SIR C.R.REDDY COLLEGE OF ENGINEERING, ELURU
DEPARTMENT OF INFORMATION TECHNOLOGY
<u>COURSE HANDOUT</u>

SUBJECT: MEAN STACK
CLASS: IV/IV B.Tech. II SEMESTER, A.Y.2022-23
INSTRUCTOR: SRI E B K MANASH

<u>Course Handout Index</u>

S. No	Description
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College Vision & Mission
Vision: To emerge as a premier institution in the field of technical education and research in the state and as a home for holistic development of the students and contribute to the advancement of society and the region.

Mission: To provide high quality technical education through a creative balance of academic and industry oriented learning; to create an inspiring environment of scholarship and research; to instill high levels of academic and professional discipline; and to establish standards that inculcate ethical and moral values that contribute to growth in career and development of society in general.

Department Vision & Mission
Vision: To be a premier department in the region in the field of Information Technology through academic excellence and research that enable graduates to meet the challenges of industry and society.
Mission: To Provide dynamic teaching-learning environment to make the students industry ready and advancement in career; to inculcate professional and leadership quality for better employability and entrepreneurship; to make high quality professional with moral and ethical values suitable for industry and society.

Program Educational Objectives (PEOs)

PEO1: Solve real world problems through effective professional skills in Information Technology industry and academic research.
PEO2: Analyze and develop applications in Information Technology domain and adapt to changing technology trends with continuous learning.
PEO3: Practice the profession in society with ethical and moral values.

Program Outcomes (POs)

PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using the first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/Development of Solutions: Design solutions for complex engineering problems and system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, society, and environmental considerations.

PO4: Conduct Investigations of Complex Problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The Engineer and Society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and Sustainability: Understand the impact of the professional engineering solutions in society and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project Management and Finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi-disciplinary environments.

PO12: Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (PSOs)

PSO1: Design Skill: Design and develop softwares in the area of relevance under realistic constraints.

PSO2: New Technology: Adapt new and fast emerging technologies in the field of Information Technology.

JNTUK Academic Calendar

Directorate of Academic Planning
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA-533003, Andhra Pradesh, INDIA
(Established by AP Government Act No. 30 of 2008)

Lr. No. DAP/AC/IV Year /B. Tech/B. Pharmacy/2022   Date 25.06.2022

Dr. KVSG Murali Krishna,
M.E, Ph.D.,
Director, Academic Planning
JNTUK, Kakinada

To
All the Principals of Affiliated Colleges,
JNTUK, Kakinada.

Academic Calendar for IV Year - B. Tech/B. Pharmacy for the AY 2022-23

Description	From	To	Weeks
I SEMESTER			
Commencement of Class Work	04.07.2022		
I Unit of Instruction	04.07.2022	27.08.2022	8W
I Mid Examinations	29.08.2022	03.09.2022	1W
II Unit of Instructions	05.09.2022	29.10.2022	8W
II Mid Examinations	31.10.2022	05.11.2022	1W
Preparation & Practicals	07.11.2022	12.11.2022	1W
End Examinations	14.11.2022	26.11.2022	2W
Commencement of II Semester Class Work	05.12.2022		
II SEMESTER			
I Unit of Instructions	05.12.2022	28.01.2023	8W
I Mid Examinations	30.01.2023	04.01.2023	1W
II Unit of Instructions	06.01.2023	01.04.2023	8W
II Mid Examinations	03.04.2023	08.04.2023	1W
Preparation & Practicals	10.04.2023	15.04.2023	1W
End Examinations	17.04.2023	29.04.2023	2W

Director, 25/6/22
Academics & Planning,
JNTUK
Director
Academic Planning
JNTUK Kakinada

Copy to the Secretary to the Hon'ble Vice Chancellor, JNTUK
Copy to Rector, Registrar, JNTUK
Copy to Director Academic Audit, JNTUK
Copy to Director of Evaluation, JNTUK

