



# MAHENDRA ENGINEERING COLLEGE

(Autonomous)

Accredited by NAAC 'A' Grade & NBA Tier-I(WA) UG: CSE,ECE,EEE

Mahendhirapuri, Mallasamudram, Namakkal Dt. - 637 503.



## Department of Computer Science and Engineering

### INNOVATIVE TEACHING METHODS

S. No	Type of innovation in teaching and learning	Faculty Contributed	Description	Type of medium for public use
1	Open Free Source Software	Mrs.K.Rajeswari	19CS14602 & Free Open Source Software Unit 1 - INTRODUCTION TO OPEN SOURCE SOFTWARE Unit 2 – MYSQL Unit 3 – PHP Unit 4 – PYTHON Unit 5- PERL	<a href="https://drive.google.com/drive/folders/10POdtb6jFgDWqd7uSaLnjigWtCS3cQ5d?usp=share_link">https://drive.google.com/drive/folders/10POdtb6jFgDWqd7uSaLnjigWtCS3cQ5d?usp=share_link</a>
2	Cyber Law	Dr.P.Ramya	19CB14401& Cyber Law Unit 1 – Legal Aspects of Information Security Unit 2 – Cyber Contracts Unit 3 – Intellectual Property Rights in Cyber Space Unit 4 – Cyber Crimes Unit 5 – Miscellaneous Issues	<a href="https://drive.google.com/drive/folders/1FVRUGGkCf3BCD3hYRj4kaZgQBAfJdIYT?usp=share_link">https://drive.google.com/drive/folders/1FVRUGGkCf3BCD3hYRj4kaZgQBAfJdIYT?usp=share_link</a>
3	Software Engineering	Mr.Venkatesh.R	Software Engineering (19CS14401) Materials Unit 1: SOFTWARE PROCESS AND AGILE DEVELOPMENT Unit 2: REQUIREMENTS ANALYSIS AND SPECIFICATION Unit 3: SOFTWARE DESIGN Unit 4: SOFTWARE IMPLEMENTATION Unit 5: PROJECT MANAGEMENT	<a href="https://drive.google.com/drive/folders/1aGh_p9YIRXfFjSJXl4GS5ZlaSlqiTXFg?usp=sharing">https://drive.google.com/drive/folders/1aGh_p9YIRXfFjSJXl4GS5ZlaSlqiTXFg?usp=sharing</a>
4	Python Programming	Mrs.Kiruthika.R	Python Programming (19CS14303)Materials Unit 1: BASICS OF PYTHON PROGRAMMING Unit 2: LISTS Unit 3: FILES Unit 4: SERIALIZING PYTHON OBJECTS Unit 5: PACKAGING PYTHON LIBRARIES	<a href="https://drive.google.com/drive/folders/19SEzavjDIGMHfN2xgtllozEMj8pWpK2x?usp=sharing">https://drive.google.com/drive/folders/19SEzavjDIGMHfN2xgtllozEMj8pWpK2x?usp=sharing</a>
5	Mobile Application Development	Dr.A.Neelamadheswari	Mobile Application Development(19CS14601) Materials Unit 1: GETTING STARTED WITH MOBILITY AND INTERFACE DESIGNING Unit 2: BUILDING BLOCKS OF MOBILE APPS Unit 3: MOBILE DATABASES Unit 4: CREATING UI AND UIE	<a href="https://drive.google.com/drive/folders/1JF077J5SJAAH38zpMqG6e2QOpRx6PA1H?usp=sharing">https://drive.google.com/drive/folders/1JF077J5SJAAH38zpMqG6e2QOpRx6PA1H?usp=sharing</a>

