Asst.Professor	Member	<i>R. Kavitha</i> 10/6/23

B. Rosiline Jeetha
10/6/23

Dr. B. ROSILINE JEETHA
MCA.,M.Phil.,Ph.D.,
Professor and Head, Dept. of Computer Science
Dr.N.G.P. Arts and Science College
Dr.N.G.P.-Kalapatti Road, Coimbatore - 48.