Department Academic Calendar

Department of Information Technology
IV/IV B.Tech Academic Calendar for 2022-23

2022-23	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T
Jul 22						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26 27 28 29 30 31
Aug 22		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31
Sep 22					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27 28 29 30
Oct 22							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25 26 27 28 29 30 31
Nov 22			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29 30
Dec 22					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27 28 29 30 31
Jan 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb 23				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mar 23					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27 28 29 30 31
Apr 23							1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25 26 27 28 29 30
May 23		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30 31
Jun 23					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27 28 29 30

List of Holidays			Mid exams
July 10: Bakrid	Oct 9: Maulud Nabi	Mar 22 : Ugadhi	End Examinations
Aug 9:Moharum	Oct 24 : Diwali	Mar 30: Srirama navami	Commencement of Class work
Aug 15:Independence day	Dec 25 :Christmas	Apr 5: Babu Jagjivan Ram Jayanti	
Aug 31:Ganesh Chaturdi	Jan 14-16: sankranti	Apr 7: Good friday	Workshops
Oct 2: Gandhi jayanthi	Jan 26:Republic Day	Apr 14:Ambetkar Jayanthi	Department fest/Elite
Oct 5: Vijayadasami	Feb 18 :Sivaratri	Jun 29: Bakrid	HoD
	Mar 8 : holi		Department of IT

Course Description

MEAN Stack technology was created just 5 years ago. And yet within this short period of time, it has created ripples across the industries. MEAN stack development is a modern approach to building dynamic web applications. It is an open-source JavaScript framework that harnesses four major technologies: MongoDB, Express, Angular, and Node.js. Given the ever-increasing demand for full-stack JavaScript developers, this course will help you master both front-end and back-end development.

Course Objectives

This course aims at training students to master the:
1. Explore each individual technology used in the MEAN stack.
2. Learn to create innovative and cutting-edge web applications quickly using only JavaScript.
3. Learn to build single-page application and multipage application using Express.
4. Learnt and create REST APIs to perform CRUD operations.

Course Outcomes

Students are able to

CO No's	Cos	Level
CO1	Outline basic and advanced concepts of HTML 5	L2
CO2	Review the Javascript programming concepts such as variables, arrays, conditionals, and loops to solve practical web design problems	L2
CO3	Build a basic web server using Node.js, work with Node Package Manager (NPM) and recognize the need for Express.js.	L3

| CO4 | Develop dynamic and responsive web applications using typescript and angular and work with database using MongoDB | L3 |

Syllabus
UNIT-I:
HTML 5: Introduction to Web, Overview of Web Technologies, HTML - Introduction, HTML - Need, Case-insensitivity, Platform-independency, DOCTYPE Declaration, Types of Elements, HTML Elements - Attributes, Metadata Element, Sectioning Elements, Paragraph Element, Division and Span Elements, List Element, Link Element, Character Entities, HTML5 Global Attributes, Creating Table Elements, Table Elements : Colspan/ Rowspan Attributes, border, cellspacing and cellpadding attributes, Creating Form Elements, Input Elements - Attributes, Color and Date Pickers, Select and Datalist Elements, Editing Elements, Media, Iframe, Why HTML Security, HTML Injection, Clickjacking, HTML5 Attributes & Events Vulnerabilities, Local Storage Vulnerabilities, HTML5 - Cross-browser support, Best Practices For HTML Web Pages.

UNIT-II:
JavaScript: Why we need JavaScript, What is JavaScript, Environment Setup, Working with Identifiers, Type of Identifiers, Primitive and Non Primitive Data Types, Operators and Types of Operators, Types of Statements, Non - Conditional Statements, Types of Conditional Statements, If and Switch Statements, Types of Loops, Types of Functions, Declaring and Invoking Function, Arrow Function, Function Parameters, Nested Function, Built-in Functions, Variable Scope in Functions, Working With Classes, Creating and Inheriting Classes, In-built Events and Handlers, Working with Objects, Types of Objects, Creating Objects, Combining and cloning Objects using Spread operator, Destructuring Objects, Browser and Document Object Model, Creating Arrays, Destructuring Arrays, Accessing Arrays, Array Methods, Introduction to Asynchronous Programming, Callbacks, Promises, Async and Await, Executing Network Requests using Fetch API, Creating and consuming Modules.

