Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE

Class: SYCSE

Term: III

WITH EFFECT FROM 02/10/2023

ROOM NO - CR 20

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30-5.30
MON	DMS SAK	M3 GPK	BREAK	OOPJ SVG	CAO HH	BREAK	SC1-DS-TUP-L1 SC2-OOPJ-BSP-L4	
TUE	DS TUP	M3 GPK		DMS SAK	CAO HH		SC2-DS-TUP-L1 SC1-OOPJ-BSP-L4	
WED	OOPJ SVG	M3 GPK		DS TUP	DMS(T) SAK		SC3-DS-TUP-L1 SC4-OOPJ-BSP-L4	
THUR	OOPJ SVG	M3(T) GPK		CAO HH	DMS SAK		SC4-DS-TUP-L1 SC3-OOPJ-BSP-L4	
FRI	DS TUP	OOPJ(T) SVG		CAO(T) HH	DS(T) TUP		UHV II AF	
SAT	UHV II MMB	UHV II HH		SEMINAR I				

Subject	Staff Name
EM-III	Prof. G.P. Kamble
DMS	Prof. S. A. Khusro
DS	Prof. T.U. Padghan
CAO	Prof. H.Hadiya
OOPJ	Prof. S. V. Ghorpade
DS Lab	Prof. T.U.Padghan
OOPJ Lab	Prof. B.S.Pawar
Seminar I	All Faculty
UHV II	Prof. M.M. Bhosle Prof. A.Fatima

Lab	Lab Name
Lab 1	Programming Language
Lab 2	Open Source
Lab 3	Mobile Computing
Lab 4	Software Development LabI
Lab 5	Software Development LabII
Lab 6	Apple Lab
Lab 7	Advance Computing Reacherch Lab
Lab 8	Object Technology Lab
Lab 9	Computer Centre
Lab 10	IOT Lab.

Staff Name	Practical batches
BSP(OOPJ)	SC1,SC2,SC3,SC4
TUP(DS)	SC1,SC2,SC3,SC4

Time Table Coordinator

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

Department - CSE

Class - TY CSE

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Term: V

WITH EFFECT FROM 10/06/2023

ROOM NO - CR 19

PERIOD	1	2		3	4		5	6
TIME / DAY	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3.15-3.30	3.30-4.30	4.30-5.30
MON	DBS SSP	TOC KRG	BREAK	T2-SE-VBK-L2 T6-SE-MMB-L8		BREAK	SE MMB	
TUE	TOC KRG	SE(T) MMB		T1-SE-MMB-L8 T2-DBS-SSP-L5 T3-SE-VBK-L2			DBS(T) SSP	
WED	BC SDP	SE MMB		T3-DBS-SSP-L5 T4-SE-VBK-L2			DBS SSP	TOC(T) KRG
THUR	HCI BSP	BC SDP		T4-DBS-AF-L4 T1-DBS-SSP-L5			T5-SE-VBK-L2	
FRI	SE MMB	TOC KRG		HCI BSP	BC SDP		HCI BSP	DBS SSP
SAT	T5-DBS-AF-L4 T6-DBS-SSP-L5						Mini Project I	

Subject	Staff Name
DBS	Prof. S. S. Patwardhan
TOC	Prof.K.R. Ghule
HCI	Prof. B.S.Pawar
BC	Prof. S.D. Pingle
DBS Lab	Prof. S. S. Patwardhan Prof.A. Fatima
SE lab	Dr. V.B. kamble Prof. M.M.Bhosle

Lab	Lab Name
Lab 1	Programming Language
Lab 2	Open Source Open Source
Lab 3	Mobile Computing
Lab 4	Software Development LabI
Lab 5	Software Development LabII
Lab 6	Apple Lab
Lab 7	Advance Computing
Lab 8	Object Technology Lab
Lab 9	Computer Centre
Lab 10	IOT Lab

Staff Name	Practical batches
VBK(SE)	T2,T3,T4,T5
MMB(SE)	T1,T6
SSP(DBS)	T1,T2,T3,T6
X(DBS)	T4,T5

Ghule

Time Table Coordinator

DEPT OF COMPUTER SCIENCE & ENGG

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

Department - CSE
Class - Btech

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Term: VII

WITH EFFECT FROM 10/08/2023
ROOM NO - CR 18

PERIOD	1	2		3	4		5	6
TIME / DAY	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3.15-3.30	3.30-4.30	4.30-5.30
MON	DT AF	CC MMB	BREAK	BDA KRG	AI SAK	BREAK	Training & Placement	
TUE	AI SAK	BI VBK		Training & Placement			CC MMB	DT AF
WED	AI SAK	DT AF		CC MMB	BDA KRG		BI VBK	
THUR	B1-AI-MMB-L8 B2-CC-KRG-L3			BI VBK	BDA KRG		B3-AI-MMB-L8 B4-CC-KRG-L3	
FRI	B1-CC-BSP-L3 B2-AI-SAK -L5			B3-CC-KRG-L3 B4-AI-SAK-L5				
SAT	B5-AI-SAK-L5 B6-CC-KRG-L3			B6-AI-SAK-L5 B5-CC-BSP-L3			Project Part 1	

Subject	Staff Name
AI	Prof. S.A.Khusro
CC	Prof. M.M.Bhosle
BDA	Prof.K.R. Ghule
BI	Dr.V.B.Kamble
DT	Prof.A. Fatima
AI LAB	Prof. S.A.Khusro Prof. M.M.Bhosle
CC LAB	Prof.K.R.Ghule , Prof. B.S.Pawar

Lab	Lab Name
Lab 1	Programming Language
Lab 2	Open Source Open Source
Lab 3	Mobile Computing
Lab 4	Software Development LabI
Lab 5	Software Development LabII
Lab 6	Apple Lab
Lab 7	Advance Computing
Lab 8	Object Technology Lab
Lab 9	Computer Centre
Lab 10	IOT Lab

Staff Name	Practical batches
KRG(CC)	B2,B3,B4,B6
BSP(CC)	B1,B5
SAK(AI)	B2,B4,B5,B6
MMB(AI)	B1,B3

Time Table Coordinator

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS

WEF: 10/08/2023

Staff Time- Table

Staff Name: Prof. K.R. Ghule

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON		TOC			BDA			
TUE	TOC							
WED					BDA			TOC(T)
THUR	B2-CC-Lab 3				BDA		B4-CC-Lab 3	
FRI		TOC		B3-CC-Lab 3				
SAT	B6-CC-Lab 3			SY DS Seminar I			BTech Project I TY Mini Project I	

LOAD: 7 (TH)+ 16 (PR) = 19

Ghule

Time Table Coordinator

Ghule

Subject Teacher

HOD

DEPT. OF COMPUTER SCIENCE & ENGG. Date

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS

WEF: 10/08/2023

Staff Time- Table

Staff Name: Prof. S.S. Patwardhan

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON	DBS			DMS				
TUE	DMS			T2-DBS-Lab5			DBS	
WED		DMS		T3-DBS-Lab5			DBS(T)	
THUR		DMS		T1-DBS-Lab5				
FRI								DBS
SAT	T6-DBS-Lab5			SY DS Seminar I			BTech Project I TY Mini Project I	

LOAD: 8 (TH)+12 (PR) = 20

Time Table Coordinator **Subject Teacher** **HOD**

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS

WEF: 10/08/2023

Staff Time- Table

Staff Name: Prof. S.V.Ghorpade

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON	OOPJ				OOPJ		SD2-OOPJ-Lab5	
TUE				OOPJ			SD1-OOPJ-Lab5	
WED	OOPJ			OOPJ			SD4-OOPJ-Lab5	
THUR	OOPJ						SD3-OOPJ-Lab5	
FRI		OOPJ(T)		OOPJ				
SAT				SY CSE SeminarI			BTech Project I TY Mini Project I	

LOAD: 8 (TH)+12 (PR) = 20

Ghule

Time Table Coordinator

Ghorpade

Subject Teacher

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS

WEF: 10/08/2023

Staff Time- Table

Staff Name: Prof. B.S. Pawar

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON		CAO					SC2-OOPJ-Lab4	
TUE		CAO					SC1-OOPJ-Lab4	
WED	CAO						SC4-OOPJ-Lab4	
THUR	HCI			CAO			SC3-OOPJ-Lab4	
FRI	B1-CC-Lab3			HCI			HCI	
SAT				B5-CC-Lab3 SY DS Seminar I			BTech Project I TY Mini Project I	

LOAD: 7 (TH)+14 (PR) = 21

Time Table Coordinator

Subject Teacher

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART II)

Department - CSE **Term: IV** **WITH EFFECT FROM 1/02/2024**

Class - SY CSE **ROOM NO - CR 20**

PERIOD	1	2		3	4		5	6
TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30-5.30
MON	DAA PG	PT & RP GPK		Training & Placement			OS KRG	DLDM NTK
TUE	OS KRG	PT & RP GPK		DAA PG	DLDM PKG		OS-SC4-KRG-Lab3 Py-SC3-PG-Lab1 Sem-SC1-SSP-Lab11 Sem-SC2-MNB-Lab8	
WED	DLDM PKG	PT & RP GPK		BHR SDP	DAA PG			
THUR	DLDM NTK	DAA PG	B R E A K	OS KRG	BHR SDP	B R E A K	OS-SC2-KRG-Lab3 Py-SC1-PG-Lab1 Sem-SC3-SSP-Lab11 Sem-SC4-MNB-Lab8	
FRI	BHR SDP	OS KRG		Python PG			OS-SC3-KRG-Lab3 Py-SC4-PG-Lab1 Sem-SC1-SSP-Lab11 Sem-SC2-MNB-Lab8	
SAT	OS-SC1-KRG-Lab3 Py-SC2-PG-Lab1 Sem-SC3-SSP-Lab11 Sem-SC4-MNB-Lab8							

Subject	Staff Name
OS	Prof. K. R. Ghule
DAA	Prof. P. Gadve
BHR	Prof. S.D. Pingle
DLDM	Prof. P.K. Ghuge
	Prof. N.T. Kolambikar
PT & RP	Prof. G.P. Kamble
Python	Prof. P. Gadve
OS Lab	Prof. K. R. Ghule
Sem lab	Prof. M.N.Bhosle
	Prof. S. S. Patwardhan

Lab	Lab Name
Lab 1	Programming Language
Lab 2	Open Source
Lab 3	Mobile Computing
Lab 4	Software Development Lab I
Lab 5	Software Development Lab II
Lab 6	Apple Lab
Lab 7	Advance Computing Reacherch Lab
Lab 8	Object Technology Lab
Lab 9	Computer Centre
Lab 10	Project Development Lab
Lab 11	Web Development Lab

Staff Name	Practical batches
KRG	OS All Batches
MNB	Sem SC2, SC4
SSP	Sem SC1, SC3
PG	Python All Batches

Ghule

Time Table Coordinator

DEPT OF COMPUTER SCIENCE & ENGG. P.E.S. COLLEGE OF ENGINEERING AURANGABAD. Date

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART II)

Department - CSE

Class - TY CSE

Term: VI

WITH EFFECT FROM 1/02/2024

ROOM NO - CR 19

PERIOD	1	2		3	4		5	6
TIME / DAY	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3.15-3.30	3.30-4.30	4.30-5.30
MON	T1-ML-SAK-Lab5 T2-CP-HH-Lab7			Training & Placement			ML SAK	ESC SCK
TUE	T2-ML-SAK-Lab5 T3-CP-HH-Lab7			ML SAK	CN MNB		IOT VBK	ESC SCK
WED	T4-ML-SAK-Lab5 T5-CP-VBK-Lab7			CD BSP	CN MNB		Mini Project II	
THUR	IOT VBK	CD BSP		CN MNB	ML SAK		T5-ML-SAK-Lab5 T1-CP-HH-Lab7	
FRI	CN MNB	ML SAK		IOT VBK	CP H.H		CD BSP	
SAT	CD BSP	ESC SCK		T3-ML-SAK-Lab5 T4-CP-HH-Lab7			Mini Project II	

BREAK

Subject	Staff Name
CD	Prof. B.S.Pawar
ML	Prof. S. A. Khusro
ESC	Prof. S.C. Kathar,
CN	Prof. M.N.Bhosle
IOT	Dr. V.B. kamble
CP	Prof. H.Hadiya

Lab	Lab Name
Lab 1	Programming Language
Lab 2	Open Source Open Source
Lab 3	Mobile Computing
Lab 4	Software Development LabI
Lab 5	Software Development LabII
Lab 6	Apple Lab
Lab 7	Advance Computing Reacherch Lab
Lab 8	Object Technology Lab
Lab 9	Computer Centre
Lab 10	Project Development Lab
Lab 11	Web Development Lab

Staff Name	Practical batches
VBK(SE)	CP T5
HH	CP T1,T2.T3,T4
SAK	ML All Batches

Ghule

Time Table Coordinator

DEPT OF COMPUTER SCIENCE & ENGG * P.E.S. COLLEGE OF ENGG. AURANGABAD * Date

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Chh. Sambhajinagar

TIME TABLE FOR THE YEAR 2023-24 (PART II)

Department - CSE,DS

Staff Time- Table **WEF: 01/02/2024**

Staff Name: Dr. V.B. Kamble

PERIOD	1	2	3	4	5	6
TIME / DAY	10.30-11.30	11.30-12.30	1.15-2.15	2.15-3.15	3:30-4:30	4.30 – 5.30
MON		SA				
TUE	SA				IOT	
WED	T5-CP-VBK-Lab7		SA		Mini Project II	
THUR	IOT					
FRI			IOT			
SAT					Mini Project II	

LOAD: 3 (TH)+ 09 (PR) = 12

Ghule

Time Table Coordinator

VB

Subject Teacher

DEPT OF COMPUTER SCIENCE & ENGG. Date

VB

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Chh. Sambhajinagar

TIME TABLE FOR THE YEAR 2023-24 (PART II)

Department - CSE,DS

WEF: 01/02/2024

Staff Time- Table

Staff Name: Prof. S. D. Pingle

PERIOD	1	2	3	4	5	6
TIME / DAY	10.30-11.30	11.30-12.30	1.15-2.15	2.15-3.15	3:30-4:30	4.30 – 5.30
MON	DS				OS-SD1-SDP-Lab2	
TUE		DS			OS-SD3-SDP-Lab2	
WED			BHR (CSE)		Mini Project II	
THUR		DS		BHR (CSE)	Seminar I	
FRI	BHR (CSE)					
SAT					Mini Project II	

LOAD: 3 (TH)+ 14 (PR) = 16

Ghuke

Time Table Coordinator

Subject Teacher

DEPT OF COMPUTER SCIENCE & ENGG. Date

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Chh. Sambhajinagar

TIME TABLE FOR THE YEAR 2023-24 (PART II)

Department - CSE,DS

Staff Time- Table **WEF: 01/02/2024**

Staff Name: Prof. K.R. Ghule

PERIOD	1	2	3	4	5	6
TIME / DAY	10.30-11.30	11.30-12.30	1.15-2.15	2.15-3.15	3:30-4:30	4.30 – 5.30
MON						
TUE	OS (CSE)			MC	OS (CSE)	
WED		MC			OS-SC4-KRG-Lab3	
THUR	MC				OS-SD2-KRG-Lab3	
FRI		OS (CSE)	OS (CSE)		OS-SC2-KRG-Lab3	
SAT	OS-SC1-KRG-Lab3				OS-SC3-KRG-Lab3	
					Mini Project II	

LOAD: 4 (TH)+ 10 (PR) = 19

Ghule

Time Table Coordinator

Ghule

Subject Teacher

DEPT OF COMPUTER SCIENCE & ENGG

HOD

P.E.S. College of Engineering, Aurangabad

Department of Computer Science and Engineering

Teaching Plan(2023-24) Part I

Course name: Cloud Computing

Course Code: BTCOE702 **Course Coordinator: Prof. M.N.Bhosale**

L.No	Topic to be cover
1	Definition and evolution of Cloud Computing
2	Evolution of Cloud Computing
3	Enabling Technologies
4	Service and Deployment Models
5	Deployment Models
6	Popular Cloud Stacks and Use Cases
7	Benefits, Risks of cloud computing
8	Challenges of Cloud Computing
9	Economic Models
10	SLAs with Their Types
11	Topics in Cloud Security
12	Historical Perspective of Data Centres
13	Data centre Components: IT Equipment and Facilities
14	Design Consideration:Requirements, Power, Efficiency
15	Redundancy &Power Calculations,
16	PUE and Challenges in cloud
17	Data Centres
18	Cloud Management
19	Cloud Software Deployment Considerations
20	Virtualization (CPU, Memory, I/O)
21	Case Study: Amazon EC2
22	Software Defined Networks (SDN).
23	Software Defined Storage (SDS).
24	Introduction to Storage Systems
25	Cloud Storage Concepts
26	Distributed File Systems (HDFS)
27	Distributed File Systems (CephFS)
28	Cloud Databases (HBase)
29	Cloud Databases(Cassandra)
30	Clouc Databases (MongoDB)
31	Clouc Databases(DynamoDB)
32	Cloud Object Storage (Amazon S3).
33	Cloud Object Storage (Open Stack Swift).
34	Cloud Object Storage (Ceph).
35	Cloud Management

Dr. Babasaheb Ambedkar Technological University, Lonere- 402103

P.E.S. College of Engineering, Aurangabad

Department of Computer Science and Engineering

Course Coordinator: Prof. K.R. Ghule **Academic Year :2023-24**

Course Name : Big Data Analytic

Semester VII **Course Code : BTCOE703**

Teaching Plan

Lc. No.	Topic Covered
1	Why Big Data and Where did it come from?
2	Characteristics of Big
3	Challenges and applications of Big Data
4	Enabling Technologies for Big Data
5	Big Data Stack
6	Big Data distribution packages
7	Overview of Apache Spark, HDFS
8	YARN, MapReduce, MapReduce Programming Model with Spark
9	MapReduce Example: Word Count,
10	Page Rank etc, CAP Theorem, Eventual Consistency
11	Consistency TradeO-s,
12	ACID and BASE, Zookeeper and Paxos, Cassandra
13	Cassandra Internals, HBase, HBase Internals.
14	Big Data Streaming Platforms for Fast Data
15	Streaming Systems
12	Big Data Pipelines for Real-Time computing
16	Spark Streaming,
17	Kafka,
18	Streaming Ecosystem
19	Overview of Big Data Machine Learning, Mahout,
20	Big Data Machine learning Algorithms in Mahout-kmeansNaive Bayes etc
22	Machine Learning Algorithms in Spark
23	SparkMLlib,Deep Learning for Big Data,
24	Graph Processing: Pregel, Giraph, Spark GraphX.
25	Introduction to mongoDB key features,
26	Core server tools
27	MongoDB through the JavaScript‘ sshell
28	Creating and querying through Indexes,
29	Constructing queries on databases
30	collections and documents,
31	MongoDB query language.
32	Why Big Data and Where did it come from?

Ghule
Subject Teacher

Dept. of Computer Science ... Date

Dr. Babasaheb Ambedkar Technological University, Lonere- 402103

P.E.S. College of Engineering, Aurangabad

Department of Computer Science and Engineering

Course Coordinator: Prof. K.R. Ghule **Academic Year :2023-24**

Course Name : Theory of Computation **Course Code : BTCOC502**

Semester V

Teaching Plan

Le. No.	Topic Covered
1	Definition of deterministic finite automata,Non-deterministic finite automata
2	Moore and Mealy machines and their conversions
3	Regular expressions, Recursive definition,
4	NFA with e-moves,
5	Inter-conversion between NFA and DFA,
6	Regular expression and FA
7	Pumping lemma.
8	Definition, Production rules, Ambiguous grammar
9	Removal of ambiguity
10	Chomsky hierarchy
11	Context Free Grammar (CFG) – definition,
12	Simplification of CFG
13	Solving problems
14	Solving problems
15	Definition of context free languages, Regular grammar definition,
12	Left linear, Right linear grammar
16	Inter-conversion between left linear and right linear regular grammar
17	Regular grammar and finite automata
18	CNF,
19	GNF
20	Derivation graphs, Type 0 and Type 1 grammars.
21	Formal definition, Pushdown automata (PDA),
22	Deterministic Pushdown automata (DPDA) – definition
23	Non-deterministic Pushdown automata (NPDA) -definition,
24	relative powers of DPDA
25	relative powers of NPDA.
26	Solving problems
27	Definition, Computing with Turing machine,
28	Extensions of Turing machines, Random access Turing machines
29	Non-deterministic Turing machines
30	Grammars, The Church's Turing hypothesis
31	Universal Turing machines
32	The Halting problem,
33	Unsolvable problems about Turing machines
34	Definition of deterministic finite automata,Non-deterministic finite automata
35	Moore and Mealy machines and their conversions

Ghule

Subject Teacher

Dr. Babasaheb Ambedkar Technological
University, Lonere- 402103
P.E.S. College of Engineering, Chh. Sambhajinagar
Department of Computer Science and Engineering

Course Coordinator: Prof. K.R. Ghule
Course Name : Operating System **Course Code :BTCOC402**
Academic Year :2023-24 Part:II **Semester IV**

No. Of Le	Topic
1	Introduction and Operating system structures
2	Definition, Types of Operating system
3	Real-Time operating system
4	System Components: System Services, Systems Calls, System Programs, System structure
5	Virtual Machines
6	System Design and Implementation,
7	System Generations,
8	Processes and CPU Scheduling: Process Concept,
9	Process Scheduling, Operation on process
10	Inter-process Communication, Cooperating processes,
11	Threads, Multithreading model, Scheduling criteria,
12	Scheduling Algorithms, Thread Scheduling, Multiple-Processor Scheduling
13	Scheduling Algorithms evaluation.
14	Process Synchronization: The critical-section problem,
15	Critical regions, Peterson's Solution, Synchronization Hardware
16	Semaphores, Classical Problems of synchronization and Monitors
17	Deadlocks: Systems Model, Deadlock characterization
18	Methods for handling Deadlocks, Deadlock Prevention, Deadlock Avoidance,
19	Deadlock Detection, Recovery from Deadlock, Combined approach to deadlock Handling.
20	Memory Management: Basic concept, Logical and Physical address map,
21	Memory allocation: Continuous Memory Allocation, Fixed and variable partition,
21	Internal and external fragmentation and compaction, Paging: Principle of operation, Page allocation – Hardware support for paging,
22	Protection and sharing, Disadvantages of paging;
23	Segmentation. Virtual Memory: Basics of Virtual Memory – Hardware and control structures Page fault
24	Working Set, Dirty page / Dirty bit – Demand paging,
25	Page Replacement algorithms: Optimal, First in First Out (FIFO), Second Chance (SC), Not recently used (NRU) and Least Recently used(LRU)
26	File Management: File Concept, Access methods,
27	File types, File operation, Directory and disk structure,
28	File System Structure, File System Implementation,
29	Allocation methods (contiguous, linked, indexed), Free-space management
30	directory implementation (linear list, hash table),
31	efficiency and performance.
32	Mass-Storage Structure: Disk Structure,
33	Disk attachment,
34	Disk scheduling, Disk management,
35	Swap Space Management

Ghule

Subject Teacher.