6	Data warehousing and Data Mining	Dr.Venkatasalam	Data warehousing and Data Mining (19CS15601)Materials Unit 1: DATA WAREHOUSING, BUSINESS ANALYSIS AND ON-LINE ANALYTICAL PROCESSING Unit 2: DATA MINING – INTRODUCTION Unit 3: DATA MINING - FREQUENT PATTERN ANALYSIS Unit 4: CLASSIFICATION AND CLUSTERING Unit 5: WEKA TOOL	<a href="https://drive.google.com/drive/folders/15bk-5njH8uEGAwW94RVmIKLky7kewUTi?usp=sharing">https://drive.google.com/drive/folders/15bk-5njH8uEGAwW94RVmIKLky7kewUTi?usp=sharing</a>
7	Data Structure	Mrs.K.Rajeswari	Data Structure (19CS13202)Materials Unit 1: LINEAR DATA STRUCTURES – LIST Unit 2: LINEAR DATA STRUCTURES – STACKS, QUEUES Unit 3: NON LINEAR DATA STRUCTURES – TREES Unit 4: NON LINEAR DATA STRUCTURES - GRAPHS Unit 5: SEARCHING, SORTING AND HASHING TECHNIQUES	<a href="https://drive.google.com/drive/folders/1tgH7xc-P097XVKfAPogHH8qz8-Z4VpZZ?usp=sharing">https://drive.google.com/drive/folders/1tgH7xc-P097XVKfAPogHH8qz8-Z4VpZZ?usp=sharing</a>
8	Computer Networks	Dr.S.G.Balakrishnan	Computer Networks(19CS14402) Materials Unit 1: INTRODUCTION AND PHYSICAL LAYER Unit 2: DATA-LINK LAYER & MEDIA ACCESS Unit 3: NETWORK LAYER Unit 4: TRANSPORT LAYER Unit 5: APPLICATION LAYER	<a href="https://drive.google.com/drive/folders/1FA4cz6XrygbJzsPiP7hEFuwaV2b5oU12?usp=sharing">https://drive.google.com/drive/folders/1FA4cz6XrygbJzsPiP7hEFuwaV2b5oU12?usp=sharing</a>
9	Compiler Design	Ms.Kalaivani R	Compiler Design(19CS14603) Materials Unit 1: LEXICAL ANALYSIS Unit 2: SYNTAX ANALYSIS Unit 3: INTERMEDIATE CODE GENERATION Unit 4: CODE GENERATION Unit 5: CODE OPTIMIZATION	<a href="https://drive.google.com/drive/folders/1BiQg_s4jrLhhto33wSelcUEf3osZdCNI?usp=sharing">https://drive.google.com/drive/folders/1BiQg_s4jrLhhto33wSelcUEf3osZdCNI?usp=sharing</a>
10	Database Management System	Dr.S.Ramya	Database Management System(19CS14404) Materials Unit 1: INTRODUCTION Unit 2: DATABASE DESIGN Unit 3: TRANSACTION PROCESSING Unit 4: FILES AND INDEXING Unit 5: SPECIAL DATABASES	<a href="https://drive.google.com/drive/folders/1R9JNm1cpUm_A6u5KK74K_uO8wbjs-2qf?usp=sharing">https://drive.google.com/drive/folders/1R9JNm1cpUm_A6u5KK74K_uO8wbjs-2qf?usp=sharing</a>
11	Problem Solving Techniques in C	Mrs.Sujeetha	Problem Solving Technique (19CS13001) in C Material Unit 1: PROBLEM SOLVING ASPECTS Unit 2: C PROGRAMMING BASICS	<a href="https://drive.google.com/drive/folders/1IJrACYCeoszcFWNJ8xyWN_eV6yLvKIVZ?usp=sharing">https://drive.google.com/drive/folders/1IJrACYCeoszcFWNJ8xyWN_eV6yLvKIVZ?usp=sharing</a>