UNIT-III:
Node.js: Why and What Node.js, How to use Node.js, Create a web server in Node.js, Node Package Manager, Modular programming in Node.js, Restarting Node Application, File Operations.
Express.js: Express Development Environment, Defining a route, Handling Routes, Route and Query Parameters, How Middleware works, Chaining of Middlewares, Types of Middlewares, Connecting to MongoDB with Mongoose, Validation Types and Defaults, Models, CRUD Operations, API Development, Why Session management, Cookies, Sessions, Why and What Security, Helmet Middleware, Using a Template Engine Middleware, Stylus CSS Preprocessor.

UNIT-IV:
Typescript: Installing TypeScript, Basics of TypeScript, Function, Parameter Types and Return Types, Arrow Function, Function Types, Optional and Default Parameters, Rest Parameter, Creating an Interface, Duck Typing, Function Types, Extending Interfaces, Classes, Constructor, Access Modifiers, Properties and Methods, Creating and using Namespaces, Creating and using Modules, Module Formats and Loaders, Module Vs Namespace, What is Generics, What are Type Parameters, Generic Functions, Generic Constraints. **MongoDB:** Introduction Module Overview, Document Database Overview, Understanding JSON, MongoDB Structure and Architecture, MongoDB Remote Management, Installing MongoDB on the local computer (Mac or Windows), Introduction to MongoDB Cloud, Create MongoDB Atlas Cluster, GUI tools Overview, Install and Configure MongoDB Compass, Introduction to the MongoDB Shell, MongoDB Shell JavaScript Engine, MongoDB Shell JavaScript Syntax, Introduction to the MongoDB Data Types, Introduction to the CRUD Operations on documents, Create and Delete Databases and Collections, Introduction to MongoDB Queries.

UNIT-V:

What is Angular, Features of Angular, Angular Application Setup, Components and Modules, Executing Angular Application, Elements of Template, Change Detection, Structural Directives - ngIf, ngFor, ngSwitch, Custom Structural Directive, Attribute Directives - ngStyle, ngClass, Custom Attribute Directive, Property Binding, Attribute Binding, Style and Event Binding, Built in Pipes, Passing Parameters to Pipes, Nested Components Basics, Passing data from Container Component to Child Component, Passing data from Child Component to ContainerComponent, Shadow DOM, Component Life Cycle, Template Driven Forms, Model Driven Forms or Reactive Forms, Custom Validators in Reactive Forms, Custom Validators in Template Driven forms, Dependency Injection, Services Basics, RxJS Observables, Server Communication using HttpClient, Communicating with different backend services using Angular HttpClient, Routing Basics, Router Links, Route Guards, Asynchronous Routing, Nested Routes.

Text Books:

1. Programming the World Wide Web, 7th Edition, Robet W Sebesta, Pearson.

2. Pro Mean Stack Development, 1st Edition, ELadElrom, Apress O'Reilly.

3. Full Stack JavaScript Development with MEAN, Colin J Ihrig, Adam Bretz, 1st edition, SitePoint, SitePoint Pty. Ltd., O'Reilly Media.

4. MongoDB – The Definitive Guide, 2nd Edition, Kristina Chodorow,O'Reilly.

Reference Books:

1. Web Technologies, HTML, JavaScript, PHP, Java, JSP, XML and AJAX, Black book,1st Edition, Dream Tech.

2. An Introduction to Web Design, Programming, 1st Edition, Paul S Wang, Sanda SKatila, Cengage Learning.

Web Links:

1.   https://infyspringboard.onwingspan.com/en/app/toc/lex_17739732834840810000_shared/overview (HTML5)

2.   https://infyspringboard.onwingspan.com/en/app/toc/lex_18109698366332810000_shared/overview (Javascript)

3.   https://infyspringboard.onwingspan.com/en/app/toc/lex_32407835671946760000_shared/overview (Node.js & Express.js)

4.   https://infyspringboard.onwingspan.com/en/app/toc/lex_9436233116512678000_shared/overview (Typescript)

5.   https://infyspringboard.onwingspan.com/en/app/toc/lex_20858515543254600000_shared/overview (Angular JS)

6.
https://infyspringboard.onwingspan.com/en/app/toc/lex_auth_013177169294712832113_shared/overview (MongoDB)