P.E.S. College of Engineering, Aurangabad

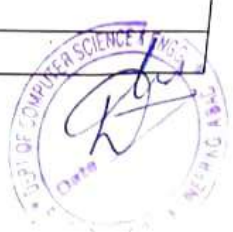
Department of Computer Science and Engineering

Teaching Plan (2021-22)

Course name: Computer Network

Course Code: BTCSE602 Course Coordinator: Prof. M.V.Bhosale

Sr. No.	Topic to be cover
1	Applications of computer network
2	Network hardware
3	Network software: Protocol Hierarchy
4	Design Issues
5	Connection oriented vs. connectionless
6	Service Primitives
7	Reference models: OSI and TCP/IP
8	Example networks: Internet,
9	Network standardization,
10	Performance: Bandwidth and Latency, Delay and bandwidth product
11	High- Speed Network,
12	Application Performance Needs
13	X5, Frame relay
14	ATM, Ethernet (802.3)
15	FDDI, Token Rings, Resilient Packet Rings
16	Wireless LANs: Wi-Fi (802.11), Cell Phone Technologies,
17	Broadband Wireless: Wi-MAX (802.16)
18	Bluetooth (802.15.1),RFID.
19	Data Link Layer Design Issues: Service provided to network layer Framing
20	Error Control,Flow Control,
21	Error Detection and Correction: error correcting codes, error detecting codes.
22	IPv4/IPv6,
23	Routers and Routing Algorithms distance vector link state
24	TCP UDP and sockets,
25	General principles,
26	Congestion prevention policies,
27	Load shading, Jitter control,
28	Quality of service: Packet scheduling, Traffic shaping,
29	Integrated Services.
30	DNS, SMTP
31	POP, FTP, HTTP
32	Network Security: Authentication
33	Basics of public key and private key cryptography
34	digital signatures and certificates,
35	Firewalls



P.E.S. College of Engineering, Aurangabad

Department of Computer Science and Engineering

Teaching Plan(2023-24)

Course name: Design and Analysis of Algorithm

Course Code: BTCOC401 Course Coordinator :Prof. P.P.Gadve

L.No	Topictobe cover
1	Definition, Properties of Algorithms.
2	Expressing Algorithm, Flowchart.
3	Algorithm Design Techniques, Performance Analysis of Algorithms.
4	Types of Algorithm's Analysis, Order of Growth, Asymptotic Notations, Recursion, Recurrences Relation.
5	Substitution Method, Iterative Method, Recursion Tree.
6	Master Theorem, Changing Variable, Heap Sort.
7	Introduction, Binary Search, Merge Sort.
8	Quick Sort, Strassen's Matrix Multiplication.
9	Backtracking Concept.
10	N–Queens Problem.
11	Four–Queens Problem, Eight–Queen Problem.
12	Hamiltonian Cycle, Sum of Subsets Problem.
13	Graph Colouring Problem.
14	Branch and Bound: Introduction.
15	Travelling Salesperson Problem.
16	15-Puzzle Problem.
17	Comparisons between Backtracking and Branch and Bound.
18	Introduction to Greedy Technique.
19	Greedy Method.
20	Optimal Merge Patterns.
21	Huffman Coding.
22	Knapsack Problem.
23	Activity Selection Problem, Job Sequencing with Deadline.
24	Minimum Spanning Tree, Single-Source Shortest Path Algorithm.
25	Introduction, Characteristics of Dynamic Programming.
26	Component of Dynamic Programming.
27	Comparison of Divide-and-Conquer and Dynamic Programming Techniques.
28	Longest Common Sub-sequence.
29	matrix multiplication, shortest paths.
30	Bellman Ford, Floyd Warshall.
31	Application of Dynamic Programming. NP Completeness.
32	Introduction, the Complexity Class P.
33	the Complexity Class NP.
34	Polynomial-Time Reduction.
35	the Complexity Class NP-Complete.

Dr. Babasaheb Ambedkar Technological University, Lonere-402103
P.E.S. College of Engineering, Aurangabad
Department of Computer Science and Engineering
Teaching Plan
Academic Year 2023-24
Part-I

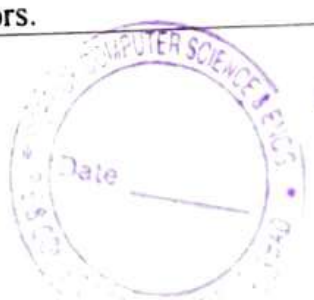
Course name: Human Computer Interaction
Course Code: BTCOE504
Course Coordinator: Prof. Bharati S. Pawar

Lecture No	Topic to be cover
1	Introduction
2	Course objective and overview
3	Historical evolution of the field
4	The Human,
5	The Computer
6	The Interaction
7	The Interaction
8	Design processes:
9	Interaction Design basics
10	Concept of usability
11	definition
12	elaboration,
13	HCI in the Soft- ware Process
14	Design Rules.
15	Implementation
16	Evaluation
17	Implementation Support
18	Evaluation Techniques
19	Universal Design
20	Use Support
21	Revision
22	Models:
23	Cognitive Models,
24	Socio – Organizational Issues
25	Stakeholders Requirements
26	Communication and Collaboration models.
27	Theories: Task Analysis Dialog notations
28	Design Models of the system Modeling Rich Interactions.
29	Modern Systems:
30	Group ware
31	Ubiquitous Computing
32	Augmented Realities
33	Hypertext
34	Multimedia
35	World Wide Web

Dr. Babasaheb Ambedkar Technological University, Lonere-402103
P.E.S. College of Engineering, Aurangabad
Department of Computer Science and Engineering
Teaching Plan
Academic Year 2023-24
Part-II

Course name: Compiler Design
Course Code: BTCOC601
Course Coordinator: Prof. Bharati S. Pawar

Lecture No.	Topic to be cover
1	Introduction to Compiling,
2	analysis of the source program,
3	the phases of a compiler,
4	the grouping of phases,
5	Compiler Construction tools,
6	A simple one-pass compiler,
7	The role of the Lexical analyzer,
8	Input buffering,
9	Specification of Tokens
10	A Language for Specifying Lexical Analyzers,
11	Design of a Lexical Analyzer generator.
12	**Revision**
13	The role of the Parser,
14	Context-free grammars,
15	Writing a Grammar
16	Top-Down Parsing,
17	Bottom-Up Parsing,
18	Operator-precedence Parsing
19	LR Parsers,
20	Using Ambiguous Grammars,
21	Parser Generators.
22	Definitions, Construction of Syntax Trees,
23	Bottom-Up Evaluation of S- Attributed definitions,
24	Top-Down Translation,
25	Bottom-Up Evaluation of Inherited attributes.
26	Intermediate Languages, Declarations,
27	Assignment Statements, Boolean Expressions,
28	Case Statements, Back patching, Procedure Calls.
29	Issues in the Design of a Code Generator, The target Machine,
30	Run-Time Storage Management, Basic Blocks and Flow Graphs,
31	Next-Use Information, Simple Code Generator,
32	Register allocation and Assignment, The DAG Representation of Basic Blocks,
33	Generating Code from DAGs,
34	Dynamic Programming
35	CodeGeneration Algorithm, Code-Generators.



Dr Babasaheb Ambedkar technological University Lonere-402103
PES College of Engineering Aurangabad.
Department of Computer Science and Engineering
Teaching Plan
Academic year- 2023-24
Part-2

Course Name: Basic Human Rights
Course code: BTCOC502
Course co ordinator: Prof. S. D. Pingle

Lecture no	Topic to cover
1	The Basic Concepts: - Individual, group, civil society, state,,
2	civil society, state,
3	equality, justice
4	Human Values, Human rights
5	and Human Duties: - Origin, s, , Declaration of
6	Contribution of American bill of right
7	French revolution
8	CA-1
9	Declaration of independence,
10	Rights of citizen,
11	Rights of working and exploited people.
12	Fundamental rights and, , Impact
13	economic programme
14	Society, religion, culture, and their inter relationship
15	impact of social structure on human behavior,: -
16	Social Structure and Social Problems
17	Social and communal conflicts
18	social harmony, , , bonded labor.
19	rural poverty
20	unemployment
21	bonded labor.
22	unit 3 Migrant workers and human rights violations
23	human rights of mentally and physically challenged
24	State, Individual liberty
25	Freedom and democracy,
26	NGOs and human rights in India
27	Land, Water,
28	Forest issues.
29	Human rights in Indian constitution and law:-
30	ca-ii
31	i) The constitution of India: Preamble
32	Directive principles of state policy
33	vi)Fundamental duties

34	Directive principles of state policy v) Some other provisions.
35	unit 5 Universal declaration of human rights and provisions of India
36	, Constitution and law
37	mid sem exam
38	National human rights
39	National human rights
40	state human rights commission.

subject teacher
Prof. S. D. Pingle

P.E.S.COLLEGEOFENGINEERING
NagsenVana,PanchakkiRoad,Chh. Sambhajinagar–431002 Tel.:
web:www.pescoe.ac.in,
email:headds@pescoe.ac.in
Department of Computer Science and Engineering (Data Science)

Ref.No.PESCOE/CSE(DS)/2024-2025/01 **Date:01/08/2024**

To,
Prof.Dr. Vipulsangram K Kadam
Professor & Incharge Criteria-1
P.E.S College of Engineering, Nagsenvan,
Chh. Sambhajinagar -431002.

Subject : Ssubmission of criteria 1 (Curricular Aspects) documents Hard copy for the academic 2023-24 as per the NAAC guidelines.

Sir,

With ref. to the subject cited above Department of Computer Science and Engineering (Data Science) is submitting hard copy documents of criteria 1 as per the notice [Ref.No. PESCOE/IQAC/2023-2024/002 Date: 29/05/2024]for the academic 2023-24 as per the NAAC guidelines.

Thank you.

Sincerely,

Dr. Asha A.Tupe
Head
Computer Science and Engineering
(Data Science)
P.E.S College Of Engineering,
Aurangabad. (Chh. Sanbhaji Nagar)

Criteria -1

Point No.	Description
1.1.1	Time Table Teaching plan
1.1.2	Academic Calendar (University,College,Department)
1.1.3	Paper setting/Paper assessment/CS /US/Practical oral appointment/BOS/LIC any other order
1.2.1 and 1.3.2	Syllabus F.E To B.E
1.2.2	Student Course Certificate
1.2.3	Project List / Implant Training
1.3.1	Co-curricular activity
1.3.3	Roll call list
1.4.1	Feedback (Parent, Student ,Teacher, Alumni)
1.4.2	Action taken report

Peoples Education Society (Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE **Term: III** **WITH EFFECT FROM 02/10/2023**

Class: SY DS **ROOM NO - CR 20**

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30-5.30
MON	OOPJ SVG	CAO BSP	B R E A K	DMS SSP	DS TUP	B R E A K	M3 NKA	UHV II SVG
TUE	DMS SSP	CAO BSP		OOPJ SVG	DS TUP		M3 NKA	UHV II SVG
WED	CAO BSP	DMS SSP		OOPJ SVG	DS TUP		SD1-DS-SDP-L2 SD2-OOPJ-SVG-L5	
THUR	DS TUP	DMS SSP		M3 NKA	CAO BSP		SD2-DS-SDP-L2 SD1-OOPJ-SVG-L5	
FRI	M3 NKA			OOPJ SVG			UHV II SVG	
SAT	SD3-DS-SDP-L2 SD4-OOPJ-SVG-L5			SD4-DS-SDP-L2 SD3-OOPJ-SVG-L5			SEMINAR I	

Subject	Staff Name
EM III	Prof. N.A.Awasarmol
DMS	Prof. S. S. Patwardhan
DS	Prof. T.U. Padghan
CAO	Prof. B.S.Pawar
OOPJ	Prof.S.V. Ghorpade
DS Lab	Prof. S.D.Pingle(SY DS) Prof.
OOPJ Lab	Prof. S. V.
Seminar I	All Faculty
UHV II	Prof.S.V. Ghorpade

Lab	Lab Name
Lab 1	Programming Language
Lab 2	Open Source
Lab 3	Mobile Computing
Lab 4	Software Development LabI
Lab 5	Software Development LabII
Lab 6	Apple Lab
Lab 7	Advance Computing
Lab 8	Object Technology Lab
Lab 9	Computer Centre
Lab 10	IOT Lab

Staff Name	Practical batches
SDP(DS)	SD1,D2,SD3,SD4
SVG(OOPJ)	SD1,D2,SD3,SD4

Computer Science & Engineering
P.E.S. College of Engineering
Chh. Sambhajinagar.

Time Table Coordinator

HOD

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART II)

Department - CSE

Class - SY DS

Term: IV

WITH EFFECT FROM 1/02/2024

ROOM NO - CR 18

PERIOD	1	2		3	4		5	6
TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30-5.30
MON	DAA SSP	DLDM PKG		Training & Placement			OS-SD1-SDP-Lab2 Py-SD2-PG-Lab4 Sem-SD3-SVG-Lab5 Sem-SD4-MNB-Lab8	
TUE	OS SVG	DLDM NKT		Python BSP	PT & RP SRA		OS-SD3-SDP-Lab2 Py-SD4-BSP-Lab4 Sem-SD1-SVG-Lab5	
WED	BHR PG	OS SVG	B R E A K	DAA SSP	PT & RP SRA	B R E A K	Py-SD3-BSP-Lab4 OS-SD2-KRG-Lab3 Sem-SD1-SVG-Lab5	
THUR	OS SVG	DLDM PKG		Sem-SD2-SSP-Lab11 Py-SD1-BSP-Lab4 OS-SD4-SVG-Lab3				
FRI	BHR PG	OS SVG		DAA SSP	PT & RP SRA			
SAT		DLDM NKT		BHR PG	DAA SSP		Sem-SD4-MNB-Lab8 Sem-SD2-SSP-Lab11 Sem-SD3-SVG-Lab5	

Subject	Staff Name
DAA	Prof. S. S. Patwardhan
OS	Prof. S. V. Ghorpade
BHR	Prof. P. Gadve
DLDM	Prof. P.K. Ghuge Prof. N.T. Kolambikar
PT&RP	Prof. S. A. Acharya
Python	Prof. B.S.Pawar
Seminar	Prof. S. V. Ghorpade
OS Lab	Prof. S. S. Patwardhan Prof. S.D. Pingle Prof. S. V. Ghorpade

Lab	Lab Name
Lab 1	Programming Language
Lab 2	Open Source
Lab 3	Mobile Computing
Lab 4	ware Development Labl
Lab 5	Software Development LabII
Lab 6	Apple Lab
Lab 7	Advance Computing Reacherch Lab
Lab 8	Object Technology Lab
Lab 9	Computer Centre
Lab 10	Project Development Lab
Lab 11	Web Development Lab

Staff Name	Practical batches
SDP	OS SD1, SD3
KRG	OS SD2
SVG	OS SD4
MNB	Sem SD4
SVG	Sem SD1, SD3
SSP	Sem SD2
BSP	Python SD1,SD3,SD4
PG	Python SD2

Computer Science and Engineering (Data Science)
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Chh. Sambhajinagar.

Head

Time Table Coordinator

H. O.

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS

WEF: 10/08/2023

Staff Time- Table

Staff Name: Prof. S.S. Patwardhan

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON	DBS			DMS				
TUE	DMS			T2-DBS-Lab5			DBS	
WED		DMS		T3-DBS-Lab5			DBS(T)	
THUR		DMS		T1-DBS-Lab5				
FRI								DBS
SAT	T6-DBS-Lab5			SY DS Seminar I			BTech Project I TY Mini Project I	

LOAD: 8 (TH)+12 (PR) = 20

Time Table Coordinator

Subject Teacher

HOD

Head
Computer Science and Engineering
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(Data Science)
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Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS

WEF: 10/08/2023

Staff Time- Table

Staff Name: Prof. K.R. Ghule

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON		TOC			BDA			
TUE	TOC							
WED					BDA			TOC(T)
THUR	B2-CC-Lab 3				BDA		B4-CC-Lab 3	
FRI		TOC		B3-CC-Lab 3				
SAT	B6-CC-Lab 3			SY DS Seminar I			BTech Project I TY Mini Project I	

LOAD: 7 (TH)+ 16 (PR) = 19

Time Table Coordinator

Subject Teacher

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Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS **WEF: 10/08/2023**

Staff Time- Table

Staff Name: Prof. B.S. Pawar

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON		CAO					SC2-OOPJ-Lab4	
TUE		CAO					SC1-OOPJ-Lab4	
WED	CAO						SC4-OOPJ-Lab4	
THUR	HCI			CAO			SC3-OOPJ-Lab4	
FRI	B1-CC-Lab3			HCI			HCI	
SAT				B5-CC-Lab3 SY DS Seminar I			BTech Project I TY Mini Project I	

LOAD: 7 (TH)+14 (PR) = 21

Time Table Coordinator

Subject Teacher

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(Data Science)
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Chh. Sambhajinagar

Peoples Education Society's(Mumbai)

P.E.S. College of Engineering, Nagsenvana Aurangabad

TIME TABLE FOR THE YEAR 2023-24 (PART I)

Department - CSE,DS **WEF: 10/08/2023**

Staff Time- Table

Staff Name: Prof. S.V.Ghorpade

TIME / CLASS	10.30-11.30	11.30-12.30	12.30-1.15	1.15-2.15	2.15-3.15	3:15-3:30	3:30-4:30	4.30 – 5.30
MON	OOPJ				OOPJ		SD2-OOPJ-Lab5	
TUE				OOPJ			SD1-OOPJ-Lab5	
WED	OOPJ			OOPJ			SD4-OOPJ-Lab5	
THUR	OOPJ						SD3-OOPJ-Lab5	
FRI		OOPJ(T)		OOPJ				
SAT				SY CSE SeminarI			BTech Project I TY Mini Project I	

LOAD: 8 (TH)+12 (PR) = 20

Time Table Coordinator **Subject Teacher** **HOD**

Head
Computer Science and Engineering
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P.E.S. College of Engineering
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Dr. Babasaheb Ambedkar Technological University, Lonere-402103
P.E.S. College of Engineering, Aurangabad
Department of Computer Science and Engineering (Data Science)
Teaching Plan
Academic Year 2023-24

Course name: Object Oriented Programming in JAVA **Course Code: BTCOC 305**

Course Coordinator: Prof. S. V. Ghorpade

. no	Topics to be cover
1.	Introduction to JAVA
2.	Introduction, Java Class Libraries,
3.	Typical Java Development Environment
4.	Memory Concepts, Arithmetic.
5.	Introduction to Classes and Objects
6.	Introduction, Classes, Objects
7.	Methods and Instance Variables,
8.	Declaring a Class with a Method and Instantiating an Object of a Class
9.	Declaring a Method, Instance variables
10.	set Methods and get Methods
11.	Primitive Types vs. Reference type double Types initializing Objects with Constructors
12.	floating point numbers.
13.	Control structures if single-selection statement,
14.	if....else double-selection statement
15.	while repetition statement, do....while repetition statement,
16.	switch multi-selection statement, break and continue statements,
17.	logical operators.
18.	Methods :Introduction
19.	Program modules in Java,
20.	*static* methods, static Fields and Class Math,
21.	declaring methods with multiple parameters, scope of declaration
22.	method overloading and Java API packages.
23.	Arrays, declaring and creating arrays in java,
24.	examples using arrays, passing arrays to methods
25.	multidimensional arrays, variable-length argument lists,
26.	using command-line arguments.
27.	Inheritance: Super classes and Subclasses
28.	protected members, relationship between super classes and subclasses,
29.	constructors in subclasses, object class

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30.	Polymorphism: Abstract classes and methods
31.	final methods and classes, polymorphism examples and Interfaces.
32.	Exception-handling overview
33.	handling Arithmetic Exceptions and Input Mismatch Exceptions
34.	when to use exception handling, java exception hierarchy, *finally* block.
35.	Introduction to Java Applets.
36.	Java script: Introduction to client side scripting, Syntax basics
37.	Operators, Comparisons, Statements, Loops,
38.	Events, Objects, and User defined functions
39.	Validations using object functions, Validations using regular expressions
40.	JS document object model, popovers, windows.

Subject Teacher.
Ghorpade
Prof. S.V. Ghorpade.