			Unit 3: ARRAYS AND FUNCTIONS Unit 4: POINTERS AND STRUCTURES Unit 5: FILE PROCESSING	
12	Word Count using Hadoop	Dr.A.Neelamadheswari	Implementation of the Map reduce programming model for large-scale data processing	<a href="https://www.udemy.com/course/cloud-computing-lab-programs/learn/lecture/29535177#overview">https://www.udemy.com/course/cloud-computing-lab-programs/learn/lecture/29535177#overview</a>
13	Introduction of Cloud Computing	Mrs.K.Rajeswari	Various aspects of cloud computing, including fundamentals, management issues, security challenges and future research trends.	<a href="https://drive.google.com/file/d/1KijyHcZAmyEh1TGz3VeuJV46qA_dVto3/view?usp=sharing">https://drive.google.com/file/d/1KijyHcZAmyEh1TGz3VeuJV46qA_dVto3/view?usp=sharing</a>
14	Cyber Awareness	Dr.A.Umamaheswari	Cyber Crime is an important threat in the international level	<a href="https://drive.google.com/file/d/1CN3KGYAZCeZKiRewDlr7pHI7Mt7hQLVx/view?usp=sharing">https://drive.google.com/file/d/1CN3KGYAZCeZKiRewDlr7pHI7Mt7hQLVx/view?usp=sharing</a>
15	Forward and Backward Pass Techniques	Dr.P.Ramya	Demonstration of a forward and Backward pass techniques.	<a href="https://drive.google.com/file/d/11WTpaUdKh4GM76uKydRQPzSYXHSDcgZ3/view?usp=sharing">https://drive.google.com/file/d/11WTpaUdKh4GM76uKydRQPzSYXHSDcgZ3/view?usp=sharing</a>
16	Banker's Algorithm	Dr.P.Ramya	Demonstrates banker's algorithm with real world application	<a href="https://drive.google.com/file/d/18JgpBBEnJDTLhik0rb1T8vyWUYxBdwFU/view?usp=sharing">https://drive.google.com/file/d/18JgpBBEnJDTLhik0rb1T8vyWUYxBdwFU/view?usp=sharing</a>
17	LMD & RMD	Dr.M.Dhurgadevi	Derive Leftmost and Rightmost derivation and constructed parse tree	<a href="https://drive.google.com/file/d/18Vru2AkjFD2xm39UY7-5GpbJCG2yz1SR/view?usp=sharing">https://drive.google.com/file/d/18Vru2AkjFD2xm39UY7-5GpbJCG2yz1SR/view?usp=sharing</a>
18	Design and Analysis of Algorithm	Dr.S.G. Balakrishnan	Demonstrate how bubble sort is working using online platform	<a href="https://drive.google.com/file/d/1kl2pMYHXKlwivPNfIGoiAqxutAnf8GDo/view?usp=sharing">https://drive.google.com/file/d/1kl2pMYHXKlwivPNfIGoiAqxutAnf8GDo/view?usp=sharing</a>
19	REDHAT Linux using AWS	Mr.R.Rajkumar	Demonstrates the Red Hat Enterprise Linux is a Enterprise targeted operated system	<a href="https://drive.google.com/file/d/1xz_FCGEhr0jr6B15Dz6YQam-gYrDmMST/view?usp=sharing">https://drive.google.com/file/d/1xz_FCGEhr0jr6B15Dz6YQam-gYrDmMST/view?usp=sharing</a>
20	Introduction to Cyber Security	Mr.P.Pintooraj	Demonstrates the cyber security tools and types of attacks	<a href="https://drive.google.com/file/d/1K8vhmJvpJR5-c4r45ulf41KCThjw4QGh/view?usp=sharing">https://drive.google.com/file/d/1K8vhmJvpJR5-c4r45ulf41KCThjw4QGh/view?usp=sharing</a>
21	Introduction to Machine Learning	Dr.S.Kogilavani	Machine Learning focuses on the development of computer program that can access data and use it learn for themselves	<a href="https://drive.google.com/file/d/1K8vhmJvpJR5-c4r45ulf41KCThjw4QGh/view?usp=sharing">https://drive.google.com/file/d/1K8vhmJvpJR5-c4r45ulf41KCThjw4QGh/view?usp=sharing</a>

22	Tools used for computing	Dr.A.Neelamadheswari	Describe architecture of cloud computing, various cloud providers and also various cloud simulation tools	<a href="https://www.youtube.com/watch?v=U8jUMKOQNZA&amp;t=79s">https://www.youtube.com/watch?v=U8jUMKOQNZA&amp;t=79s</a>
23	Mobile Application Development Lab - GUI Components	Dr.A.Neelamadheswari	GUI Components using Fonts and Colors' using Android Studio for Mobile Application Development Lab	<a href="https://www.youtube.com/watch?v=wD4tVvoTGXY&amp;t=31s">https://www.youtube.com/watch?v=wD4tVvoTGXY&amp;t=31s</a>
24	Mobile IP Interaction	Dr.A.Neelamadheswari	Demonstrates the topic Mobile IP interaction	<a href="https://www.youtube.com/watch?v=K4be7a0mRcw&amp;t=29s">https://www.youtube.com/watch?v=K4be7a0mRcw&amp;t=29s</a>