Lesson Plan

S. No	Unit	Topic	Teaching Aids	CO
1		**Introduction**	BB	CO1
2		Introduction to Web, Overview of Web Technologies,	BB	CO1
3		HTML - Introduction, HTML - Need, Case-insensitivity,	BB	CO1
4	I	Platform-independency, DOCTYPE Declaration, Types of Elements,	BB	CO1
5		HTML Elements - Attributes, Metadata Element, Sectioning Elements,	BB	CO1
6		Paragraph Element, Division and Span Elements,	PPT	CO1

7		List Element, Link Element, Character Entities, HTML5 Global Attributes, Creating Table Elements,	PPT	CO1
8		Table Elements : Colspan/ Rowspan Attributes, border, cellspacing and cellpadding attributes,	PPT	CO1
9		Creating Form Elements, Input Elements - Attributes, Color and Date Pickers, Select and Datalist Elements, Editing Elements, Media, Iframe, Why HTML Security, HTML Injection,	BB/PPT	CO1
10		Clickjacking, HTML5 Attributes & Events Vulnerabilities, Local Storage Vulnerabilities, HTML5 - Cross-browser support, Best Practices	BB	CO1
11		**JavaScript:** Why we need JavaScript, What is JavaScript, Environment Setup,	BB	CO2
12		Working with Identifiers, Type of Identifiers, Primitive and Non Primitive Data Types,	BB/PPT	CO2
13		Operators and Types of Operators, Types of Statements, Non - Conditional Statements,	BB/PPT	CO2
14		Types of Conditional Statements, If and Switch Statements, Types of Loops,	BB/PPT	CO2
15		Types of Functions, Declaring and Invoking Function, Arrow Function, Function Parameters,	BB	CO2
16	II	Nested Function, Built-in Functions, Variable Scope in Functions, Working With Classes, Creating and Inheriting Classes,	BB	CO2
17		In-built Events and Handlers, Working with Objects, Types of Objects, Creating Objects,.	BB	CO2
18		Combining and cloning Objects using Spread operator, Destructuring Objects, Browser and Document Object Model,	BB/PPT	CO2
19		Creating Arrays, Destructuring Arrays, Accessing Arrays, Array Methods,	BB	CO2
20		Introduction to Asynchronous Programming, Callbacks,	BB/PPT	CO2
21		Promises, Async and Await,	BB	CO2
22		Executing Network Requests using Fetch API,	BB	CO2
23		Creating and consuming Modules	BB/PPT	CO2
24		**Node.js:** Why and What Node.js, How to use Node.js, Create a web server in Node.js,	BB/PPT	CO3
25		Node Package Manager, Modular programming in Node.js,	BB	CO3
26	III	Restarting Node Application, File Operations.	BB/PPT	CO3
27		**Express.js:** Express Development Environment, Defining a route.	BB	CO3

28		Handling Routes, Route and Query Parameters, How Middleware works,	BB/PPT	CO3
29		Chaining of Middlewares, Types of Middlewares,	BB/PPT	CO3
30		Connecting to MongoDB with Mongoose, Validation Types and Defaults,	BB	CO3
31		Models, CRUD Operations, API Development, Why Session management,	BB	CO3
32		Cookies, Sessions, Why and What Security, Helmet Middleware,	BB	CO3
33		Using a Template Engine Middleware,	BB/PPT	CO3
34		Stylus CSS Preprocessor	BB	CO3
35	IV	**Typescript:** Installing TypeScript, Basics of TypeScript, Function, Parameter Types	BB	CO4
36		Return Types, Arrow Function, Function Types, Optional and Default Parameters,	BB/PPT	CO4
37		Rest Parameter, Creating an Interface, Duck Typing, Function Types, Extending Interfaces,.	BB	CO4
38		Classes, Constructor, Access Modifiers, Properties and Methods	BB/PPT	CO4
39		Creating and using Namespaces, Creating and using Modules, Module Formats and Loaders,	BB	CO4
40		Module Vs Namespace, What is Generics, What are Type Parameters, Generic Functions, Generic Constraints.	BB	CO4
41		**MongoDB:** Introduction Module Overview, Document Database Overview, Understanding JSON,	BB	CO4
42		MongoDB Structure and Architecture, MongoDB Remote Management,	BB	CO4
43		Installing MongoDB on the local computer (Mac or Windows), Introduction to MongoDB Cloud,	BB/PPT	CO4
44		Create MongoDB Atlas Cluster, GUI tools Overview, Install and Configure MongoDB Compass,	BB	CO4
45		Introduction to the MongoDB Shell	BB/PPT	CO4
46		MongoDB Shell JavaScript Engine, MongoDB Shell JavaScript Syntax,	BB	CO4
47		Introduction to the MongoDB Data Types,	BB	CO4
48		Introduction to the CRUD Operations on documents,	BB/PPT	CO4
49		Create and Delete Databases and Collections,	BB	CO4
50		Introduction to MongoDB Queries	BB	CO4
51	V	What is Angular, Features of Angular, Angular Application Setup, Components and Modules,.	BB/PPT	CO4
52		Executing Angular Application, Elements of Template, Change Detection,	BB	CO4