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Dr. Babasaheb Ambedkar Technological University, Lonere-402103
P. E.S. College of Engineering, Aurangabad
Department of CSE (Data Science)
Teaching Plan Academic Year 2023-24

Course name: Computer Architecture and Organization
Course Code:BTCOC403 Course Coordinator: Prof.B.S. Pawar

L.No	Topic to be cover
1	Concept of computer organization and architecture
2	Fundamental unit, Computer function and interconnection
3	CPU structure and function
4	Characteristics and Types of operands
5	Types of operations
6	Assembly language
7	instruction format and Types of instruction and Instruction execution
8	Machine state and processor status
9	Structure of program and Introduction to RISC and CISC architecture
10	The arithmetic and logic Unit, Integer representation
11	Integer representation and Integer arithmetic
12	Floating point representation and Floating point arithmetic
13	Introduction of arithmetic co-processor
14	internal Memory: Semiconductor main memory
15	Error correction, Advanced DRAM organization
16	Virtual memory systems and cache memory systems
17	External Memory: Organization and characteristics of magnetic disk
18	Optical memory, RAID, Memory controllers
19	Control unit operation: Micro-operations
20	Control of the processor

Computer Science and Engineering
(Data Science)
P.E.S. College of Engineering
Chh. Sambhajinagar.

TEACHING PLAN

(AS PER UNIVERSITY SYLLABUS)

TOPIC	% SYLLYBUS
Fundamental Structures & Basic logic : Sets, venn diagram, Cartesian Product, Power sets, Cardinality & Countability, Propositional logic, logic connectives, truth tables. Normal forms, Validity, Predicate logic. Limitations of Predicate logic, First order logic Universal & Existential quantification. Mathematical Induction, well ordering Principle Prime numbers in Division algorithms. Euclidean algorithm for greatest Common Divisor Fundamental theorem of Arithmetic	20%
Functions & relations : Basics of relations, types of rel? Reflexivity, Symmetry, transitivity & equivalence relation Injective, Surjective, Bijective & inverse function Combinatorics, counting Recursion recurrence and generating function	20%
Graphs basic terminology, types of graph Path & Circuits, models & Weighted graph Euler & Hamiltonian paths. Shortest p. problem. Representation of graph. Isomorphic graph & planer graphs Connectivity, matching Coloring	20%
Trees : Rooted trees, types of trees. Path length in rooted trees Binary Search trees. Spanning, minimal S. trees and cut set Kruskal's Algorithm. Prim's Algorithm for minimal spanning tree	20%
Algebraic Structures and Morphism Structures with one Binary operation Semi groups, Monoids groups. Congruence & Quotient Structure Free & cyclic Monoids & groups Permutation groups, Substructures, Structures with 2 Binary operations. Rings, Boolean Ring & Boolean Algebra. Integral Domain & Fields Identities of Boolean Algebra Duality, Representation of Boolean Function Disjunctive & Conjunctive Normal form.	20%

Head
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Head
Computer Science and Engineering
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Chh. Sambhajinagar.

TOTAL Attendance

8+1
7
(+1)
(+1)
(+1)
(-)
(+1)
(+1)
(+1)
(-1)
(-1)
(-1)

P.E.S. College of Engineering, Aurangabad

Department of Computer Science and Engineering (Data Science)

Teaching Plan(2023-24)

Course name: Basic human rights

Course Code: BTHM403 **Course Coordinator :Prof. P.P.Gadve**

L.No	Topictobe cover
1	The Basic Concepts: - Individual, group, civil society, state.
2	equality, justice, Human Values, Human rights and Human Duties.
3	Origin, Contribution of American bill of rights.
4	French revolution.
5	Declaration of independence.
6	Rights of citizen.
7	Rights of working and exploited people.
8	Fundamental rights and economic programme.
9	Society, religion, culture, and their inter relationship.
10	Impact of social structure on human behaviour.
11	Social Structure and Social Problems.
12	Social and communal conflicts and social harmony.
13	rural poverty.
14	unemployment, bonded labor.
15	Migrant workers and human rights violations .
16	human rights of mentally and physically challenged.
17	State, Individual liberty.
18	Freedom and democracy.
19	NGOs and human rights in India.
20	Land, Water, Forest issues.
21	Human rights in Indian constitution and law.
22	the constitution of India: Preamble.
23	Fundamental rights.
24	Directive principles of state policy.
25	Fundamental duties.
26	some other provisions.
27	Universal declaration of human rights.
28	State, Individual liberty.
29	Freedom and democracy.
30	Society.
31	religion, culture.
32	and provisions of India.
33	Constitution and law.
34	National human rights commission.
35	state human rights commission.

Head
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Chh. Sambhajinagar.

Head
Computer Science and Engineering
(Data Science)
P.E.S. College of Engineering
Chh. Sambhajinagar.

Dr. Babasaheb Ambedkar Technological University, Lonere- 402103
P.E.S. College of Engineering, Chh. Sambhajinagar
Department of Computer Science and Engineering (Data Science)

Course Coordinator: Prof. S.V. Ghorpade
Course Name : Operating System **Course Code :BTCOC402**
Academic Year :2023-24 Part:II **Semester IV**

No. Of Le	Topic
1	Introduction and Operating system structures
2	Definition, Types of Operating system
3	Real-Time operating system
4	System Components: System Services, Systems Calls, System Programs, System structure
5	Virtual Machines
6	System Design and Implementation,
7	System Generations.
8	Processes and CPU Scheduling: Process Concept,
9	Process Scheduling, Operation on process
10	Inter-process Communication, Cooperating processes,
11	Threads, Multithreading model, Scheduling criteria,
12	Scheduling Algorithms, Thread Scheduling, Multiple-Processor Scheduling
13	Scheduling Algorithms evaluation.
14	Process Synchronization: The critical-section problem,
15	Critical regions, Peterson's Solution, Synchronization Hardware
16	Semaphores, Classical Problems of synchronization and Monitors
17	Deadlocks: Systems Model, Deadlock characterization
18	Methods for handling Deadlocks, Deadlock Prevention, Deadlock Avoidance,
19	Deadlock Detection, Recovery from Deadlock, Combined approach to deadlock Handling.
20	Memory Management: Basic concept, Logical and Physical address map,
21	Memory allocation: Continuous Memory Allocation, Fixed and variable partition,
21	Internal and external fragmentation and compaction, Paging: Principle of operation, Page allocation – Hardware support for paging,
22	Protection and sharing, Disadvantages of paging;
23	Segmentation. Virtual Memory: Basics of Virtual Memory – Hardware and control structures Page fault
24	Working Set, Dirty page / Dirty bit – Demand paging,
25	Page Replacement algorithms: Optimal, First in First Out (FIFO), Second Chance (SC), Not recently used (NRU) and Least Recently used(LRU)
26	File Management: File Concept, Access methods,
27	File types, File operation, Directory and disk structure,
28	File System Structure, File System Implementation,
29	Allocation methods (contiguous, linked, indexed), Free-space management
30	directory implementation (linear list, hash table),
31	efficiency and performance.
32	Mass-Storage Structure: Disk Structure,
33	Disk attachment,
34	Disk scheduling, Disk management,
35	Swap Space Management

Ghorpade
Subject Teacher.

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Chh. Sambhajinagar.

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(Data Science)
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Chh. Sambhajinagar.

P.E.S. College of Engineering, Aurangabad

Department of Computer Science and Engineering

Teaching Plan(2023-24)

Course name: Design and Analysis of Algorithm

Course Code: BTCOC401(SY DS) **Course Coordinator :Prof. S.S.Pathwardhan**

L.No	Topictobe cover
1	Definition, Properties of Algorithms.
2	Expressing Algorithm, Flowchart.
3	Algorithm Design Techniques, Performance Analysis of Algorithms.
4	Types of Algorithm's Analysis, Order of Growth, Asymptotic Notations, Recursion, Recurrences Relation.
5	Substitution Method, Iterative Method, Recursion Tree.
6	Master Theorem, Changing Variable, Heap Sort.
7	Introduction, Binary Search, Merge Sort.
8	Quick Sort, Strassen's Matrix Multiplication.
9	Backtracking Concept.
10	N–Queens Problem.
11	Four–Queens Problem, Eight–Queen Problem.
12	Hamiltonian Cycle, Sum of Subsets Problem.
13	Graph Colouring Problem.
14	Branch and Bound: Introduction.
15	Travelling Salesperson Problem.
16	15-Puzzle Problem.
17	Comparisons between Backtracking and Branch and Bound.
18	Introduction to Greedy Technique.
19	Greedy Method.
20	Optimal Merge Patterns.
21	Huffman Coding.
22	Knapsack Problem.
23	Activity Selection Problem, Job Sequencing with Deadline.
24	Minimum Spanning Tree, Single-Source Shortest Path Algorithm.
25	Introduction, Characteristics of Dynamic Programming.
26	Component of Dynamic Programming.
27	Comparison of Divide-and-Conquer and Dynamic Programming Techniques.
28	Longest Common Sub-sequence.
29	matrix multiplication, shortest paths.
30	Bellman Ford, Floyd Warshall.
31	Application of Dynamic Programming. NP Completeness.
32	Introduction, the Complexity Class P.
33	the Complexity Class NP.
34	Polynomial-Time Reduction.
35	the Complexity Class NP-Complete.

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Chh. Sambhajinagar.

Head
Computer Science and Engineering
(Data Science)
P.E.S. College of Engineering
Chh. Sambhajinagar.

Time table Teaching

Department of Electronics & Compu
(Electronics & Telecommunication Engineering)
P.E.S. COLLEGEF ENGINEERING
Nagsen Vana, Panchakki Road, Aurangabad – 431 002
Tel.:2403002, Tel/Fax:02402403020
web: www.pescoe.ac.in, email: headetc@pescoe.ac.in

TEACHING WORK-LOAD DISTRIBUTION STAFF WISE 2023-24 PART –I

Sr. No.	Name of Staff	Subject	Class	L+T	PR	Total	Total Load
1.	DR. V. K. KADAM	1.Optimization of Digital Signal Processing Structures for VLSI (MTVLE114) C	M.Tech	3	—	3	11
		2.Mini project 3	Final Yr. ETC	—	4	4	
		3Mini Project -1.	TY ECE	—-	4	4	
2.	PROF. S. S. KHEDGIKAR	1. Basics of VLSI (MTVLC103)	M.Tech.	3+1	—	4	11
		2. Mini Project -3	Final Yr. ETC	—	4	4	
		3 .Business Communication (BTECHM505B)	TY ECE	3	—	3	
3.	PROF. V. V. KULKARNI	1.Analog IC Design (MTVLC102)	M.Tech	3+1	—	4	11
		2 Engineering Economics & Financial Mathematics (BTHM705)	Final Yr. ETC	3	—	3	
		3Mini Project -1.	TY ECE	—	4	4	
4	PROF. S. C. KATHAR	1.Mobile Communication & Networks (BTETOE703E)	Final Yr. ETC	3+1		4	18
		2.Microwave Engineering (BTETC701)	Final Yr. ETC	3+1	2	6	
		3.Seminar 1	SY ECE		4	4	
		4.Computer Network & Cloud Computing LAB	TY ECE		2+2	4	
		5.Internship 1,2,3 (Evaluation)					

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Department of Electronics & Computer Engineering
(Electronics & Telecommunication Engineering)
P.E.S. COLLEGEF ENGINEERING
Nagsen Vana, Panchakki Road, Aurangabad – 431 002
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web: www.pescoe.ac.in, email: headetc@pescoe.ac.in

5.	PROF. P. K. GHUGE	1.Programming in JAVA (BTECOE504C)	TY ECE	3+1	—	4	15
		2.Mini Project -1	TY ECE	—	4	4	
		3.Digital Electronics and Microprocessor (BTESC305)	SY ECE	3	—	3	
		4.Seminar 1	SY ECE	—	4	4	
		5.Seminar I (Evaluation) (BTECS307)	SY ECE	—	—		
6.	PROF. J. P. ZINE	1.Advanced Computer Architecture(MTVLE125A	M.Tech.	3	—	3	15
		2.Software Engineering (BTECPE503 D)	TY ECE	3+1		4	
		3.Computer Architecture & Operating System (BTESC304)	SY ECE	3	—	3	
		4.Seminar 1	SY ECE	—	4	4	
		5.Mini Project1 (Evaluation) (BTECM507)	TY ECE	—	—		
7.	PROF. A. P. KHARAT	1.Graph theory & Discrete Optimization (MTVLC101)	M.Tech.	3+1	—	4	16
		2.PGLab	M.Tech.	—	2	2	
		3.Fiber Optic Communication (BTETPE702D)	Final Yr. ETC	3+1	—	4	
		4.Competitive Programming Lab	TY ECE	—	2+2	4	
		5.Digital Signal & Image Processing (BTECPC502)	TY ECE	2	—	2	
		6.Mini Project 3 (Evaluation) (BTETM708)	Final Yr. ETC	—	—	—	

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Department of Electronics & Computer Engineering
AURANGABAD

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web: www.pescoe.ac.in, email: headetc@pescoe.ac.in

8.	PROF. V. R. KSHIRSAGAR	1.E-Waste Management (BTETOE704F) 2.Electronics Devices & Circuits (BTECPC302) 3.BEEE	Final Yr. ETC SY ECE First Year	3+1 3+1 4	— 2+2 —	4 8 4	16
9.	PROF. N. T. KOLAMBIKAR	1.Programming Data Structure & Algorithm Using C (BTECPC303) 2.Computer Network & Cloud Computing (BTECPC501) 3.Seminar 1 4.Digital Signal & Image Processing (BTECPC502)	SY ECE TY ECE SY ECE TY ECE	3+1 3+1 — 1	2+2 — 4 —	8 4 4 1	17
10	Prof.S.R.Acharya	Engineering Mathematics III	SY ECE	4	—		4
11	Dr.V.V.Deshpande	Communication Skill (MTVLC106)	M.Tech, Final Yr. ETC	2 2			4
12	Prof.P.L.Pandit	universal Human Value	SY ECE	3			3

Dr.Vipulsangram K Kadam
Professor & Head

Copy to Principal for information

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE

CLASS - SY

WITH EFFECT FROM - 10/08/2023

ROOM NO. - CR 10

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	DE&MP	EDC	B	PD&A	CA&OS	B	EM III	EM III
TUESDAY	PD&ALAB(S1) EDCLAB(S2)		R	DE&MP	PD&A	R	UHV-II	
WEDNESDAY	EDC	CA&OS	E	PD&ALAB(S2) EDCLAB(S1)		E	EM III	EM III
THURSDAY	CA&OS	EDC	A	SEMINAR1		A	UHV-II	EDC
FRIDAY	PD&A	PD&A	K	UHV-II	DE&MP	K	SEMINAR1	
SATURDAY	SEMINAR1							

Staff Name	Subject (Code)
Prof.S.A.Acharya	Engineering Mathematics-III (BTES301)
Prof.V.R.Kshirsagar	Electronics Devices & Circuits (BTECPC302)
Prof.N.T.Kolambikar	Programming Data Structure & Algorithm Using C (BTECPC303)
Prof.J.P.Zine	Computer Architecture & Operating System (BTESC304)
Prof.P.K.Ghuge	Digital Electronics and Microprocessor (BTESC305)
Prof.S.C.Kathar	CLASSTEACHER
Prof.P.K.Ghuge	Seminar1 Incharge
Prof.P.L.Pandit	Universal Humen Value II

SEMINAR 1 (GUIDE)

1 Prof.S.C.Kathar
2 Prof.J.P.Zine
3 Prof.P.K.Ghuge
4 Prof.N.T.Kolambikar

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal
P.E.S. College of Engineeering
Aurangabad.

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE

WITH EFFECT FROM - 10/08/2023

CLASS - TY

ROOM NO. - CR 12

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	CN&CC	SE	B	CN&CC LAB(T1) (SCK) CPLAB(T2) (APK)		B	DS&IP (NTK)	PJ
TUESDAY		BC	R	DS&IP (APK)	SE	R	MINI PROJECT 1	
WEDNESDAY	CN&CC LAB(T2) (SCK) CPLAB(T1) (APK)		E	PJ	SE (T)	E	CN&CC	
THURSDAY	PJ	CN&CC	A	DS&IP (APK)	BC	A	MINI PROJECT 1	
FRIDAY	PJ (T)	SE	K	BC	CN&CC (T)	K		
SATURDAY								

Staff Name	Subject (Code)
Prof.N.T.Kolambikar	Computer Network & Cloud Computing (BTECPC501)
Prof.A.P.Kharat	Digital Signal & Image Processing (BTECPC502)
Prof.J.P.Zine	Software Engineering (BTECPE503 D)
Prof.P.K.Ghuge	Programming in JAVA (BTECOE504C)
Prof.S.S.Khedgikar	Business Communication (BTECHM505B)
Prof.S.C.Kathar	Computer Network & Cloud Computing LAB
Prof.A.P.Kharat	Competitive Programming Lab
Prof.J.P.Zine	CLASSTEACHER / Mini project 1 Incharge

MINI PROJECT 1 (GUIDE)

1 Dr.V.K.Kadam
2 Prof.V.V.Kulkarni
3 Prof.P.K.Ghuge
4 Prof. ~~J.P.Zine~~ S.C. Kathar.

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

P.E.S. COLLEGE OF ENGINEERING * Department of Electronics & Computer Engineering * AURANGABAD

Dr.A.P.Wadekar
Principal

Revised on 14/9/23

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ETC

CLASS - Final Year

WITH EFFECT FROM - 10/08/2023

ROOM NO. - CR 23

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	FOC	ME	B	MINI PROJECT 3		B	EW	
TUESDAY	ME	EE&FM	R	ME (LAB)		R	FOC	EW
WEDNESDAY	MINI PROJECT 3		E	TRAINING		E	EW (T)	ME
THURSDAY	MINI PROJECT 3		A	TRAINING		A	FOC	M&CN
FRIDAY	M&CN	ME (T)	K	FOC (T)	EE&FM	K		
SATURDAY	M&CN (T)	M&CN		EE&FM	EW			

Staff Name	Subject (Code)
Prof.S.C.Kathar	Microwave Engineering (BTETC701)
Prof.A.P.Kharat	Fiber Optic Communication (BTETPE702D)
Prof.S.C.Kathar	Mobile Communication & Networks (BTETOE703E)
Prof.V.R.Kshirsagar	E-Waste Management (BTETOE704F
Prof.V.V.Kulkarni	Engineering Economics & Finantial Mathematics (BTHM705)
Prof.A.P.Kharat	CLASSTEACHER/ MINI PROJECT 3 (Incharge)

MINI PROJECT 3 (GUIDE)

1 Dr.V.K.Kadam

2 Prof.S.S.Khedgikar

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE & ETC — WITH EFFECT FROM - 10/08/2023

CLASS - MTECH (VLSI Design) — ROOM NO. -

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	ODSPS	BV	B	AICD		B		
TUESDAY	ODSPS	GTDO	R	BV	AICD	R	ACA	
WEDNESDAY	ODSPS	BV	E	GTDO	AICD	E	PG LAB	
THURSDAY			A	CS	CS	A		
FRIDAY	ACA	GTDO	K	AICD	BV	K		
SATURDAY	ACA	GTDO						

Staff Name	Subject (Code)
Dr..V.K.Kadam	Optimization of Digital Signal Processing Structures for VLSI (MTVLE114) C
Prof.S.S.Khedgikar	Basics of VLSI (MTVLC103)
Prof.V.V.Kulkarni	Analog IC Design (MTVLC102)
Prof. J.P. Zine	Advanced Computer Architecture (MTVLE125A)
Prof.A.P.Kharat	Graph theory & Discrete Optimization (MTVLC101)
Prof.A.P.Kharat	PGLab
DRr.V.V.Deshpande	Communication Skill (MTVLC106)

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Dr.A.P.Wadekar
Principal

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P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE & ETC

WITH EFFECT FROM - 10/08/2023

CLASS - Mtech

ROOM NO. -

Subject Teacher Dr.V.K.Kadam

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	ODSPS		B	MINI PROJECT 3		B		
TUESDAY	ODSPS		R			R	MINI PROJECT 1	
WEDNESDAY	ODSPS		E			E		
THURSDAY	MINI PROJECT 3		A			A	MINI PROJECT 1	
FRIDAY			K			K		
SATURDAY								

Mtech Optimization of Digital Signal Processing Structures for VLSI (MTVLE114) C

TY ECE MINI PROJECT 1

Final Yr ETC MINI PROJECT 3

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE & ETC

CLASS - Mtech, TY ECE

Subject Teacher Prof.S.S.Khedgikar

WITH EFFECT FROM - 10/08/2023

ROOM NO. - TY (CR 12)

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY		BV	MINI PROJECT 3			
TUESDAY		BC	BV			
WEDNESDAY		BV				
THURSDAY	MINI PROJECT 3			BC		
FRIDAY			BC	BV		
SATURDAY						

Mtech Basics of VLSI (MTVLC103)

TY ECE Business Communication (BTECHM505B)

Final Yr ETC MINI PROJECT 3

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kshirsagar
Head Department of Electronics & Computer Engineering

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Dr.A.P.Wadekar
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Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE & ETC

WITH EFFECT FROM - 10/08/2023

CLASS - Mtech, Final Yr

ROOM NO. - CR23

Subject Teacher Prof.V.V.Kulkarni

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY			AICD			
TUESDAY		EE & FM		AICD	MINI PROJECT 1	
WEDNESDAY				AICD		
THURSDAY					MINI PROJECT 1	
FRIDAY			AICD	EE & FM		
SATURDAY			EE & FM			

Mtech Analog IC Design (MTVLC102)

Final Yr ETC Engineering Economics & Finantial Mathematics (BTHM705)

TY ECE MINI PROJECT 1

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

WITH EFFECT FROM - 10/08/2023

Department - ECE & ETC

ROOM NO. - TY(CR12) SY(CR10)