53		Structural Directives - ngIf, ngFor, ngSwitch, Custom Structural Directive,	BB/PPT	CO4
54		Attribute Directives - ngStyle, ngClass, Custom Attribute Directive, Property Binding,	BB	CO4
55		Attribute Binding, Style and Event Binding, Built in Pipes, Passing Parameters to Pipes, Nested Components Basics,	BB/PPT	CO4
56		Passing data from Container Component to Child Component, Passing data from Child Component to ContainerComponent,	BB	CO4
57		Shadow DOM, Component Life Cycle, Template Driven Forms, Model Driven Forms or Reactive Forms,	BB/PPT	CO4
58		Custom Validators in Reactive Forms, Custom Validators in Template Driven forms,	BB/PPT	CO4
59		Dependency Injection, Services Basics, RxJS Observables,	BB	CO4
60		Server Communication using HttpClient, Communicating with different backend services using Angular HttpClient,	BB/PPT	CO4
61		Routing Basics, Router Links, Route Guards,	BB	CO4
62		Asynchronous Routing, Nested Routes	BB/PPT	CO4

Evaluation Pattern

S. No	Components	Internal	External	Total
1	Theory	25	75	100
2	Engineering Graphics/Design/Drawing	25	75	100
3	Practical	20	30	50
4	Mini Project/Internship/Industrial Training/ Skill Development programmes/Research Project	-	50	50
5	Project Work – Part I	20	30	50
5	Project Work – Part II	60	90	150

Marks Range Theory (Max – 100)	Marks Range Lab (Max – 75)	Letter Grade	Level	Grade Point
≥ 90	≥ 67	O	Outstanding	10
≥80 to <90	≥60 to <67	S	Excellent	9
≥70 to <80	≥52 to <60	A	Very Good	8
≥60 to <70	≥45 to <52	B	Good	7
≥50 to <60	≥37 to <45	C	Fair	6
≥40 to <50	≥30 to <37	D	Satisfactory	5
<40	<30	F	Fail	0
			Absent	0

Timetable

SIR CRREDDY COLLEGE OF ENGINEERING, ELURU
DEPARTMENT OF INFORMATION TECHNOLOGY
III/IV B.Tech IT – II SEMESTER   A.Y 2022-2023

TIME TABLE
A-SECTION

With effect from : 09-01-2023   Class Teacher: Smt. B.Lalitha Bhavani /J.Malathi   LH -48

DAY	1 09:00 To 09:50	2 09:50 To 10:40	3 11:00 To 11:50	4 11:50 To 12:40		5 1:40 To 2:30	6 02:30 To 03:20	7 03:20 To 04:10	8 04:10 To 5:00
MON	ML	CNS	MSD		L	FM&MC	BDA(T)	ES-II	CNS(M)
TUE	BDA	ML	CNS	MSD(T)	U	ML	FM&MC	CNS(T)	BDA(M)
WED	FM&MC	ML LAB			N	CNS	BDA	Counseling	ML (M)
THU	MSD	ML	FM&MC(T)	BDA	C	BDA LAB			FM&MC(M)
FRI	CNS	BDA	MSD	ML(T)	H	CNS LAB			MSD(M)
SAT	FM&MC	SOC LAB				ML/BDA (R)	FM&MC (R)	MSD (R)	CNS (R)

*T – Tutorial
*R- Remedial Classes
*M- Make Up Classes

STAFF:

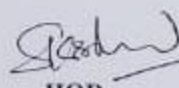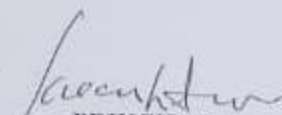|	
Machine Learning	: Smt. J.Malathi
Big Data Analytics	: Smt. B.Lalitha Bhavani
Cryptography and Network Security	: Smt. G.Krishnaveni
Professional Elective-II -MEAN Stack Development	: Sri. E.B.K. Manash
Open Elective-II Fundamentals of Microprocessors and Microcontrollers	: Smt. T.Satya Nagamani
Big Data Analytics lab	: Sri. Ch. Yallamanda / Smt. B.Lalitha Bhavani
Machine Learning using Python Lab	: Smt. J.Malathi/ Sri.G.Pavan
Cryptography and Network Security Lab	: Sri. Y.Siva Koteswara rao/ Smt. G.Krishnaveni
Skill Oriented Course – IV (Video Analytics)	: Smt. J.Malathi/ Sri. G.Pavan
Employability skills-II	: Smt. S. Sirisha

G. Krishnaveni
Dept. Time Table Incharge

HOD,
Dept. of. I.T
HEAD OF THE DEPARTMENT
Information Technology
Sir C.R.R. College of Engg.
ELURU 534 007.

PRINCIPAL
Principal
Sir C.R.R.College of Engineerinn
ELURU - 534 007

SIR CRREDDY COLLEGE OF ENGINEERING, ELURU
DEPARTMENT OF INFORMATION TECHNOLOGY
III/IV B.Tech IT – II SEMESTER   A.Y 2022-2023

TIME TABLE
B-SECTION

With effect from : 09-01-2023   Class Teacher: Smt. T.Satya Nagamani/ G.Krishnaveni   LH -47

DAY	1 09:00 To 09:50	2 09:50 To 10:40	3 11:00 To 11:50	4 11:50 To 12:40		5 1:40 To 2:30	6 02:30 To 03:20	7 03:20 To 04:10	8 04:10 To 5:00
MON	ML	BDA	FM&MC	CNS(T)	L	ML LAB			CNS(M)
TUE	CNS	MSD	BDA	ML	U	BDA LAB			BDA(M)
WED	BDA	CNS	FM&MC	MSD(T)	N	SOC LAB			ML (M)
THU	FM&MC	CNS LAB			C	ML(T)	FM&MC	ES-II	FM&MC(M)
FRI	ML	ML	CNS	BDA	H	MSD	FM&MC(T)	Counseling	MSD(M)
SAT	MSD		CNS	BDA(T)		ML/BDA (R)	FM&MC(R)	MSD (R)	CNS (R)

*T – Tutorial
*R- Remedial Classes
*M- Make Up Classes

STAFF:

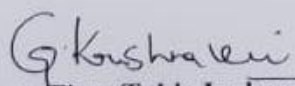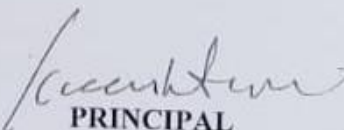|	
Machine Learning	: Sri. G.Pavan
Big Data Analytics	: Smt. B. Lalitha Bhavani
Cryptography and Network Security	: Smt. G.Krishnaveni
Professional Elective-II -MEAN Stack Development	: Sri. E.B.K. Manash
Open Elective-II Fundamentals of Microprocessors and Microcontrollers	: Smt. T. Satya Nagamani
Big Data Analytics lab	: Smt. B. Lalitha Bhavani/ Sri.Ch. Yallamanda
Machine Learning using Python Lab	: Sri. G.Pavan / Smt. J.Malathi
Cryptography and Network Security Lab	: Smt. G. Krishnaveni/ Sri. Y.Siva Koteswara rao
Skill Oriented Course – IV (Video Analytics)	: Sri. G.Pavan /Smt. J.Malathi
Employability skills-II	: Smt. S.Sirisha

Dept. Time Table Incharge

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