CLASS - TY ECE, SY ECE

Subject Teacher Prof.P.K.Ghuge

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	DE&MP					PJ
TUESDAY			DE&MP		MINI PROJECT 1	
WEDNESDAY			PJ			
THURSDAY	PJ		SEMINAR 1		MINI PROJECT 1	
FRIDAY	PJ		DE&MP		SEMINAR 1	
SATURDAY						

TY ECE Programming in JAVA (BTECOE504C)

TYECE MINI PROJECT 1

SY ECE Digital Electronics and Microprocessor (BTESC305)

SY ECE SEMINAR 1

Prof.P.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
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P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE & ETC

WITH EFFECT FROM - 10/08/2023

CLASS - MTECH, TY ECE, SY ECE

ROOM NO. - TY(CR12) SY(CR10)

Subject Teacher Prof.J.P.Zine

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY		SE		CA&OS		
TUESDAY				SE	ACA	
WEDNESDAY		CA&OS		SE		
THURSDAY	CA&OS		SEMINAR 1			
FRIDAY	ACA	SE			SEMINAR 1	
SATURDAY	ACA					

M Tech Advanced Computer Architecture (MTVLE125A)

TY ECE Software Engineering (BTECPE503 D)

SY ECE Computer Architecture & Operating System (BTESC304)

SY ECE SEMINAR 1

Prof.J.P.Zine
Time Table Coordinator

P.E.S. COLLEGE OF ENGINEERING Department of Electronics & Computer Engineering AURANGABAD

Dr.V.K.Kadam
Head of Department

P.E.S. COLLEGE OF ENGINEERING Department of Electronics & Computer Engineering AURANGABAD

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE & ETC

WITH EFFECT FROM - 10/08/2023

CLASS - Mtech, Final Yr

ROOM NO. - CR 23

Subject Teacher Prof.S.C.Kathar

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY		ME	CNCC LAB (T1)			
TUESDAY	ME		ME LAB (B1)			
WEDNESDAY	CNCC(T2)					ME
THURSDAY			SEMINAR 1			M & CN
FRIDAY	M & CN	ME			SEMINAR 1	
SATURDAY	M & CN	M & CN				

TY ECE Computer Network & Cloud Computing LAB

Final Yr ETC Mobile Communication & Networks (BTETOE703E)

SY ECE SEMINAR 1

Final Yr ETC Microwave Engineering (BTETC701)

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE & ETC

WITH EFFECT FROM - 10/08/2023

CLASS - Prof.V.R.Kshirsagar

ROOM NO. - SY (CR10) Final Yr (CR23)

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY		EDC	BEEE C-13		EW	
TUESDAY	EDC LAB (S2)			BEEE D-11		EW
WEDNESDAY	EDC		EDC LAB (S1)		EW	
THURSDAY		EDC				EDC
FRIDAY	BEEE B-14		BEEE E-11			
SATURDAY				EW		

SY ECE Electronics Devices & Circuits (BTECPC302)

FIRST YEAR Basic Electrical and Electronics Engineering

Final Yr. E-Waste Management (BTETOE704F)

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

WITH EFFECT FR(10/08/2023

Department - ECE & ETC

CLASS - TY ECE. SY ECE

ROOM NO. - TY(CR12) SY(CR10)

Subject Teacher Prof.N.T.Kolambikar

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	CN&CC		PD&A		DS&IP	
TUESDAY	PD&A LAB (S1)			PD&A		
WEDNESDAY			PD&A LAB (S2		CN&CC	
THURSDAY		CN&CC	SEMINAR 1			
FRIDAY	PD&A	PD&A		CN&CC		
SATURDAY			SEMINARI			

TY ECE Computer Network & Cloud Computing (BTECPC501)

SY ECE Programming Data Structure & Algorithm Using C (BTECPC303)

SY ECE SEMINAR 1

Prof.J.P.Zine
Time Table Coordinator

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Head of Department

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Dr.A.P.Wadekar
Principal

Revised on 14/9/23

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE

WITH EFFECT FROM - 15/09/23

CLASS - SY ECE

ROOM NO. - CR 03

Subject Teacher Prof.P.L.Pandit

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY					UHV II	
TUESDAY						
WEDNESDAY						
THURSDAY					UHV II	
FRIDAY			UHV II			
SATURDAY						

Prof.J.P.Zine
Time Table Coordinator

P.E.S. COLLEGE OF ENGINEERING Department of Electronics & Computer Engineering AURANGABAD

Dr.V.K.Kadam
Head of Department

P.E.S. COLLEGE OF ENGINEERING Department of Electronics & Computer Engineering AURANGABAD

Dr.A.P.Wadekar
Principal

P.E.S.College of Engineering Aurangabad

Departement ECE/ECT/MTECH VLSI

TEACHING WORK-LOAD DISTRIBUTION STAFF WISE 2023-24 PART –II

Sr. No.	Name of Staff	Subject	Class	L+T	PR	Total
1	Dr.V.K.Kadam	Project/Internship	Final Yr ECT		2	9
		Computer networks	Mtech VLSI	3		
		Project/Seminar	Mtech VLSI		4	
2	Prof.S.S.Khedgikar	Artificial Intelligence and Machine Learning	TY ECE	4		11
		Industrial Safety	Mtech VLSI	3		
		Project/Seminar	Mtech VLSI		4	
3	Prof.V.V.Kulkarni	Industrial Automation and Control (PLC)	TY ECE	4		13
		Project/Internship	Final Yr ECT		2	
		Physical Design Automation	Mtech VLSI	3		
		Project/Seminar	Mtech VLSI		4	
4	Prof.S.C.Kathar	Employability and Skill Development	TY ECE	3		15
		Basic Human Rights	SY ECE	3		
		Seminar II	SY ECE		4	
		Seminar	FY (VLSI)		2	
		Mini Project II	TY ECE		4	
		Internship Incharge	SY,TY			
5	Prof.P.K.Ghuge	Python programming	SY ECE	4	4	16
		DLDM	SY CSE	4		
		Mini Project II	TY ECE		4	
6	Prof.J.P.Zine	Data Analysis	SY ECE	4		16
		Mini Project II			4	
		(Mini Project II Incharge)				
		Analog & Digital VLSI Design	Mtech VLSI	4		
		Project/Seminar	Mtech VLSI		4	
7	Prof.A.P.Kharat	VLSI Design	TY ECE	4		16
		Seminar II	SY ECE		4	
		VLSI Design Verification & Testing	Mtech VLSI	4		
		Project/Seminar	Mtech VLSI		4	
8	Prof.V.R.Kshirsagar	Database Management System	SY ECE	4	4	17
		BEEE	FY Div A	1		
		Seminar II	SY ECE		4	
		Seminar	FY (ECE)		2	
		Project/Seminar	Final Yr ECT		2	
		(Seminar II Incharge)				
9	Prof.N.T.Kolambikar	Internet of Things	TY ECE	4	4	16
		DLDM	SY CSE	4		
		Mini Project II	TY ECE		4	
10	Prof S.R.Acharya	Probability theory and random processes	SY ECE	3		3
11	CSE Dept Staff	1.Artificial Intelligence and Machine Learning Lab	TY ECE		4	4

Time Table Incharge

Prof.J.P.Zine

Head of Department

Dr.V.K.Kadam

COLLEGE OF ENGINEERING * P.E.S. AURANGABAD * Department of Electronics & Computer Engineering

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE

WITH EFFECT FROM - 01/02/2024

CLASS - SY

ROOM NO. - CR 12

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	BHR	DMS	B	PP	PT&RP	B	--Seminar--	
TUESDAY	BHR	PP	R	---PP Lab(S1)/DMS Lab (S2)--		R	DA	DMS
WEDNESDAY	DA	PT&RP	E	PP	DMS	E	---Traning TP Cell---	
THURSDAY	DMS	BHR	A	DA	PT&RP	A		
FRIDAY	---PP Lab(S2)/DMS Lab (S1)---		K	PP	DA	K	--Seminar--	
SATURDAY								

Prof S C Kathar	Class Teacher
Prof P K Ghuge	Python programming BTECPC401
Prof.V.R.Kshirsagar	Database Management System BTECPC402
Prof.S.C.Kathar	Basic Human Rights BTHM403
Prof S.R.Acharya	Probability theory and random processes BTBS404
Prof.J.P.Zine	Data Analysis BTECPE405B Elective I
Prof.P.K.Ghuge, Prof.V.R.Kshirsagar	Python Programming Lab and Database Management System Lab BTECPL406

Prof.V.R.Kshirsagar	Seminar - II BTECS407 (Incharge)
Prof.S.C.Kathar	Internship -II BTECP408

Seminar Guide	Roll No
Prof.V.R.Kshirsagar	1 To 10
Prof.S.C.Kathar	11 To 21
Prof.A.D.Kharat	22 to 33

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

AURANGABAD * ENGINEERING

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE

WITH EFFECT FROM - 01/02/2024

CLASS - TY

ROOM NO. - CR 10

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	IOT	IA&C	B	--IOT Lab (T1) /AIML Lab(T2)--		B	VLSI	AIML
TUESDAY	VLSI	AIML	R	IA&C	ESD	R	IOT	
WEDNESDAY	--IOT Lab (T2) /AIML Lab(T1)--		E	ESD	VLSI	E	--TP Cell Training---	
THURSDAY	--Mini Project II (PKG,JPZ)--		A	IOT	ESD	A	AIML	IA&C
FRIDAY	IA&C	IOT	K	AIML	VLSI	K	--Mini Project II (PKG,JPZ,NTK)--	
SATURDAY	Mini Project II			Mini Project II				

Prof.J.P.Zine	Class Teacher
Prof.N.T.Kolambikar	BTECPC601 Internet of Things (IOT)
Prof.S.S.Khedgikar	BTECPC602 Artificial Intelligence and Machine Learning(AIML)
Prof.V.V.Kulkarni	BTECPE603A Industrial Automation and Control (PLC) (IA&C)
Prof.A.P.Kharat	BTECOE604A VLSI Design (VLSI)
Prof.S.C.Kathar	BTECHM605B Employability and Skill Development (ESD)
Prof.N.T.Kolambikar, CSE Dept Staff	BTECPL606 Internet of Things Lab and Artificial Intelligence and Machine Learning Lab

Prof.S C.Kathar	BTECP608 Internship –III
BTECM607 Mini Project II	
Guide Name	
Prof.J.P.Zine (Incharge)	
Prof.S.C.Kathar	
Prof.N.T.Kolambikar	
Prof.P.K.Ghuge	

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

WITH EFFECT FROM - 01/02/2024

Department - ETC

Lab:- DSP Lab

CLASS - Final Year

PERIOD	1	2		3	4		5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	12:30 to 1:15 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:15 to 3:30 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY			B			B		
TUESDAY			R			R		
WEDNESDAY			E			E	--- Project/Internship--	
THURSDAY			A			A		
FRIDAY			K			K		
SATURDAY								

Class Teacher	Prof.A.P.Kharat	
BTETP 801	Project Work / Internship	

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE & ETC

CLASS - Final Yr Btech

Subject Teacher Dr.V.K.Kadam

WITH EFFECT FROM - 01/02/2024

ROOM NO. -

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY						
TUESDAY						
WEDNESDAY					---Project/Internship----	
THURSDAY						
FRIDAY						
SATURDAY						

BTETP 801	Project Work / Internship

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE & ETC

CLASS - Final Yr Btech

Subject Teacher Dr.V.K.Kadam

WITH EFFECT FROM - 01/02/2024

ROOM NO. -

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY						
TUESDAY						
WEDNESDAY					---Project/Internship----	
THURSDAY						
FRIDAY						
SATURDAY						

BTETP 801	Project Work / Internship

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering, Nagsenvana, Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

WITH EFFECT FROM - 01/02/2024

ROOM NO. - CR 10

Department - ECE & ETC

CLASS - TY ECE

Subject Teacher Prof.S.S.Khedgikar

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY						AIML
TUESDAY		AIML				
WEDNESDAY					AIML	
THURSDAY						
FRIDAY	AIML					
SATURDAY						

BTECPC602 Artificial Intelligence and Machine Learning(AIML)

Prof.J.P.Zine

Dr. ... Kadam

... partment

Dr.A.P.Wadekar

Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE & ETC

WITH EFFECT FROM - 01/02/2024

CLASS - TY ECE,Final Yr

ROOM NO. - CR 10

Subject Teacher Prof.V.V.Kulkarni

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY		IA&C				
TUESDAY			IA&C			
WEDNESDAY					---Project/Internship----	
THURSDAY						IA&C
FRIDAY	IA&C					
SATURDAY						

BTECPE603A Industrial Automation and Control (PLC) (IA&C)

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE & ETC | WITH EFFECT FROM - 01/02/2024

CLASS - SY,TY,FY | ROOM NO. - CR10(TY),CR12(SY)

Subject Teacher Prof.S.C.Kathar

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	BHR				--Seminar--	
TUESDAY	BHR			ESD		
WEDNESDAY			ESD			
THURSDAY		BHR		ESD	--Seminar FY (VLSI)--	
FRIDAY			--Seminar--			
SATURDAY	---Mini Project II---		-Mini Project II---			

SY Classteacher & Internship Incharge
BTECHM605B Employability and Skill Development (ESD)
Basic Human Rights BTHM403
Seminar - II BTECS407
BTECM607 Mini Project II

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE ,DS,CSE | WITH EFFECT FROM - 01/02/2024

CLASS - SY | ROOM NO. - SY(CR12)

Subject Teacher Prof.P.K.Ghuge

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY		DLDM (DS)	PP			
TUESDAY		PP	---PP Lab (S1)---		DLDM(CSE)	
WEDNESDAY	DLDM(CSE)		PP			
THURSDAY	---Mini Project II---				DLDM(DS)	
FRIDAY	---PP Lab (S2)---		PP	---Mini Project II---		
SATURDAY						

Python programming BTECPC401
Python Programming Lab BTECPL406

Prof.J.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE & ETC

CLASS - SY,TY

Subject Teacher Prof.J.P.Zine

WITH EFFECT FROM - 01/02/2024

ROOM NO. - CR 12

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY				DA		
TUESDAY					DA	
WEDNESDAY	DA					
THURSDAY	---Mini Project II---		DA			
FRIDAY					---Mini Project II---	
SATURDAY						

Data Analysis BTECPE405B Elective I
BTECM607 Mini Project II (Incharge)
TY Class Teacher

Prof.J.P.Zine
Time Table Coordinator

Dr.V.L.Jadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

WITH EFFECT FROM - 01/02/2024

Department - ECE & ETC

CLASS - SY,TY

ROOM NO. - CR 10

Subject Teacher Prof.A.P.Kharat

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY				VLSI	--Seminar--	
TUESDAY	VLSI					
WEDNESDAY				VLSI		
THURSDAY						
FRIDAY				VLSI	--Seminar--	
SATURDAY						

BTECOE604A VLSI Design (VLSI)
Seminar - II BTECS407
Class Teacher (Final Year)

Prof.P.P.Zine
Time Table Coordinator

V.V.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART II)

Department - ECE & ETC

CLASS - FY,SY,Final Yr,

Subject Teacher Prof.V.R.Kshirsagar

WITH EFFECT FROM - 01/02/2024

ROOM NO. - CR 12

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY		DMS			--Seminar--	
TUESDAY		BEEE	---DMS Lab (S2)---			DMS
WEDNESDAY				DMS	---Project/Internship----	
THURSDAY	DMS				--Seminar FY ECE--	
FRIDAY	---DMS Lab (S1)---				--Seminar--	
SATURDAY						

Database Management System BTECPC402
Database Management System Lab BTECPL406
Seminar - II BTECS407 (Incharge)

Prof.V.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

Dr.A.P.Wadekar
Principal

Peoples Education Society (Mumbai)

P.E.S.College of Engineering ,Nagsenvana,Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024(PART I)

Department - ECE,DS,CSE

CLASS - TY,SY

Subject Teacher Prof.N.T.Kolambikar

WITH EFFECT FROM - 01/02/2024

ROOM NO. - CR 10

PERIOD	1	2	3	4	5	6
TIMING	10:30 to 11:30 a.m.	11:30 to 12:30 p.m.	1:15 to 2:15 p.m.	2:15 to 3:15 p.m.	3:30 to 4:30 p.m.	4:30 to 5:30 p.m.
MONDAY	IOT		---IOT Lab (T1)---			DLDM(CSE)
TUESDAY		DLDM(DS)			IOT	
WEDNESDAY	---IOT Lab (T1)---					
THURSDAY	DLDM(CSE)		IOT			
FRIDAY		IOT		DLDM(DS)	---Mini Project II---	
SATURDAY		DLDM (DS)	<--- Mini Project II --->			

BTECPC601 Internet of Things (IOT)
BTECPL606 Internet of Things Lab and
BTECM607 Mini Project II

Prof.A.P.Zine
Time Table Coordinator

Dr.V.K.Kadam
Head of Department

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Dr.A.P.Wadekar
Principal

Dr. Babasaheb Ambedkar
Technological University, Lonere-
402103

P.E.S.College of Engineering, Aurangabad

Department of Electronics and Computer Engineering

Course Coordinator:Jyoti P.Zine

Course Name:Computer Architecture & Operating System

Course Code:BTESC304

Academic Year: 2023-234

Semester : III (Part1)

Program Educational Objectives(PEO) and Program Specific Outcomes (PSO)

Year : 2022 - 2023

Semester :III

Program Educational Objectives (PEO)

PEO 1.	To equip graduates with a strong foundation in engineering sciences and Electronics & Computer Engineering fundamentals to become effective collaborators, researchers and real-time problem solver with technical competencies.
PEO 2.	Perceive the limitation and impact of engineering solutions in social, legal, environmental, economic and multidisciplinary contexts.
PEO 3.	Excel in Industry/technical profession, higher studies, and entrepreneurship exhibiting global competitiveness

Program Specific Outcomes (PSO)

PSO 1.	Apply the fundamentals of science, mathematics and engineering knowledge to design, development, formulates and investigate complex engineering problems related to the application area in Electronics & Computer Engineering.
PSO 2.	Provide exposure to latest tools and technologies and aware of the impact of professional engineering solution in environmental, societal, professional ethics and able to communicate effectively.
PSO 3.	To publish research paper and think, innovates in Electronics & Computer domain.

	Program Outcomes (PO)	Year : 2022 - 2023 Semester : III

After undergoing the learning process of four years, students of B.Tech. (Electronics& Computer Engineering) at Dr. Babasaheb Ambedkar Technological University will have an ability to build information systems and provide computer based solutions to real life problems. The graduates of this programme will demonstrate the following abilities and skill sets.

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, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, 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 societal 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 multidisciplinary 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 multidisciplinary 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.

	Course Objective and Course Outcomes Subject: Computer Architecture and Operating Systems BTESC304	Year : 2022 - 2023 Semester : III

Pre-Requisites:	History of Computers, Computer Generations, Digital Electronics, Number Systems, Number Conversion

After completion of the course, students will have adequate background, conceptual clarity and knowledge of appropriate solution techniques related to:

Course Objective : As part of this course	
1.	To understand the services provided by and the design of an operating system.
2.	Understand the structure, organization memory management
3.	To understand the structure, function, and characteristics of computer systems
4.	To identify the elements of modern instructions sets and their impact on processor design

Course Outcomes : On completion of the course, students will be able to:	
CO 1	Get acquaint with computer architecture and CPU building blocks
CO2	Understand classify and draw schematic diagrams of various computer memories
CO3	Explain operations of control unit and input output of a typical computer
CO4	Define Operating system, thread, process, inter-process communication and Solve numerical related to various CPU Scheduling Algorithm
CO5	Understand concepts of Process Synchronization and Deadlocks and Solve associated Numerical

	Mapping of Course Objective and Course Outcomes	Year : 2021 - 2022 Semester : I / II

Mapping of Course Outcomes (COs) with Program Outcomes (POs):

	PO1	PO2	PO3	PO4 PO5 PO6 PO7	PO8 PO9	PO10	PO11	PO12
CO1	YES			YES	YES			
CO2		YES	YES	YES				
CO3			YES	YES				YES
CO4		YES	YES			YES		
CO5		YES	YES	YES YES				

Mapping of Course Outcomes (COs) with Program Specific Outcomes (PSO)

	PSO 1	PSO 2	PSO 3
CO1	YES		
CO2	YES	YES	
CO3	YES		
CO4			YES
CO5		YES	YES
CO6			

	Teaching Plan	Year : 2022 - 2023 Semester : III

Bloom Levels: 1. Remember 2.Understand 3. Apply 4.Analysis 5. Create

No. of Lecture	Date/Day	Topic / Sub - Topic	Course Outcome No. and Bloom Level	Refer (Text Book, Website) Page no. ____ to ____
1	Day1	Introduction to the subject & Over all syllabus	1,2	University Syllabus
2	Day2	Concept of computer organization and architecture, Fundamental unit, Computer function and interconnection,	1,2	William Stalling, Computer organization and Architecture, Edition, 2009.
3	Day3	CPU structure and function. A Brief history of computers, Designing and Performance,	1,2	William Stalling, Computer organization and Architecture, Edition, 2009.
4	Day4	MICs, GPGPUs, Intel X86 Architecture.	3	William Stalling, Computer organization and Architecture, Edition, 2009.
5	Day5	The Arithmetic and Logic Unit, Integer representation, Integer arithmetic. Floating point representation, Floating point arithmetic.	1,2,3	William Stalling, Computer organization and Architecture, Edition, 2009.
6	Day6	Instruction Sets: Characteristics, Instruction Representation, Number of Addresses, Instruction Set Design,	1,2	William Stalling, Computer organization and Architecture, Edition, 2009.

7	Day7	Types of operands, Types of operations, Addressing modes, Instruction format, Assembly language,	1,2	William Stalling, Computer organization and Architecture, Edition, 2009.
8	Day8	Instruction execution, Machine state and processor status, Structure of program, Introduction to RISC and CISC	3	William Stalling, Computer organization and Architecture, Edition, 2009.
9	Day9	Memory Organization: Internal Memory: Semiconductor main memory, Error correction, Advanced DRAM organization, Virtual memory systems and cache memory systems.	1,2	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
10	Day10	External Memory: Organization and characteristics of magnetic disk, Magnetic tape, Optical memory, RAID, Memory controllers.	1,2	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
11	Day11	Memory Management: Basic concept, Logical and Physical address map, Memory allocation: Continuous Memory Allocation, Fixed and variable partition, Internal and external fragmentation and compaction,	1,2	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
12	Day12	Paging: Principle of operation, Page allocation Hardware support for paging, Protection and sharing, Disadvantages of paging.	3	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
13	Day13	Virtual Memory: Basics of Virtual Memory Hardware and control structures Locality of reference, Page fault, Working Set, Dirty page/Dirty bit Demand paging, Page Replacement algorithms: Optimal,	3	WilliamStalling, Computerorganization andArchitecture, Edition,2009.

14	Day14	First in First Out (FIFO), Second Chance (SC), Not recently used (NRU) and Least Recently used (LRU). 4	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
15	Day15	Control Unit: Control unit operation: Micro-operations, Control of the processor, Hardwired implementation, 2,3	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
16	Day16	Micro-programmed Control Unit, Basic concepts, Micro-instruction sequencing, Micro-instruction execution, Applications of micro-programming. 3	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
17	Day17	Input/ Output Organization: External devices, I/O module, Programmed I/O, Interrupt driven I/ O, Direct memory access, I/O channels and processors, External interface. 1,3	WilliamStalling, Computerorganization andArchitecture, Edition,2009.

18	Day18	Instruction pipe-lining: Concepts. Parallel processing: Multiple processor organization, Symmetric multiprocessor, 2,3	WilliamStalling, Computerorganization andArchitecture, Edition,2009.
19	Day19	Cache coherence and the MESI protocol 4,5	Hayes,Computer Architectureand Organization,Edition, 2012.
20	Day20	Computer system architecture, Definition, types/classification, objectives, and functions of Operating System (OS). 4,5	Hayes,Computer Architectureand Organization,Edition, 2012.

21 22 23	Day21 Day22 Day23	System Components- System Services, Systems Calls, System structure. Virtual Machines, System Design and Implementation. 5 Concept of Process and Threads, Process Scheduling, Operation on process, Cooperating processes. 1,2,5 Inter-process Communication, Scheduling criteria, scheduling Algorithms, 4,5	Hayes,Computer Architectureand Organization,Editio n, 2012. Hayes,Computer Architectureand Organization,Editio n, 2012. Hayes,Computer Architectureand Organization,Editio n, 2012.
24	Day24	Multiple-Processor Scheduling, Real-Time Scheduling, Scheduling Algorithms and performance evaluation 4,5	Hayes,Computer Architectureand Organization,Editio n, 2012.
25	Day25	Process Synchronization: The critical-section problem, Critical regions, 5	Hayes,Computer Architectureand Organization,Editio n, 2012.
26	Day26	Synchronization Hardware, Semaphores, Classical Problems of synchronization, 4,5	WilliamStalling, Computerorganizati on andArchitecture, Edition,2009.
27	Day27	and Monitors Synchronizations in Solaris. Deadlocks: Systems Model, Deadlock characterization, 5	WilliamStalling, Computerorganizati on andArchitecture, Edition,2009.
28	Day28	Methods for handling Deadlocks, Deadlock Prevention, 5	WilliamStalling, Computerorganizati on andArchitecture, Edition,2009.
29	Day29	Deadlock Avoidance,4	WilliamStalling, Computerorganizati on andArchitecture, Edition,2009.
30	Day30	Deadlock Detection, 5	William Stalling, Computer organization and

			Architecture, Edition, 2009.
31	Day31	Recovery from Deadlock, 3,4	William Stalling, Computer organization and Architecture, Edition, 2009.
32	Day32	Combined approach to deadlock Handling 4	William Stalling, Computer organization and Architecture, Edition, 2009.
33	Day33	Memory allocation: Continuous Memory Allocation 2,3	William Stalling, Computer organization and Architecture, Edition, 2009.
34	Day34	Virtual Machines, System Design and Implementation. 2,3	William Stalling, Computer organization and Architecture, Edition, 2009.
35	Day35	revision	

Subject Teacher
Prof.J.P.Zine
Dept of ECE

P.E.S. COLLEGE OF ENGINEERING * AURANGABAD * Department of Electronics & Computer Engineering

Dr. Babasaheb Ambedkar Technological University, Lonere- 402103

P.E.S.College of Engineering, Aurangabad

Department of Electronics and Computer Engineering

Course Coordinator :Prof.V.R Kshirsagar

Course Name : Database Management Systems

Course Code :BTECPC402

Academic Year : 2023-2024

Semester I / II : II

	Program Educational Objectives(PSO) and Program Specific Outcomes (PSO)	Year : 2023 - 2024 Semester : I / II

Program Educational Objectives (PEO)

PEO 1.	To equip graduates with a strong foundation in engineering sciences and Electronics & Computer Engineering fundamentals to become effective collaborators, researchers and real-time problem solver with technical competencies.
PEO 2.	Perceive the limitation and impact of engineering solutions in social, legal, environmental, economic and multidisciplinary contexts.
PEO 3.	Excel in Industry/technical profession, higher studies, and entrepreneurship exhibiting global competitiveness

Program Specific Outcomes (PSO)

PSO 1.	Apply the fundamentals of science, mathematics and engineering knowledge to design, development, formulates and investigate complex engineering problems related to application area in Electronics & Computer Engineering
PSO 2.	Provide exposure to latest tools and technologies and aware of the impact of professional engineering solution in environmental, societal, professional ethics and able to communicate effectively.
PSO 3.	To publish research paper and think, innovates in Electronics & Computer domain.

	Program Outcomes (PO)	Year : 2023 - 2024 Semester : I / II

PROGRAM OUTCOMES: Upon successful completion of this course it is expected that electronics graduate will be able to:

	Program Outcome
PO1.	**Engineering Knowledge:** Apply 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 first principles of mathematics, natural sciences and engineering sciences.
PO3.	**Design/ Development of Solutions:**Design solutions for complex engineering problems and design system components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal 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 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 under- standing of the limitations.
PO6.	**The Engineer and Society:** Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice.

PO7.	**Environment and Sustainability:** Understand the impact of professional engineering solutions in soci- etal and environmental contexts and demonstrate knowledge of and need for sustainable develop-ment.
PO8.	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.
PO9.	**Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
PO10.	**Communication:** Communicate effectively on complex engineering activities with the engineering com-munity 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 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 multidisciplinary 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

	Course Objective and Course Outcomes	Year : 2023 - 2024 Semester : I / II

Course Objective : As part of this course	
1.	1. To teach the basic database concepts, applications, data models, schemas and instances
2.	To familiarize Entity Relationship model for a database
3.	To demonstrate the use of constraints and relational algebra operations
4.	To emphasize the importance of normalization in databases
5.	To demonstrate the basic concepts of transaction processing and concurrency control
6.	To familiarize the concepts of database storage structures and identify the access techniques.

Course Outcomes : At the end of course, the student will be able to	
CO1	Use the basic concepts of Database Systems in Database system
CO2	Apply SQL queries to interact with Database
CO3	Apply normalization on database design to eliminate anomalies
CO4	Analyze database transactions and can control them by applying ACID properties.
CO5	Study of NOSQL database and oriented using MongoDB.

	Mapping of Course Objective and Course Outcomes	Year : 2023 - 2024 Semester : II

Mapping of Course Outcomes (COs) with Program Outcomes (POs):

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	X		X									X
CO2		X		X		X			X	X		X
CO3	X	X		X			X			X		X
CO4	X				X		X		X		X	X
CO5			X			X		X			X	
CO6			X		X				X			

Mapping of Course Outcomes (COs) with Program Specific Outcomes (PSO)

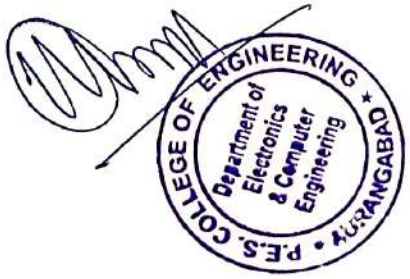
	PO1	PO2	PO3	PO4	PO5
CO1	X	X		X	X
CO2	X		X		X
CO3		X		X	X
CO4		X	X		X
CO5	X				
CO6	X	X		X	X

	Teaching Plan	Year : 2023 - 2024 Semester : I

Bloom Levels: 1. Remember 2.Understand 3. Apply 4.Analysis 5. Create

No. of Lecture	Date	Topic / Sub - Topic	Course Outcome No. and Bloom Level	Refer (Text Book, Website) Page no. ____ to ____
1	DAY 1	Unit 1: Introduction to Database Management System Database system architecture	1,2	Navathe, Fundamentals of Database System,
2	DAY 2	Data Abstraction, Data Independence,,	1,2	------- do-------
3	DAY 3	Types of databases	1,2	------- do-------
4	DAY 4	Introduction to Relational Database management system	1,2	------- do-------
5	DAY 5	Schema and instances	1,2	------- do-------
6	DAY 6	Data models: Entity-relationship mode	1,2	------- do-------
7	DAY 7	Unit 2: Structured Query Language (SQL):]	1,2,3,5	------- do-------
8	DAY 8	Data Definition Language (DDL)	1,2,3,5	------- do-------
9	DAY 9	Data Manipulation Language (DML)	1,2,3,5	------- do-------
10	DAY 10	Relational integrity constraints	1,2,3,5	------- do-------
11	DAY 11	data manipulation operations using WHERE clause, Order By Clause,NULL,LIMIT etc,	1,2,3,5	------- do-------
12	DAY 12	SQL functions,	1,2,3,5	------- do-------
13	DAY 13	joins, group by and having clause,	1,2,3,5	------- do-------
14	DAY 14	Subqueries, views.	1,2,3,5	------- do-------

15	DAY 15	Unit 3: Relational database design Types of keys	1,2,3	Henry Korth, Abraham Silberschatz & S. Sudarshan, Database System Concepts
16	DAY 16	Need of Normalization	1,2,3	-------- do--------
17	DAY 17	Functional dependency and its types	1,2,3	-------- do--------
18	DAY 18	Dependency preservation	1,2,3	-------- do--------
19	DAY 19	Lossy and Lossless design, dependency	1,2,3	-------- do--------
20	DAY 20	Normal forms, 1NF, 2NF	1,2,3	-------- do--------
21	DAY 21	3NF and BCNF.	1,2,3	-------- do--------
22	DAY 22	Unit 4: Transaction processing,	1,2	-------- do--------
23	DAY 23	Concurrency Control schemes	1,2	-------- do--------
24	DAY 24	Concurrency control,	1,2	-------- do--------
25	DAY 25	ACID property,	1,2	-------- do--------
26	DAY 26	Serializability of scheduling	1,2	-------- do--------
27	DAY 27	Locking schedulers	1,2	-------- do--------
28	DAY 28	timestamp based schedulers	1,2	-------- do--------
29	DAY 29	Database recovery	1,2	-------- do--------
30	DAY 30	Unit 5: NOSQL Database,Difference between RDBMS and NOSQL Database,	1,2	-------- do--------
32	DAY 31	Need of NOSQL databases	1,2	-------- do--------
33	DAY 32	Types of NOSQL databases	1,2	-------- do--------
34	DAY 33	CAP Theorem	1,2	-------- do--------
35	DAY 34	Introduction to Document oriented databased with MongoDB	1,2	MongoDB: The Definitive Guide
36	DAY 35	MongoDB installation	1,2,3	-------- do--------
37	DAY 36	Basic CRUD operation with MongoDB.	1,2,3	-------- do--------



Peoples Education Society's (Mumbai)

College of Engineering, Nagsenvana, Aurangabad.

TIME TABLE FOR THE YEAR 2023 - 2024

CLASS SY TERM 1 (1,3,5,7 odd Sem) WITH EFFECT FROM 10.8.23 ROOM NO. CR-4

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			EEM PDM	EM|C I SMK	EM|C I — SY1 (SMK) EEM — SY2 (PDM) Mini Proj — SY3 ( ) KBG		EM-III SRA	EM-III SRA
TUESDAY			EMS IRK	EM|C I SMK	EM|C I — SY2 (SMK) EEM — SY3 (PDM) Mini Proj — SY5 ( ) KBG		EM-III SRA	EM-III SRA
WEDNESDAY			EEM PDM	EMS IRK	EM|C I — SY3 (KBG) EEM — SY1 (PDM) Mini Proj — SY4 (PPF)		BHR BNC	BHR BNC
THURSDAY			EEM PDM	EM|C I SMK	EM|C I — SY4 (SMK) EEM — SY5 (PDM) Mini Proj — SY1 (PPF)		EMS IRK	
FRIDAY			EEM PDM	EM|C I SMK	EM|C I — SY5 (KBG) EEM — SY4 (PDM) Mini Proj — SY2 (PPF)			
SATURDAY								

PROF. : Prof. S.M. Kulkarni (SMK)
Dr. P.D. Mohite (PDM)
Dr A.A. Tupe (AAT)
Prof. I.R Kadu (IRK)
Prof. S.R. Acharya (SRA)
Dr. B.N. Chaudhari (BNC)
Prof. P.P. Fulzale (PPF)
Prof. [illegible] (KBG)

Date : 9.8.23.

Batches
1-20 — SY1
21-40 — SY2
41-60 — SY3
61-80 — SY4
81-100 — SY5
100 — Onwards SY5

Dr. Chaudhari B.N.
Professor & Head
Department of Electrical Engineering
P.E.S. College of Engineering
Aurangabad (M.S.)

PRINCIPAL
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Aurangabad.

College of Engineering, Nagsenvana, Aurangabad.

TIME TABLE FOR THE YEAR 2023 - 2024

CLASS TY TERM 1 (1,3,5,7 odd Sem) WITH EFFECT FROM 10.8.23 ROOM NO. CR-5

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			EL-IA(B) VPK	EL HVDC(B) KBG	PSA VPK	EL-ES(C) RUM	m&mc — TY1 (MSP) PSA PE — TY2 (SVM) TY3 VPK Mini proj — TY3 (ASD)	
TUESDAY			EL-HVDC(B) KBG	PE SVM	m&mc MSP	PSA VPK	m&mc — TY2 (MSP) PE — TY5 (SSK) TY1 (VPK) PSA — TY3 (RUM) Mini proj — TY4 (ASD)	
WEDNESDAY			PE SVM	PSA SSK	Mini proj — TY5 (RUM) PSA PE — TY2 (SVM) TY4 (VPK) m&mc — TY3 (MSP)	EL-ES(C) RUM	m&mc MSP	
THURSDAY			PSA — TY5 (VPK) PE — TY1 (SVM) TY4 (MSP) m&mc — TY2 (ASD) Mini proj	EL-IA(B) VPK	EL HVDC(B) KBG	EL-ES(C) RUM	PE SVM	
FRIDAY			PSA SSK	EL-IA(B) VPK	PE SVM	m&mc MSP	PSA — TY1 (VPK) PE — TY3 (SVM) m&mc — TY5 (SSK) Mini proj — TY4 (ASD)	
SATURDAY								

PROF. : Prof: V.P. Kamble (VPK)
Prof: K.B. Gawale (KBG)
Prof. Kumagare (RUM)
Prof. M.S. Potdar (MSP)
Prof. S.V. Munkute (SVM)
Prof. S.S. Kamble (SSK)

Date : 9.8.23

Batches
1 – 20 — TY1
21 – 40 — TY2
41 – 60 — TY3
61 – 80 TY4
81 – 100. Onwards — TY5

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS B.Tech. TERM I (Odd Sem) 1,3,5,7 WITH EFFECT FROM 10.8.23 ROOM NO. CR-6.

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			PSOC PPF	HVE AAT	EL-G PCI ASP	ELH IRK	HVE	BT1 (AAT)
TUESDAY			PSOC PPF	HVE AAT	EE LH IRK	EL-G-PCI ASP	HVE	BT2 (AAT)
WEDNESDAY			EL-G PCI ASP	EL-F EJEC KBG	TP	activity	PSOC PPF	EL-F EJAC KBG
THURSDAY			PSO PPF	EL-F EJAC KBG	TP	activity	HVE AAT	
FRIDAY			EL-H IRK	HVE AAT	HVE	BT3 AAT		
SATURDAY			HVE	BT4 AAT	HVE	BT5 AAT		

PROF. : Prof P.P. Fulzade (PPF)
Prof D.A.A. Tupe (AAT)
Prof A.S. Pande (ASP)
Prof. K.B. Gawali (KBG)
Prof. I.R. Kadri (IRK).

Date : 9.8.23.

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS M Tech TERM I (1,3,5,7 Odd Sem) WITH EFFECT FROM 10.8.23 ROOM NO. PG-R.

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			RES SSK	CS IRK	EL-I HVPT PPF	PSM BNC	PQA Lm RUM.	APE ASP
TUESDAY			PQA Lm RUM	PSM BNC	RES SSK	PSM BNC	EL-I HVPT PPF	ASP APE.
WEDNESDAY			PQA Lm RUM	EL-I HVPT PPF	APE ASP	RES SSK	APE ASP.	
THURSDAY			CS IRK	PSM BNC	PS	lab- MT1	(SSK)	SSK RES.
FRIDAY								
SATURDAY								

PROF. : Dr B.N. Chaudhari (BNC)
Prof P.P. Fulzale (PPF)
Prof. A.B. Pande (ASP)
Prof. S.S. Kamble (SSK)
Prof I.R. Kadu (IRK)

Batch
1 to 18 → MT1.

Date : 9.8.23.

Dr. Chaudhari. B.N.
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Pepoles Education Society`s (Mumbai)

College of Engineering, Nagsenvana, Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024

CLASS ..SY.. TERM 2,4,6,8 (Even Sem.) WITH EFFECT FROM 1.2.24 ROOM NO. ..4..

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			NA PDm	EM/C II SmK	ADE SVm	PS VPK	NA — SY1 PDm EM/C II — SY5 SmK ADE — SY4 SVm PS — SY3 VPK	
TUESDAY			NA — SY2 PDm EM/C II — SY1 SmK ADE — SY5 MSP PS — SY4 AAM	ELE KBG	EM/C II SmK	ADE SVm	PS VPK	
WEDNESDAY			PS VPK	NA PDm	ELE KBG	EM/C II SmK	Training And Placement	
THURSDAY			NA PDm	EM/C II SmK	NA — SY3 PDm EM/C II — SY2 KBG ADE — SY1 SVm PS — SY5 VPK	ADE SVm	PS VPK	
FRIDAY			ADE SVm	NA PDm	NA — SY4 PDm EM/C II — SY3 KBG ADE — SY2 MSP PS — SY1 VPK			
SATURDAY				ELE KBG	NA — SY5 RVM EM/C II — SY4 KBG ADE — SY3 MSP PS — SY2 VPK			

IRK to file 25.24

PROF. : Electrical dept

Date : 25.1.24.

ELE = Smart Grid Technology

PDm – Dr. P.D. mohite
SmK – Prof S.M. Ikand Kulkarni
SVm – Prof. S.V. Munkute
VPK – Prof. V.P. Kamble
KBG – Prof. K.B. Gavale

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Pe[illegible]es Education Society's (M[illegible]ai)

College of Engineering, Nagsenvana, Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024

CLASS TY TERM 2,4,6,8 (Even Sem.) WITH EFFECT FROM 1.2.24 ROOM NO. 5

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			EL-PPE AAT	CS ASP	SGP IRK	ELE MSP	EMD — TY1 AAM CS — TY5 ASP SGP — TY4 IRK	
TUESDAY			CS ASP	EL PPE AAT	EMD — TY2 AAT CS — TY1 ASP SGP — TY5 IRK		Seminar	
WEDNESDAY			EMD AAM	CS ASP	SGP IRK	ELE MSP	Training and Placement.	
THURSDAY			SGP IRK	EL PPE AAT	EMD AAM	ELE MSP	EMD — TY3 AAT CS — TY2 RUM SGP — TY1 PPF	
FRIDAY			CS ASP	ELE MSP	EMD — TY4 AAT CS — TY3 ASP SGP — TY2 IRK		Seminar	KBG, RUM
SATURDAY				EMD AAM	EMD — TY5 AAT CS — TY4 ASP SGP — TY3 PPF		Seminar	

BNC, SSK / PDM, AAM / SMK SVM MSP / AAT ASP PPF / BNC, SVM

PROF. : Electrical dept

Date : 25.1.24

AAT – Prof. A.A. Tupe
ASP – Prof A.S. Pande
IRK – Prof. I.R. Kadri
AAM – Prof A.A Maske
MSP – Prof MS Potdar
PPF – Prof P.P. Fulzele

EL- PPE = Power plant Engineering
ELE = Smart Grid Technology
MSP = Prof M.S Potdar, SMK = Prof S.M Kulkarni
SVM = Prof S.V. Munkute, PDM = Prof P.D. Mohite
BNC = Dr B.N. Chaudhari
SSK = Prof S.S. Kamble.

PRINCIPAL
College of Engineering
Aurangabad

Dr. Chaudhari B.N.
Professor & Head
Department of Electrical Engineering
P.E.S. College of Engineering
Aurangabad (M.S.)

Peoples Education Society's (Mumbai)

College of Engineering, Nagsenvana, Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024.

CLASS Btech. TERM 2,4,6,8, Even Sem. WITH EFFECT FROM 1.2.24. ROOM NO. 6

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			IOT IRK G	EL PPF C				
TUESDAY			EL PPF G	IOT IRK G				
WEDNESDAY			IOT IRK G	EL PPF G.				
THURSDAY								
FRIDAY								
SATURDAY								

PROF. : Electrical dept

Date : 25.1.24.

IOT 4.0 & Ind internet of Thing.

IRK – Prof. I R Kadri
PPF – Prof. P.P. Fulzele.

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College of Engineering
Aurangabad.

Dr. Chaudhari B.N.
Professor & Head
Department of Electrical Engineering
P.E.S. College of Engineering
Aurangabad (M.S.)

P[illegible]oles Education Society's (M[illegible]ibai)

College of Engineering, Nagsenvana, Aurangabad

TIME TABLE FOR THE YEAR 2023 - 2024

CLASS M tech. TERM 2,4,6,8 (Even) WITH EFFECT FROM 12.2.24 ROOM NO. PG:R

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			PSDS SSK PGR	EL-4 VPK	EL-5 PPF	EL-3 RUM	PS Lab ← SSK	→ mtech (1)
TUESDAY				APSP BNC	EL-5 PPF			
WEDNESDAY			EL-3 RUM	APSP BNC	EL-4 VPK	PSDS SSK	PS Lab ← SSK	→ mtech (2)
THURSDAY			EL-4 VPK	APSP BNC	APSP BNC	PSDS SSK	mtech ← BNC	→ Project
FRIDAY			EL-4 VPK	PSDS SSK	EL-5 PPF	EL-3 RUM		
SATURDAY								

PROF. : Electrical Dept

Date : 25.1.24.

EL-3 – Smart Grid Design & Analysis
EL-4 – Modelling and Simulation of
EL-5 – Power electronics System
↳ Energy management and

BNC – Dr. B.N. Chaudhari
SSK – Prof. S.S. Kamble
VPK – Prof. V.P. Kamble.
PPF – Prof. P.P. Fulzele
RUM – Prof. R.U. Magare.

PRINCIPAL
College of Engineering
Aurangabad

Dr. Gaidhari B.N.
Professor & Head
Department of Electrical Engineering
P.E.S. College of Engineering
Aurangabad (M.S.)

P.E.S. COLLEGE OF ENGINEERING AURANGABAD

DEPARTMENT OF MECHANICAL & AUTOMATION ENGINEERING

Load Distribution for Semester I ; Academic Year 2023-2024

S N	Name Of Staff	Theory Subject	Theory Load	Class	PR Load	Project	Total Load
1	Dr MMD	MD I	4	TY	2	6	12
2	Dr RGP	SD	3	Final Y	4	6	13
3	DR SKU	RES	3	TY		6	9
4	Prof AMB	EG	2	FY	8	6	16
5	Prof PLP	IEM	4	Final Y	4	6	14
		UHV-II	3	SY			3
6	Prof NDD	TOM II	4	TY	6	6	16
		ED	3	Final Y			
7	Prof AAG	TD 4hr AT I 4hr	8	SY, TY	6	6	20
8	Prof ARN	MT 4hr EE 3hr	7	SY, Final Y	6	6	19
9	Prof VDS	AE 3hr Elective -V 3hrs	6	TY,	10	6	22
				Final Y			
10	Prof ABG	MTX 4hr FM 4hr	8	Final Y ,SY	6	6	20
11	Prof. APP	HT	4	TY, FY	12		16
		BCME	1				
				TOTAL			180

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Aurangabad

P.E.S. COLLEGE OF ENGINEERING AURANGABAD

DEPARTMENT OF MECHANICAL & AUTOMATION ENGINEERING

Load Distribution for Semester II ; Academic Year 2023-2024

S N	Name Of Staff	Theory Subject	Theory Load	Class	PR Load	Seminar/ Mini Project	Project	Total Load
1	Dr MMD	MD II	4	TY		4	2	10
2	Dr RGP	Robotics 3hr	3	TY		4	2	9
3	DR SKU	BCME	3	FY		4	2	9
4	Prof AMB	EG 2hr TOM 4 hrs	6	FY & TY	10	4	2	22
5	Prof PLP	BHR 3hr E-Vehicle 3 hr	6	SY & TY	4	4	2	16
6	Prof NDD	SOM 4hr Wind Energy 4hr	8	TY	4	4	2	18
7	Prof AAG	Intro.Auto. 4hr FAS 3hr	6	SY, Final Y	4	4	2	16
8	Prof ARN	MP II 4 hr NCER 3hr	6	TY, Final Y	4	4	2	16
9	Prof VDS	EG 2hrs	2	FY	8	4	2	16
10	Prof ABG	EG 2hr EDC 3hr	5	FY ,SY	8	4	2	19
11	Prof. APP	BCME 1hr EG 2hr	5	FY	8	4	2	19
				TOTAL				170

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P.E.S College of Engineering, Nagsenvana, Aurangabad

Department of Mechanical and Automation Engineering

Time Table SEM I, A.Y 2023-24

Class SE

With effect from Revised 6/9/23 21-08-2023 Room No. CR3

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			EM III Prof NKA CR3	FM Prof ABG CR3	SE1-MD DH2 AAG SE2 -FM FM lab APP SE3- CAD CAD Lab ARN		ME Prof.ARN CR3	
Tuesday			FM Prof ABG CR3	TD Prof AAG CR3	SE1- CAD CAD Lab ARN SE2 –MD DH2 AAG SE3- FM FM lab APP		UHV-II Prof PLP CR3	EM III Prof NKA CR3
Wednesday			FM Prof ABG CR3	ME Prof.ARN CR3	EM III Prof NKA CR3	TD Prof AAG CR3	SE1 -FM FM lab APP SE2- CAD CAD Lab ARN SE3-MD DH2 AAG	
Thursday			ME Prof.ARN CR3	TD Prof AAG CR3	FM Prof ABG CR3	EM III Prof NKA CR3	UHV-II Prof PLP CR3	
Friday			TD Prof AAG CR3	ME Prof.ARN CR3	UHV-II Prof PLP CR3			
Saturday			SE1- ME Lab Worshop		SE2- ME Lab Worshop		SE3 ME Lab Worshop	

Batches,
SE 1-Roll NO 1-20
SE 2-Roll NO 21-40
SE 3-Roll NO 41 onwords

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWLI

Head,
Dept. of Mechanical Engineering
Dr. R.G.BUNGLE
HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

Principal
Dr. A.P.Wadekar
Principal
P.E.S.College of Engineering
Aurangabad.

P.E.S College of Engineering, Nagsenvana, Aurangabad

Department of Mechanical Engineering

Time Table SEM I, A.Y 2023-24

Class	TE		With effect from Revised 21-08-2023				Room No.	CR-2
Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			HT Prof APP CR2	MD I DR MMD CR2	TOM II Prof NDD CR2	AE Prof VDS CR2	AT Prof AAG CR2	RES DR SKU CR2
Tuesday			TE1-HT HT LAB APP TE2-MD-I DH2 VDS TE3- TOM TOM LAB NDD		TOM II Prof NDD CR2	AE Prof VDS CR2	HT Prof APP CR2	RES DR SKU CR2
Wednesday			AT Prof AAG CR2	MD I DR MMD CR2	HT Prof APP CR2	TOM II Prof NDD CR2	RES DR SKU CR2	AE Prof VDS CR2
Thursday			HT Prof APP CR2	MD I DR MMD CR2	TE1-TOM TOM LAB NDD TE2-HT HT LAB APP T3- MD-I DH2 VDS		AT Prof AAG CR2	
Friday				MD I DR MMD CR2	AT Prof AAG CR2	TOM II Prof NDD CR2	TE1-MDI DH2 Dr.MMD TE2- TOM TOM LAB NDD TE3-HT HT LAB APP	
Saturday							Batches, TE 1-Roll NO 1-20 TE 2-Roll NO 21-40 TE 3-Roll NO 41 onwords	

Prepared by
Prof.A. R. Narwade

Checked by
Prof. A.A.GAWLI

Head,
Dept. of Mechanical Engineering
DR R.D.PUNGLE

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Aurangabad.

P.E.S. College of Engineering * Mechanical Department *

P.E.S College of Engineering, Nagsenvana, Aurangabad

Department of Mechanical Engineering

Time Table SEM I, A.Y 2023-24

Class BE With effect from Revised 6/9/23 21-08-2023 Room No. CR-1

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			IPR Prof ARN CR1	EL -V NCM VDS CR1	IEM Prof PLP CR1	MTX Prof ABG CR1	TP Cell Training	
Tuesday			IPR Prof ARN CR1	IEM Prof PLP CR1	TP Cell Training		Open EL III SD/ ED Dr.RGP/Prof NDD RAC Lab/CR1	EL -V NCM VDS CR1
Wednesday			IEM Prof PLP CR1	EL -V NCM VDS CR1	B1- MTX MQC Lab ABG B2 - EL NCM E-yantra lab VDS		MTX Prof ABG CR1	
Thursday			B2- MTX MQC Lab ABG B3 - EL NCM E-yantra lab VDS		IEM Prof PLP CR1	IPR Prof ARN CR1	MTX Prof ABG CR1	
Friday				Open EL III SD/ ED Dr.RGP/Prof NDD RAC Lab/CR1	B1 - EL NCM E-yantra lab - VDS B3- MTX MQC Lab ABG		MTX Prof ABG CR1	
Saturday				Open EL III SD/ ED Dr.RGP/Prof NDD RAC Lab/CR1	Open EL III SD2/ Open EL III ED1 Dr. RGP RAC Lab / Prof PLP CAD Lab		Open EL III SD1 / Open EL III ED2 Dr. RGP RAC Lab / Prof PLP CAD Lab	

Batches,
BE-1-Roll NO 1-20
BE-2-Roll NO 21-40
BE-3 Roll NO 41 onwords

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWALI

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Aurangabad.

P.E.S College of Engineering, Nagsenvana, Aurangabad

Department of Mechanical Engineering

Time Table SEM I, A.Y 2023-24

Prof. Dr.MMD With effect from 10-08-2023 Room No. CR 2

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday				MD I CR2				
Tuesday								
Wednesday				MD I CR2				
Thursday				MD I CR2				
Friday				MD I CR2			TE1-MDI DH2	
Saturday								

Prepared by
Prof. A.R. Narwade

Checked by
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P.E.S College of Engineering, Nagssenvana, Aurangabad
Department of Mechanical Engineering
Time Table SEM I, A.Y 2023-24

Prof. Dr.RGP With effect from 10-08-2023 Room No. CR1

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday								
Tuesday							Open EL III SD RAC Lab	
Wednesday								
Thursday								
Friday				Open EL III SD RAC Lab				
Saturday				Open EL III SD RAC Lab	Open EL III SD2 RAC Lab		Open EL III SD1 RAC Lab	

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWALI

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P.E.S College of Engineering, Nagsenvana, Aurangabad

Department of Mechanical Engineering

Time Table SEM I, A.Y 2023-24

Prof. DR SKU With effect from 10-08-2023 Room No. CR2

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday								RES CR2
Tuesday								RES CR2
Wednesday							RES CR2	
Thursday								
Friday								
Saturday								

06/09/2023

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWALI

Head,
Dept. of Mechanical Engineering
Dr. R.G.PUNGLE
HEAD OF DEPARTMENT
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P.E.S.College of Engineering
Aurangabad.

P.E.S College of Engineering, Nagsenvana, Chh. Sambhajinagar

Department of Mechanical and Automation Engineering

Time Table SEM II, A.Y 2023-24

Class SE With effect from 02/01/2024 Room No. CR3

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			Electric Drive Prof.ABG	BHR Prof. PLP	TOM Prof.AMB	Introduction Automation Prof. AAG	SOM Prof.NDD	
Tuesday			TOM Prof.AMB	Electric Drive Prof.ABG	TP Cell Activity		S1-SOM MSM LAB- Prof.NDD S2-TOM TOM LAB -Prof. AMB	
Wednesday			SOM Prof.NDD	TOM Prof.AMB	Electric Drive Prof.ABG	Introduction Automation Prof. AAG		
Thursday			S2-SOM MSM LAB- Prof.NDD S1-TOM TOM LAB -Prof. AMB		SOM Prof.NDD	Introduction Automation Prof. AAG	BHR Prof. PLP	
Friday			TOM Prof.AMB	SOM Prof.NDD	Introduction Automation Prof. AAG	BHR Prof. PLP		
Saturday								

Batches,
SE 1-Roll NO 1-20
SE 2-Roll NO 21-40

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWLI

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Dr. [illegible]
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Chhatrapati Sambhajinagar

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Department of Mechanical Engineering

Time Table SEM II, A.Y 2023-24

Class TE With effect from 02/01/2024 Room No. CR-2

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			Wind Energy Prof. NDD	MD -II Dr. MMD	Robotics Dr. RGP	E -Vehicles Prof. PLP	TE-1 MD-II Thermal Lab- AAG TE-2 E-Vehicles MQCLab- SNG	
Tuesday			MP-II ARN	MD -II Dr. MMD	TP Cell Activity		TE-2MD-II Thermal Lab- AAG TE-1-MP-II IHP Lab -ARN	
Wednesday			E -Vehicles Prof. PLP	MD -II Dr. MMD	MP-II ARN	Wind Energy Prof. NDD		
Thursday				MD -II Dr. MMD	Robotics Dr. RGP	MP-II ARN	Wind Energy Prof. NDD	
Friday			E -Vehicles Prof. PLP	Robotics Dr. RGP	MP-II ARN	Wind Energy Prof. NDD	TE-2 MP-II IHP Lab -ARN TE-1 E-Vehicles MQCLab- SNG	
Saturday			MINI Project		Seminar		Batches, TE 1-Roll NO 1-20 TE 2-Roll NO 21-40	

Prepared by
Prof.A. R. Narwade

Checked by
Prof. A.A.GAWLI

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Department of Mechanical Engineering

Time Table SEM II A.Y 2023-24

Class BE | With effect from 02/01/2024 | Room No. CR-1

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			NCR Prof. ARN		FSA Prof. AAG			
Tuesday			FSA Prof. AAG		NCR Prof. ARN			
Wednesday								
Thursday								
Friday								
Saturday			Project work					

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWALI

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Department of Mechanical Engineering
Time Table SEM II, A.Y 2023-24

Prof. ARN With effect from 02-01-2024 Room No. CR2

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			NCR					
Tuesday			MP-II CR2		NCR		TE-1-MP-II IHP Lab	
Wednesday					MP-II CR2			
Thursday						MP-II CR2		
Friday					MP-II CR2		TE-2 MP-II IHP Lab	
Saturday			T.Y Mini Project		T.Y. Seminar		Final Year - Project work	

Prepared by
Prof. A.R. Narwade

Checked by
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Head,
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PES College of Engineering
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P.E.S College of Engineering, Nagssenvana, Chh. Sambhajinagar
Department of Mechanical Engineering
Time Table SEM II, A.Y 2023-24

Prof. AAG With effect from 02-01-2024 Room No. CR2, CR3

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday					FSA	Introduction Automation CR3	TE-1 MD-II Thermal Lab	
Tuesday			FSA				TE-2MD-II Thermal Lab-	
Wednesday						Introduction Automation CR3		
Thursday						Introduction Automation CR3		
Friday					Introduction Automation CR3			
Saturday			T.Y Mini Project		T.Y. Seminar		Final Year - Project work	

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWALI

Head,
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PES College of Engineering
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Department of Mechanical Engineering
Time Table SEM II, A.Y 2023-24

Prof. APP | With effect from 02-01-2024 | Room No. CR13, CR14

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:30-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday			EG C1+C2 DH1			EG FY -C CR-13	Automobile Phy.sss.	
Tuesday			EG C1+C2 DH1			EG FY -C CR-13	BCME FY -B CR14	
Wednesday								
Thursday			EG C3+C4 DH1					
Friday								
Saturday			EG C3+C4 DH1		T.Y. Seminar		Final Year - Project work	

Prepared by
Prof. A.R. Narwade

Checked by
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Chhatrapati Sambhajinagar

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Department of Mechanical and Automation Engineering

Extra Classes Time Table SEM I, A.Y 2023-24

Class SE With effect from 24-05-2024 to 31-05-2024 Room No. CR3

Period	1	2	3	4	5	6	7	8
	8:15-9:15	9:15-10:15	10:30-11:30	11:00-12:30	1:15-2:15	2:15-3:15	3:30-4:30	4:30-5:30
Monday				TD Prof AAG CR3	ME Prof.ARN CR3	FM Prof ABG CR3		
Tuesday				EM III Prof NKA	ME Prof.ARN CR3	FM Prof ABG CR3	TD Prof AAG CR3	
Wednesday				EM III Prof NKA	ME Prof.ARN CR3	TD Prof AAG CR3	FM Prof ABG CR3	
Thursday				EM III Prof NKA	ME Prof.ARN CR3	FM Prof ABG CR3	TD Prof AAG CR3	
Friday				EM III Prof NKA	ME Prof.ARN CR3	TD Prof AAG CR3	FM Prof ABG CR3	
Saturday				EM III Prof NKA	ME Prof.ARN CR3	TD Prof AAG CR3		

Prepared by
Prof. A.R. Narwade

Checked by
Prof. A.A.GAWLI

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Chhatrapati Sambhajinagar

ss:- Third Year B.Tech (Mech)

bject:- Heat Transfer

TEACHING PLAN

(AS PER UNIVERSITY'S SYLLABUS)

P.E.S. College of Engineering, Mechanical Department

Prof. A.P. Paliwal. Sem I. A.Y-2023-24.

SR. NO.	TOPIC	% SYLLYBUS
1	Unit-1 - Introduction; Heat Transfer mech	
2	anism Conduction heat transfer, -thermal	
3	Conductivity, Convection heat transfer, Ra-	
4	diation heat transfer, laws of heat transfer	20%
5	steady state, Conduction; General heat Con-	
6	duction equation, Boundary & Initial Conditions	
7	One dimensional steady state conduction; the slab	
8	the cylinder, the sphere, the composite syste	
9		
10	Unit: 2: Overall Heat Transfer & Extended Surfaces	
11	Thermal Contact resistance, Critical Radius of Insulatn	
12	Electrical Analogy, Overall heat transfer coefficient	20%
13	Heat source systems, Variable thermal Conductivity	
14	Extended Surfaces, Unsteady state heat Conduction	
15	Lumped system analysis, Biot & Fourier Number	
16		
17	Unit: 3: Principles of Convection	
18	Continuity Momentum & Energy equations, Hydr.	
19	dynamic & Thermal Boundary layer for a Convection	
20	flat plate & Pipe flow, Dimensionless Group.	
21	forced convection: Empirical Relations for pipe &	20%
22	tube flow, flow a/c cylinders, spheres, tube banks	
23	free Convection: free convection over vertical,	
24	inclined & horizontal surface, Cylinder & Sphere.	
25		
26	Unit: 4: Heat Exchangers	
27	Classification of HE, temp. distribution in HE	
28	& Counter flow arrangement, the overall	
29	heat transfer coefficient, analysis of	20%
30	HE, The LMTD Method, the Effectiveness	
31	NTU method, Selection of Heat Exchangers	
32		
33	Unit. 5: Radiation	
34	Radiation laws, Radiation properties, Atmosp-	
35	heric & Solar Radiation, thermal Radiation	20%
36	Black body radiation, The view factor,	
37	Radiation heat transfer from black surfa-	
38	ce, Gray surface, Radiation shields &	
39	radiation effect.	
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HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

ass : B.Tech.   PDF-ARK.
                                                                               Sem - I
b : IPR   A.Y. 2023-24

TEACHING PLAN

(AS PER UNIVERSITY SYLLABUS)

SR.NO.	TOPIC	% SYLLYBUS
1	unit-I introduction to intellectual property	20%
2	introduction to IPR	
3	types of intellectual property	
4	international organizations	
5	agencies & trades	
6	& importance of intellectual	
7	property rights	
8	unit-2 Trade marks	20%
9	Purpose and function of	
10	trade mark, acquisition of	
11	trade mark rights	
12	protectable matter of trade	
13	selecting & evaluating trademark	
14	trademark registration process.	
15	unit-3 Law of copy ~~right~~ patent	20%
16	foundation of patent law	
17	patent searching processes	
18	ownership rights & transfer	
19	Trade secrets : Trade secrets law	
20	determination of trade secret liability of misappropriation	
21	protection for submission trade secret litigation	
22	Law of copy rights & TP	20%
23	fundamental of copy right law,	
24	originality of material right of	
25	reproduction, right of perform	
26	to work publicly, copy right	
27	ownership issue copy right registration	
28	Notice of copy rights international copy right law	20%
29	unit-5 New development of	
30	intellectual property: New development	
31	in trade mark law copy right law	
32	intellectual property audits,	
33	international overview on intellectual property	
34	international trademark law, copy right law	
35	international patent law, international in trade secret	
36	law	
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HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

Class - S.Y.B.Tech
Sub - ME (Mfg. engg.)

Prof. [illegible]
Sem I
A.Y. 2023-24

P.E.S. College of Engineering
Mechanical Department

TEACHING PLAN
(AS PER UNIVERSITY SYLLABUS)

SR.NO.	TOPIC	% SYLLABUS
1	Introduction to casting, sand casting, solidification of	
2	metals pure metals, Alloys. Solidification	
3	time special casting processes shell moulding	20%
4	Investment casting, permanent mold casting	
5	Vacuum casting, die casting defects, NDT methods	
6	centrifugal casting inspection & testing	
7	casting defects.	
8		
9	metal forming: Hot & cold working of metal	
10	principles of rolling, forging	
11	drop forging, press forging upset	
12	roll forging Extrusion, drawing	
13	spinning & effect of hot working	20%
14	cold working processes cold rolling swaging,	
15	Extrusion - forward, backward & impact	
16	roll forming tube drawing wire drawing shot peening	
17	Joining Processes - Arc welding Theory	
18	SMAW, GTAW, GMAW, FCAW submerged	
19	arc welding stud welding Resistance welding	
20	Theory spot & seam projection welding	
21	Gas welding process, friction, ultrasonic welding	20%
22	Thermit welding EBW & LASER welding	
23	soldering, brazing and adhesive bonding	
24	welding defects & quality	
25	machining processes: Turning & hole making	
26	introduction the turning process, lathes &	
27	lathe operation component, workholding devices	
28	and Accessories, lathe operation types	
29	of lathes, Types of chips Boring and boring	
30	machines Drilling machines, Drills	20%
31	Drill materials & sizes Drilling practice	
32	Drilling machines Reaming operation & Reamers	
33	machining processes: milling Broaching & Gear mfg.	
34	introduction milling, milling m/c peripheral milling	
35	face milling End milling other milling operations	
36	milling cutters Tool Holders milling process	20%
37	capabilities planning & shaping : Broaching	
38	Gear mfg by machining form cutting	
39	Gear generating cutting Bevel gears	
40	Gear finishing processes CNC, VMC.	
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HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

P.E.S. College of Engineering
Mechanical Department

Prof. ABG

TEACHING PLAN

(AS PER UNIVERSITY SYLLABUS)

Sem-I

A.Y. 2023-24.

B.Tech (ME).

:- Mechatronics

SR.NO.	TOPIC	% SYLLYBUS
1	Unit 1 - Introduction - Mechatronics systems, elements	
2	Practical examples of system. Sensors & Transducers	
3	various senses used in Mtx system. Pressure, Temp,	17%
4	sensors, Velocity & Acceleration sensors, force sensor,	
5	Optical encoders, Capacitive level sensors, selection.	
6	Unit-2. Signal conditioning & Data Representation.	
7	Types of electronic signals, Need of signal processing	
8	OAMPS-Types, classification, applications, Opto Isolators,	12%
9	Protection Devices, ADC, DAC, Interfacing devices,	
10	Relays, Displays, Seven segment type, LCD, Data loggers.	
11	Unit 3 - Drives: Types of Electric Motors, AC & DC,	
12	DC servomotors, stepper motors, linear motors etc.	
13	Pneumatics & Hydraulics, - actuators, DC Valves, Basic	17%
14	preparation, FRL Unit, sequencing of P. cylinders, etc	
15	Hydraulic Cylinders, Design of cylinders, Meter in, Meter out ckts	
16	Unit 4 - Micro processor & Microcontroller, 8085 ups,	
17	Architecture, types of registers & their functions,	
18	Instruction set, interfacing, applications, 8051 ups,	12%
19	Instruction set, pins & their function, Interfacing applications,	
20	PLC - Architectures, Types of I/P & O/P, Programming etc.	
21	Unit 5 Control Systems - Open loop & Closed loop systems,	
22	block diagram manipulation/Reduction, Transfer function	
23	Modelling of Mechanical systems using springs	17%
24	continued: Modelling	
25	Pathpot & Mass equivalance.	
26	Unit 6 :- Stability of Systems. Introduction.	
27	On/off Controller, Proportional, Integral control,	
28	Derivative control, systems, PI, PD & PID	12%
29	Controllers. Introduction to control using state variable	
30	system models. Bode Plots & Stability criteria	
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32		Total = 100%
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HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

Class:- Third Year B.Tech (Mech)

Subject:- Heat Transfer

TEACHING PLAN

(AS PER UNIVERSITY SYLLABUS)

Prof. A.P. Paliwal.
Sem I
A.Y-2023-24.

SR. NO.	TOPIC	% SYLLYBUS
1	Unit-I - Introduction; Heat Transfer mech-	
2	anism Conduction heat transfer, Thermal	
3	Conductivity, Convection heat transfer, Ra-	
4	diation heat transfer, Laws of heat transfer	20%
5	Steady State, Conduction; General heat con-	
6	duction equation, Boundary & Initial Conditions	
7	One dimensional Steady State conduction; the Slab	
8	the Cylinder, the Sphere, in composite Syste-	
9		
10	Unit: 2: Overall Heat Transfer & Extended Surfaces	
11	Thermal Contact Resistance, Critical Radius of Insulatio-	
12	Electrical Analogy, Overall heat transfer coefficient	20%
13	Heat Source Systems, Variable thermal Conductivity	
14	Extended Surfaced, Unsteady State heat Conduction	
15	Lumped System Analysis, Biot & Fourier Number	
16		
17	Unit: 3: Principles of Convection	
18	Continuity, Momentum & Energy equations, Hydro-	
19	dynamic & Thermal Boundry layer for a Convection	
20	Flat plate & Pipe flow, Dimensionless Group,	
21	forced convection: Empirical Relations for pipe &	20%
22	tube flow, flow a/c Cylinders, Spheres, Tube bank	
23	Free Convection: free Convection from vertical,	
24	Inclined & Horizontal Surface, Cylinder & Sphere.	
25		
26	Unit: 4: Heat Exchangers	
27	Classification of HE, temp. distribution in HE	
28	& Counter flow arrangement, the overall	
29	Heat transfer Coefficient, analysis of	20%
30	HE, The LMTD Method, the Effectiveness	
31	NTU method, Selection of Heat Exchangers	
32		
33	Unit. 5: Radiation	
34	Radiation laws, Radiation properties, Atmosp-	
35	heric & Solar Radiation, thermal Radiation	20%
36	Black body radiation, The view factor,	
37	Radiation heat transfer from black Surfa-	
38	ce, Gray Surface, Radiation Shield &	
39	Radiation effect.	
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HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

Sem II
Prof. Gawali A.A.
S.Y. B.Tech (Mech & Automation)
: 2023-24
: Intro. to Automation

TEACHING PLAN

(AS PER UNIVERSITY SYLLABUS)

P.E.S. College of Engineering * Mechanical Department *

NO.	TOPIC	% SYLLYBUS
	Unit 1: Introduction	
	Definition, history, Need and scope of Automation Industrial Automation Vs industrial information Technology. Role of Automation in Industry, Economy of scale and economy of scope, Type of production system, Types of Automation System, Effect of Automation on people & society	20 %
	UNIT 2: Architecture of Automation System	
	The fuctional Elements of industrial Automation Sensing and Actuation elements, Industrial sensor and Instrument system, The Architecture of element, Various types of Automation level, The Automation pyramid with schematic	20 %
	UNIT 3: Actuation & Control system	
	Fundamental of Pneumatic and hydraulic system, Industrial Actuater System what is continuous control system and how it works?, sequence control system Automation, logic control, supervisory control and production control.	20 %
	UNIT 4: Introduction to process control	
	Introduction of process control, & characteristic of a process, General modelling principle, Mathematical modelling procedure, Some modelling Example, feedback and feed forward system, Example of mathematical modeling with schematic.	20 %
	UNIT 5: Automation system & Tool	
	IOT, Expert System, PLC, SCADA Artificial intelligence, Machine learning Machine vision.	20 %

HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

Class:- TY. B. Tech.

Subject:- Heat Transfer

Prof. A. P. Paliwal.
Sem I.
A.C.Year - 2023-24

L.No.	Date	TOPIC	ATT.
1	21/8/23	Introduction to heat transfer, modes of	
2	23/8/23	heat transfer, Thermal Conductivity.	
3	25/8/23	Laws of H.T., Steady State Conditim	
4	31/8/23	Boundry & Initial conditim, 1-dimen-	
5	6/9/23	tional Steady State heat Condition.	
6	7/9/23	General heat Conduction eqn; & Slab,	
7	11/9/23	Cylinder Sphere, Composite Slab	
8	12/9/23	Ch.2. Overall heat transfer coeff.	
9	13/9/23	Thermal Contact Resistance, Critical	
10	18/9/23	Radius of Insulation, Electrical	
11	19/9/23	analogy, Heat Source Systems.	
12	20/9/23	Variable thermal Conductivity.	
13	21/9/23	Unsteady State heat Conduction, fins	
14	25/9/23	Extended Surfaces, Biot number	
15	26/9/23	Lumped System Analysis	
16	27/9/23	Ch.3: Continuity, Momentum &	
17	3/10/23	Energy Eqn. Hydrodynamic & thermal	
18	4/10/23	boundry Layer for Convection, flat	
19	5/10/23	plate & pipe flow, Dimensionless group	
20	9/10/23	forced convection: Empirical relation	
21	11/10/23	for pipe & tube flow a/c Cylinders	
22	16/10/23	Sphere & tubes, free Convection	
23	18/10/23	from vertical, Horizontal & Inclined	
24	19/10/23	Ch.4: Classification of Heat ex-	
25	23/10/23	changers, Temperature distribution	
26	2/11/23	in Pel & Counter flow arrange-	
27	6/11/23	ment, Overall heat transfer	
28	8/11/23	Coeff., Analysis of Heat Exchangers	

TEACHER

H.O.D.
HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

PRINCIPAL

PROTION COVERED

L.No.	Date	TOPIC	ATT.
29	8/11/23	LMTD Method, NTU Method &	
30	10/11/23	Effectiveness of Heat Exchangers,	
31	20/11/23	Selection of Heat Exchangers	
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TEACHER

H.O.D.

HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

PRINCIPAL

Class: F.Y.B.Tech

Subject: E.G.

P.E.S. College of Engineering * Mechanical Department *

PROTION COVERED

Mr. A.P. Paliwal
Sem: II
A.Y.: 23-24

L.No.	Date	TOPIC	ATT.
1	5/2/24	Unit 1- Drawing Std. SP:46, Types of Lines	
2	6/2/24	Lettering, Dimensioning, Scale Conventions	
3	12-2-24	Dividing a given st. line into equal parts	
4	12-2-24	Bisecting given angle drawing polygon	
5	13-2-24	Sp. methods of Constructing polygon	
6	13-2-24	Unit:2- Orthographic projection views of	
7	20-2-24	objects from their Isometric views	
8	20-2-24	Projection of points lying in 4	
9	26-2-24	Quadrants. Types of projection	
10	27-2-24	of points, practice numericals	
11	28-2-24	Unit:3- Proj. of St. lines & Planes	
12	4-3-24	Proj. of lines ∥el & ⊥ar to 1 or both planes	
13	5-3-24	proj. of Inclined to 1 or both planes	
14	12-3-24	Proj. of planes ∥el & ⊥ar to 1 or both planes	
15	18-3-24	Proj. of planes inclined to 1 to both planes	
16	19-3-24	Unit:4- Proj. of Solids, Types of Solids	
17	26-3-24	Proj. of solids with axis ⊥ar & ∥el to 1 or both	
18	1-4-24	Solids with axis inclined to 1 or both planes	
19	2-4-24	Proj. of Spheres touching each other	
20	8-4-24	Units: 5- Sectioning of Solids: Section	
21	15-4-24	planes ⊥ar to one plane, Section	
22	16-4-24	planes ⊥ar to one plane & ∥el to	
23	23-4-24	or Inclined to other plane	
24	6-5-24	Isometric projections. Isometric	
25	7-5-24	Scale, Drawing of Isometric projec-	
26	14-5-24	tions from given ortho. views	

TEACHER

H.O.D.

HEAD OF DEPARTMENT
Mechanical Engineering
PES College of Engineering
Aurangabad

PRINCIPAL

TEACHING PLAN (2023-2024)
SUBJECT: - ENGINEERING MATHEMATICS – I (BTBSC101)

Unit No.	Lecture No.	TOPIC	% Portion covered
1	**1**	**Unit 1: Linear Algebra-Matrices:** Rank of matrix-Normal form	
	2	Inverse of a matrix by Gauss-Jordan method	
	3	Consistency of non-homogeneous and homogeneous system of linear equations	
	4	Eigen values and Eigen vectors and their properties	
	5	Eigen values and Eigen vectors and their properties	
	6	Cayley- Hamilton Theorem (without proof) and its Applications.	
2	**7**	**Unit 2: Partial Differentiation:** Partial Derivatives of first and higher orders	
	8	Partial Derivatives of first and higher orders	
	9	Homogeneous functions-Euler's Theorem for two variables	
	10	Homogeneous functions-Euler's Theorem for three variables	
	11	Total derivative	
	12	Change of independent Variables	
3	**13**	**Unit 3: Application of Partial Differentiation:** Jacobian	
	14	Properties of Jacobian	
	15	Taylor's theorem for function of two variables	
	16	Maclaurin's theorem for function of two variables	
	17	Maxima and Minima of Functions of two variables	
	18	Lagrange's method of undetermined multipliers	
4	**19**	**Unit 4: Reduction Formulae and Curve Tracing:** Reduction formula for $_0\int^{\pi/2}\sin^n x dx$, $_0\int^{\pi/2}\cos^n x dx$, $_0\int^{\pi/2}\sin^m x\cos^n x dx$	
	20	Curve tracing in Cartesian form	
	21	Curve tracing in Cartesian form	
	22	Curve tracing in Polar form	
	23	Curve tracing in Polar form	
	24	Curve tracing in Parametric form	
5	**25**	**Unit 5: Multiple integral and their Applications:** Evaluation of Double integrals in Cartesian coordinates	
	26	Evaluation of Double integrals in Cartesian coordinates	
	27	Change of order of integration	
	28	Evaluation of Double integral by changing to polar coordinates	
	29	Triple integral	
	30	Application of Multiple integrals to find area as double integral	
	31	Application of Multiple integrals to find volume as triple integral	
	32	Application of Multiple integrals to find surface area	

Text Books

1) Higher Engineering Mathematics by B. S. Grewal, Khanna Publishers, New Delhi.
2) Advanced Engineering Mathematics by Erwin Kreyszig, John Wiley & Sons, New York.
3) A Course in Engineering Mathematics (Vol I) by Dr. B. B. Singh, Synergy Knowledgeware, Mumbai.
4) A Text Book of Applied Mathematics (Vol I & II) by P. N. Wartikar and J. N. Wartikar, Pune Vidyarthi Griha Prakashan, Pune.
5) Higher Engineering Mathematics by H. K. Das and Er. Rajnish Verma, S. Chand & CO. Pvt. Ltd., New Delhi

TEACHING PLAN (2023-2024)
SUBJECT: - ENGINEERING MATHEMATICS – II (BTBSC201)

Unit No.	Lecture No.	TOPIC	% Portion covered
1	**1**	**Unit 1: Complex Numbers**: Definition & geometrical representation	
	2	De-Moivre's theorem	
	3	Roots of complex numbers by using De-Moivre's theorem	
	4	Circular & Hyperbolic function of complex variable	
	5	Relation between circular and hyperbolic function	
	6	Real and imaginary parts of circular and hyperbolic functions	
	7	Logarithm of complex quantities	
2	**10**	**Unit 2: Ordinary Differential Eq^{n} of 1st Order and 1st Degree & Their Applications:** Linear equations	
	11	Reducible to linear equations(Bernoulli's equation)	
	12	Exact differential equation	
	13	Equations reducible to exact equations	
	14	Applications to orthogonal Trajectories	
	15	Applications to mechanical systems	
	16	Applications to electrical systems	
3	**19**	**Unit 3: Linear Differential Eq^{ns} with Constant Coefficients:** Introductory remarks – C.F. , P.I.	
	20	Rules of finding complementary function	
	21	Rules of finding particular integral	
	22	Rules of finding particular integral	
	23	Method of variation of parameters	
	24	Cauchy's homogeneous equation	
	25	Legendre's linear equation	
4	**28**	**Unit 4: Fourier Series:** Introductory remarks- Euler's formulae, Cond^{ns} for Fourier series expansion-Dirichlet's cond^{ns}	
	29	Functions having points of discontinuity	
	30	Change of interval	
	31	Odd & even function- expansion of odd & even periodic functions	
	32	Odd & even function- expansion of odd & even periodic functions	
	33	Half range Fourier sine series	
	34	Half range Fourier cosine series	
5	**37**	**Unit 5: Vector Calculus:** Scalar and vector fields, Gradient	
	38	Divergence and curl	
	39	Solenoidal and irrotational vector fields	
	40	Vector identities	
	41	Green's lemma	
	42	Gauss's divergence theorem	
	43	Stoke's theorem	

Text Books

a. Higher Engineering Mathematics by B. S. Grewal, Khanna Publishers, NewDelhi.
b. Advanced Engineering Mathematics by Erwin Kreyszig, John Wiley & Sons, NewYork.
c. A Course in Engineering Mathematics (Vol II) by Dr. B. B. Singh, Synergy Knowledge ware, Mumbai.
d. A Text Book of Applied Mathematics (Vol I & II) by P. N. Wartikar and J. N. Wartikar, Pune Vidyarthi Griha Prakashan,Pune.
e. Higher Engineering Mathematics by H. K. Das and Er. Rajnish Verma, S. Chand & CO. Pvt. Ltd., New Delhi.

TEACHING PLAN (2023-2024)
SUBJECT: - ENGINEERING MATHEMATICS – III (BTBSC301)

Unit No.	Lecture No.	TOPIC	% Portion covered
1	**1**	**Unit 1: Laplace Transform:** Definition- Conditions for existence, L. T. of elementary functions	
	2	Theorem of Laplace Transform: First shifting theorem	
	3	Second Shifting theorem, Change of Scale theorem	
	4	Laplace Transform of Derivatives, Integral, Multiplication	
	5	Laplace Transom of Division, Evaluation of integral by L. T.	
	6	Transforms of some special functions- periodic function	
	7	Heaviside-unit step function	
	8	Heaviside-unit step function	
	9	Dirac Delta function	
2	**10**	**Unit 2: Inverse Laplace Transform:** Introductory remarks, inverse L. T. of elementary functions	
	11	Methods to find ILT : Theorem of Inverse Laplace Transform	
	12	Theorem of Inverse Laplace Transform	
	13	Theorem of Inverse Laplace Transform	
	14	Inverse L. T. by using convolution theorem	
	15	Inverse L. T. by using partial fractions	
	16	Applications to find the solutions of linear differential equations	
	17	Applications to find the solutions of linear differential equations	
	18	Simultaneous linear differential equations with constant coefficients	
3	**19**	**Unit 3: Fourier Transform:** Definition- Integral theorem, Fourier sine and cosine integrals	
	20	Fourier sine and cosine integrals	
	21	Fourier sine and cosine integrals	
	22	Examples	
	23	Fourier sine transform	
	24	Fourier cosine transform	
	25	Properties of Fourier transforms	
	26	Parseval's identity for Fourier Transforms	
	27	Parseval's identity for Fourier Transforms	
4	**28**	**Unit 4: Partial Differential Equations and Their Applications:** Formation of partial differential equation by eliminating arbitrary constant and function	
	29	Formation of partial differential equation by eliminating arbitrary constant and function	
	30	Equations solvable by direct integration	
	31	Linear equations of first order (Lagrange's linear equations)	
	32	Linear equations of first order (Lagrange's linear equations)	
	33	Method of separation of variables	
	34	Applications to find solutions of one dimensional heat flow equation	
	35	Applications to find solutions of one dimensional heat flow equation	
	36	One dimensional wave equation	
5	**37**	**Unit 5: Function of Complex Variable(Differential Calculus):** Introduction	
	38	Analytic ,Cauchy Riemann equations in Cartesian form	
	39	Cauchy Riemann equations in polar form	
	40	Harmonic functions in Cartesian form	
	41	Cauchy's integral theorem	
	42	Cauchy's integral formula	
	43	Cauchy's integral formula	
	44	Residues, Cauchy's residue theorem	
	45	Cauchy's residue theorem	

TEACHING PLAN (2023-2024)

SUBJECT: -Probability & Statistics (BTBS404**)**

Unit No.	Lecture No.	TOPIC	% Portion covered
1	1	**Unit 1:Probability Theory:** Definition of probability: classical,	
	2	Empirical and axiomatic approach of probability	
	3	Addition theorem of probability	
	4	Multiplication theorem of probability	
	5	Baye's theorem of inverse probability	
	6	Properties of probabilities with proofs, Examples	
	7	Properties of probabilities with proofs, Examples	
2	8	**Unit 2:Random Variable and Mathematical Expectation:**	
	9	Random variables, Probability distributions	
	10	Probability mass function, Probability density function	
	11	Mathematical expectation, Join and marginal probability distributions	
	12	Properties of expectation and variance with proofs.	
	13	Theoretical Probability Distributions : Binomial distribution	
	14	Poisson distribution, Normal distribution, Fitting of binomial distributions, Properties of binomial	
	15	Poisson and normal distributions	
	16	Relation between binomial and normal distributions, Relation between Poisson and normal distributions	
3	17	**Unit 3: Correlation:** Introduction, Types of correlation,	
	20	Correlation and causation, Methods of studying correlation	
	21	Karl Pearson's correlation coefficient,	
	22	Karl Pearson's correlation coefficient,	
	23	Spearman's rank correlation,	
	24	Coefficient, Properties of Karl Pearson's correlation coefficient and Spearman's rank correlation coefficient	
	25	Probable errors.	
4	26	**Unit 4: Linear Regression Analysis:** Introduction, Linear and non-linear regression	
	27	Lines of regression, Derivation of regression lines of y on x and x on y	
	28	Angle between the regression lines	
	29	Coefficients of regression	
	30	Theorems on regression coefficient	
	31	Theorems on regression coefficient	
	32	Properties of regression coefficient.	
5	33	**Unit 5: Estimation and Hypothesis:** Estimation, Large Sample Estimation of a Population Mean	
	34	Small Sample Estimation of a Population Mean	
	35	Large Sample Estimation of a Population Proportion	
	36	Sample Size Considerations, Testing Hypotheses	
	37	The Elements of Hypothesis Testing, Large Sample Tests for a Population Mean	
	38	Large Sample Tests for a Population Mean	
	39	The Observed Significance of a Test, Small Sample Tests for a Population Mean	
	40	Large Sample Tests for a Population Proportion.	

Teaching Plan (2023-2024)

Course name – Engineering Chemistry (BTBS 102/202)

Subject Teacher - Dr. Ashwini D. Deshmukh

Lecture No.	Planned Syllabus	% Syllaus Covered
	Unit One : Water Treatment (7Hrs)	
1	Introduction,Sources of water,impurities.	
2	Hard & soft water, temporary hardness,permanenthardness,disadvantages of hard water-in Domestic and Industrial use	
3	Softening of water- Zeolite process	
4	Ion Exchange Process	
5	Hot - Lime Soda Process	
6	Water Characteristics - Hardness and its determination by EDTA method	
7	Dissolved oxygen (DO) and its determination by Winkler's method.	
	Unit Two : Phase Rule (6Hrs)	
8	Phase rule ,statement,Explaination of the terms – Phase	
9	Defination of Component,Degree of Freedom.	
10	One Component system- Water system	
11	One Component system - Sulphur system	
12	Reduced Phase rule equation	
13	Two Component system,Phase diagram of Silver-Lead alloy system.	
	Unit Three : Corrosin and its Control (7Hrs)	
14	Introduction,Fundamental reason of corrosion	
15	Electrochemical Corrosion (Wet corrosion) types,mechanism	
16	Direct chemical Corrosion (Dry corrosion) types,mechanism	
17	Factors affecting the rate of Corrosion	
18	Types of corrosion , galvanic cell corrosion ,microbial corrosion	
19	Methods to mininise the rate of corrosion .shape and designing of metal	
20	Cathodic protection method and its type, Anodic protection method	
	Unit Four : Fuels and Lubricants (7Hrs)	
21	**Fuels** : Inroduction,classification of fuel ,Calorific value of a fuel ,Characteristics of a good fuel,	
22	Solid fuel- Coal and Various types of Coal ,	
23	Analysis of Coal - Proximate analysis and Ultimate analysis, Liquid fuel Refining of Petroleum	
24	**Lubricants-**Inroduction,classification of lubricants-Solid,Semi-Soliand Liquid Lubricants	
25	Properties of luubricants :Physical Properties - Viscosity, Viscosity Index ,	
26	Surface Tension ,Flash point and Fire point	
27	Chemical Properties - Acid value and Saponification value	
	Unit Five: Electrochemistry (7Hrs)	
28	Introduction,definition and units of units of Ohm's Law,SpecificResistance,SpecificConductance,Equivalent and Molecular Conductance.	
29	Method ofConductance measurement by Wheatstone bridge method ,Cell constant	
30	Conductometric titration	
31	Nernst equation and its application for the calculation of half-cell potential	
32	Glass electrode	
33	Fuel cell (H_2O_2) , Advantages of Fuel cell	
34	Ostwald's theory of acid –base indicator	

Head of Applied Science **Subject Teacher**

Prof.S.R.AcharyaDr.A. D.Deshmukh

P.E.S College of Engineering
Nagsenvana, Chhatrapati Sambhajinagar
Teaching Plan
Course Name: Communication Skill (**BTHM104/204**) **Subject Teacher:** Rameshwar B.Avhad

1.	**Unit 1: Communication and Communication Processes (04hrs)** Introduction to Communication,	% Syllabus Covered
2.	Forms and functions of Communication.	
3.	Barriers to Communication and overcoming them.	
4.	Verbal and Non-verbal Communication	
5.	Reading: Introduction to Reading, Barriers to Reading, Types of Reading: Skimming, Scanning, Fast Reading, Strategies for Reading.	
6.	Comprehension.	
7.	Listening: Importance of Listening, Types of Listening, and Barriers to Listening.	
8.	**Unit 2: Verbal & Non-verbal Communication (04 hrs)**	
9.	Use of Language in Spoken Communication,	
10.	Principles and Practice of Group Discussion,	
11.	Public Speaking (Addressing Small Groups and Making Presentation),	
12.	Interview Techniques, Appropriate Use of Non-verbal Communication,	
13.	Presentation Skills,	
14.	Extempore, Elocution.	
15.	**Unit 3: Study of Sounds in English (02 hrs)**	
16.	Introduction to phonetics, Study of Speech Organs,	
17.	Study of Phonemic Script, Articulation of Different Sounds in English.	
18.	**Unit 4:English Grammar (05 hrs)**	
19.	Grammar: Forms of Tenses.	
20.	Articles,	
21.	Prepositions,	
22.	Use of Auxiliaries and	
23.	Modal Auxiliaries,	
24.	Synonyms and Antonyms,	
25.	Common Errors.	
26.	**Unit 5: Writing Skills, Reading Skills & Listening Skills (04 hrs)**	
27.	Features of Good Language, Difference between Technical Style and Literary Style,	
28.	Writing Emails,	
29.	Formal and Informal English,	
30.	Technical Reports: Report Writing: Format, Structure and Types	
31.	Letter Writing: Types, Parts, Layouts,	
32.	Letters and Applications, Use of Different Expressions and Style,	
33.	Writing Job Application Letter and Resume.	

Head of Applied Science
Pro. S.R. Acharya

Subject Teacher
Rameshwar .B.Avhad

Prof. S, S, Surse

Teaching Plan (A.Y 2023-24)
Course Name : Engineering Physics (BTBS/ Engineering Physics 4 Credits)
Subject Teacher : Prof. Saurabh S. Surse

Lecture No	Planned Syllabus	CO
	Unit One : Oscillations and Ultrasonics (07 Hrs)	
01	Oscillation: Defination of Free Oscillation,Damped Oscillation,Forced Oscillation	1
02	Differential equation for Free Oscillation,Damped Oscillation,Forced Oscillation	1
03	Resonance and Sharpness of Resonance	1
04	Differential Wave Equation	1
05	Ultrasomc waves,Production of Ultrasonics	1
06	Pizoelectric and Magnetostriction Effect	1
07	Applic...:on of Ultrasonic and Numericals	1
	Unit Two : Optics, Fiber Optics and LASER (07 Hrs)	
08	Interference of light inthin film,wedge shaped film	2
09	Newton's Ring	2
10	Polarization of light,method for production of pokarized light	2
11	Huygen's theory of Double Refraction	2
12	Principle and Struture of Optical Fiber ,Acceptance Angle,Acceptance Cone,Numericsl Aperture	2
13	Principle of LASER, Types of LASER Ruby and	2
14	He-Ne LASER and their applications	2
	Unit Three : Electron Optics, Nuclear Physics ans Quantum Mechanics (07 Hrs)	
15	Motion of electron in Electric Field (Parallel and Perpendicular)	3
16	Motion of electron in magnetic field, motion of electron in combined effect, Bainbridge Mass Spectrograph	3
17	G.M Counter	3
18	Heisenberg's uncertaintity principle, Schrodinger's time dependent wave equation, Schrodinger's time independent wave equation	3
19	Schrodinger's time dependent wave equation, Physical Significance of Wave Function	3
	Unit Four : Crystal Struture, X-Rays and Electrodynamics (07 Hrs)	
20	Unit Cell, Bravais lattice, Cubic System	4
21	No. of atoms per unit cell , Co-ordination number, Atomic Radius	4
22	Packing density,Relation between Lattice constant and Density	4
23	Lattice Planes and Miller Indices	4
24	X-Ray Diffraction	4
25	Line and Continuous Spectrum of X-Rays	4
26	Introduction to Maxwell Equation (No Derivation)	4
	Unit Five : Magnetic, Superconducting and Semiconducting Materials (07 Hrs)	
27	Types of Magnetic Materials	5
28	B-H Curve	5
29	Superconductivity, Types of Superconductors	5
30	Meissner Effect	5
31	Properties and Application of Superconductors	5
32	Bamd Theory of Solids	5
33	Conductivity of Semi Conductors	5
34	Hall Effect	5

Dr. S.V. Munde

Teaching plan (A.Y. 2023-2024)
Course name: Engineering Physics (BTBS102/202 Engineering Physics 4 Credits)
Subject Teacher: Dr. Surekha Munde

Lecture no.	Planned syllabus	CO
	Unit One: Electron Optics and X-Rays (07 Hrs)	
1	Syllabus of Engineering physics as per DBATU, Lonere	
2	Oscillation: Definition of Free oscillation, damped oscillation, Forced oscillation	1
3	Differential equation for Free oscillation, damped oscillation, Forced oscillation	1
4	Resonance and Sharpness of Resonance	1
5	differential wave equation	1
6	Ultrasonic waves, production of ultrasonics	
7	Piezoelectric effect, Magnetostriction effect	1
8	Applications of Ultrasonics	1
	Unit Two: Optics, Fiber Optics and Laser (07 Hrs)	
9	Interference of light in thin film, wedge shaped film	2
10	Newton"s rings	2
11	polarization of light, methods for production of polarized light(Reflection, Refraction & Double refraction)	2
12	Huygen"s theory of double refraction	2
13	Principle and structure of optical fiber, acceptance angle, acceptance cone, numerical aperture.	2
14	Principle of laser, Types of laser – Ruby and He-Ne laser and their applications.	2
15		2
	Unit Three: Electron Optics, Nuclear and QuantumMechanics (07 Hrs)	
16	Motion of electron in Electric field (parallel and perpendicular)	3
17	Motion of electron in magnetic field, motion of electron in combined effect, Bainbridge mass spectrograph	3
18	G. M counter	
19	Heisenberg"s uncertainty principle, Schrödinger"s time dependent wave equations	3
20	Schrödinger"s time dependent wave equations , physical significance of wave function.	3
	Unit Four : Crystal Structure, X-rays and Electrodynamics (07 Hrs)	3
21	Unit cell, Bravais lattice, cubic system,	
22	number of atoms per unit cell, coordination number, atomic radius	4
23	packing density, relation between lattice constant and density	4
24	lattice planes and Miller indices	4
25	X-ray diffraction,	4
26	Line and Continuous Spectrum of X-ray	4
27	Introduction of Maxwell equations (no derivation)	4
	Unit V: Magnetic, Superconducting and Semiconducting materials (07 Hrs)	4
28	Types of magnetic materials (Diamagnetic, Paramagnetic and Ferromagnetic)	
29	B-H curve	4
30	Superconductivity, types of superconductors,	4
31	Meissner effect	4
32	properties and applications of superconductor,	4
33	Band theory of solids,	4
34	conductivity of semiconductors	4
35	Hall effect.	4
		4

Peoples Education Society's (Mumbai)

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS FY- B (CS- DS / ECE) TERM 2nd WITH EFFECT FROM 22/01/2024 ROOM NO. .....

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY				EM-II FY-B 14		PT & RP ECE		
TUESDAY				EM-II FY-B 14		PT & RP DS		
WEDNESDAY				PT & RP ECE		PT & RP DS		
THURSDAY				EM-II FY-B 14		PT & RP ECE		
FRIDAY				EM-II FY-B 14		PT & RP DS		
SATURDAY								

PROF. : S. R. Acharya

Date :

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS F4-B|E TERM 2nd WITH EFFECT FROM 22|01|2024 ROOM NO. .....

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY				Engg. phy F4-B 11		Engg. phy F4-E 11		
TUESDAY				Engg. phy F4-B 11		Engg. phy F4-E 14		
WEDNESDAY				Engg. phy F4-E 11	Engg. phy - E1+E2 F4-B			
THURSDAY				Engg. phy F4-B 11	Engg. phy	- E3+E4		
FRIDAY			Engg. phy F4-B 11			Engg. phy F4-E 14		
SATURDAY								

PROF. : Dr. S.V. Munde

Date : 31|01|2024

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS FY - D|E TERM 2nd WITH EFFECT FROM 22|01|2024 ROOM NO. .....

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY							✓ Em-II FY-E 11	
TUESDAY			✓Em-II FY-D 11					✓Em-II FY-E 13
WEDNESDAY			✓ Em-II FY-E 11		✓Em-II FY-D 11			
THURSDAY							✓Em-II FY-D 11	
FRIDAY					✓ Em-II FY-D 11		✓Em-II FY-E 14	
SATURDAY								

PROF. : N. K. Awasarmol

Date : 31|01|24

Ashwajeet

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS SY-CSE TERM 2nd WITH EFFECT FROM 22/01/2024 ROOM NO. .....

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY				PT & RP CSE				
TUESDAY				PT & RP CSE				
WEDNESDAY				PT & RP CSE				
THURSDAY								
FRIDAY								
SATURDAY								

PROF. : Dr. G. P. Kamble

Date :

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS FY-B|C|D|E TERM 2nd WITH EFFECT FROM 22|01|2024 ROOM NO. ....

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			✓CS - E1+ / CS - E3+	E2 (CR-13) / E4 (CR-13)	✓CS FY-B 14	✓CS FY-B 14		
TUESDAY					✓CS FY-D 11	✓CS FY-D 11		
WEDNESDAY			CS - B1+B2 / CS - B3+B4 ⟷		✓CS - C1+C2 / CS - C3+C4 ⟷			
THURSDAY			✓CS FY-E 13	✓CS FY-E 13	✓CS - D1+D2 / CS - D3+D4 ⟷			
FRIDAY					✓CS FY-C 13	✓CS FY-C 13		
SATURDAY								

PROF. : R. B. Arhad

Date : 3

(Signature) 31/01/2024

(Signature)

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS FY-B|C|D TERM 2nd WITH EFFECT FROM 22|01|2024 ROOM NO. .....

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			Engg. Phy FY-B 14		Engg. Phy	- D3+D4	Engg. Phy FY-C 13	
TUESDAY			Engg. Phy	- C3+C4	Engg. Phy	- B3+B4		Engg. Phy FY-B 14
WEDNESDAY			Engg. Phy	- D1+D2	Engg. Phy FY-B 14		Engg. Phy FY-C 13	
THURSDAY			Engg. Phy	- C1+C2	Engg. Phy FY-B 14		Engg. Phy FY-C 13	
FRIDAY				Engg. Phy FY-C 13	Engg. Phy	- B1+B2		
SATURDAY								

PROF. : S. S. Suase

Date :

Received 1-02-2024

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS F4-A TERM 2nd WITH EFFECT FROM 22/01/2024 ROOM NO. 15

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY						Engg. chem F4-A 15	Engg. chem - A3+A4	
TUESDAY			Engg. chem F4-A 15					
WEDNESDAY						Engg. chem F4-A 15	Engg. chem A1+A2	
THURSDAY								
FRIDAY			Engg. chem F4-A 15					
SATURDAY								

PROF.: Dr. A. D. Deshmukh

Date :

Deshmukh Received 31/01/2024

Athavale

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TIME TABLE FOR THE YEAR 2023 - 2024

CLASS F4-A|C TERM 2nd WITH EFFECT FROM 22|01|2024 ROOM NO. 13,15

PERIOD	1	2	3	4	5	6	7	8
TIMING	8 to 9 a.m.	9 to 10 a.m.	10-30 to 11-30 a.m.	11-30 to 12-30 p.m.	1-15 to 2-15 p.m.	2-15 to 3-15 p.m.	3-30 to 4-30 p.m.	4-30 to 5-30 p.m.
MONDAY			✓EM-II F4-A 15		✓EM-II F4-C 13			
TUESDAY					✓EM-II F4-C 13	✓EM-II F4-A 15		
WEDNESDAY			✓EM-II F4-C 13					
THURSDAY			✓EM-II F4-A 15			✓EM-II F4-C 13		
FRIDAY						✓EM-II F4-A 15		
SATURDAY								

PROF. : S. N. Admankar

Date :

Received

Achoryar

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TIME TABLE FOR THE YEAR 2023-2024

CLASS: -FY - A (MECHANICAL & CIVIL) TERM:-1ST WITH EFFECT FROM: 07/08/2023 CLASS ROOM NO.: 13

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	Engg. Phy. SVM	E&EE ASP	CS → A1÷A2(VVD) CS → A3÷A4(VVD)			
TUESDAY	Engg. Phy → A1÷A2(SVM) EG → A3÷A4(AMB)		E&EE PDA	Engg. Phy. SVM	EM-I SNA	BCME SKF
WEDENSDAY	EG → A1÷A2(AMB) Engg. Phy → A3÷A4 (SVM)		Engg. Phy. SVM	EM-I SNA		
THURSDAY	CS VVD	CS VVD	EG → A1÷A2(AMB) EG → A3÷A4(AMB)		EG AMB	EM-I NKA
FRIDAY	EG AMB	Engg. Phy. SVM	BCME APP	EM-I NKA		
SATURDAY						

SNA- S. N. Admankar (EM-I – Engineering Mathematics - I)
NKA- N. K. Awasarmal (EM-I – Engineering Mathematics - I)
SVM- S. V. Munde (Engg. Phy - Engineering Physics)
AMB- A. M. Bawiskar (EG –Engineering Graphics)
VVD- V. V. Deshpande (CS-Communication Skills)
ASP- A. S. Pande (E&EE- Energy & Environment Engineering)
PDA - P. D. Alte (E&EE- Energy & Environment Engineering)
SKF- S. K. Fatima (BCME- Basic Civil & Mechanical Engineering)
APP- A. P. Paliwal (BCME- Basic Civil & Mechanical Engineering)

FY Coordinator
PESCOE

Principal
P. E. S. College of Engineering
Aurangabad

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TIME TABLE FOR THE YEAR 2023-2024

CLASS: -FY - B (CSE) TERM:-1ST WITH EFFECT FROM: 07/08/2023 CLASS ROOM NO.: 14

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	Engg. Chem. ADD	EM-I SRA	W/S → B1+B2 Engg. Chem. → B3+B4(ADD)		EM RMS	EM RMS
TUESDAY	CPC AF	EM-I SRA	W/S → B1+B2 EM → B3+B4(NKK)		EM RMS	EM RMS
WEDENSDAY		EM-I SRA	CPC AF	Engg. Chem. ADD	EM → B1+B2(NKK) W/S → B3+B4	
THURSDAY	Engg. Chem. ADD	EM-I SRA	Engg. Chem. → B1+B2(ADD) W/S → B3+B4			
FRIDAY	BEEE VRK	Engg. Chem. ADD	BEEE RUM	CPC AF		
SATURDAY						

SRA-S. R. Acharya (EM-I – Engineering Mathematics - I)
ADD-A. D. Deshmukh (Engg. Chem. - Engineering Chemistry)
RMS-R. M. Sawant (EM-Engineering Mechanics)
AF-Arjuman Fatima (CPC- Computer Programming in C)
VRK-V. R. Kshirsagar(BEEE- Basic Electrical & Electronics Engineering)
RUM-R. U. Magre (BEEE- Basic Electrical & Electronics Engineering)

Acharya
FY Coordinator
PESCOE, Chh. Sambhajinagar

Principal
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TIME TABLE FOR THE YEAR 2023-2024

CLASS: -FY - C (CSE-DS) TERM:-1ST WITH EFFECT FROM: 07/08/2023 CLASS ROOM NO.: 13

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	W/S → C1+C2 EM → C3+C4(NKK)		BEEE VRK	CPC AF	EM-I SNA	Engg. Chem. ADD
TUESDAY	EM-I SNA	Engg. Chem. ADD	BEEE RUM	CPC AF	W/S → C1+C2 Engg. Chem. → C3+C4(ADD)	
WEDENSDAY	Engg. Chem. → C1+C2(ADD) W/S → C3+C4		EM RMS	EM RMS	Engg. Chem. ADD	
THURSDAY	EM-I SNA	CPC AF	EM RMS	EM RMS		
FRIDAY	EM → C1+C2(NKK) W/S → C3+C4		Engg. Chem. ADD	EM-I SNA		
SATURDAY						

SNA- S. N. Admankar (EM-I – Engineering Mathematics - I)

ADD-A. D. Deshmukh (Engg. Chem. - Engineering Chemistry)

RMS -R. M. Sawant (EM-Engineering Mechanics)

AF-Arjuman Fatima (CPC- Computer Programming in C)

VRK – V. R. Kshirsagar(BEEE- Basic Electrical & Electronics Engineering)

RUM-R. U. Magre (BEEE- Basic Electrical & Electronics Engineering)

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TIME TABLE FOR THE YEAR 2023-2024

CLASS: -FY - D (EE) TERM:-1ST WITH EFFECT FROM: 07/08/2023 CLASS ROOM NO.: 11

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	CPC HH	BEEE RUM	Engg. Chem. JGW	EM-I SNA	W/S → D1+D2 EM → D3+D4(PDA)	
TUESDAY	W/S → D1+D2 Engg. Chem. → D3+D4(JGW)		CPC HH	BEEE VRK	Engg. Chem. JGW	
WEDENSDAY	Engg. Chem. JGW	CPC HH	EM RMS	EM RMS	EM-I SNA	
THURSDAY	Engg. Chem. → D1+D2(JGW) W/S → D3+D4		EM RMS	EM RMS	EM-I SNA	
FRIDAY	Engg. Chem. JGW	EM-I SNA	EM → D1+D2(PDA) W/S → D3+D4			
SATURDAY						

SNA- S. N. Admankar (EM-I – Engineering Mathematics - I)

JGW-J. G.Wankhade(Engg. Chem. - Engineering Chemistry)

RMS -R. M. Sawant (EM-Engineering Mechanics)

HH-Hashmi Hadiya (CPC- Computer Programming in C)

VRK – V. R. Kshirsagar (BEEE- Basic Electrical & Electronics Engineering)

RUM-R. U. Magre (BEEE- Basic Electrical & Electronics Engineering)

FY Coordinator
PESCOE, Chh. Sambhajinagar

Principal
P. E. S. College of Engineering
Aurangabad

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P. E. S. College of Engineering, Nagsenvana, Aurangabad

TIME TABLE FOR THE YEAR 2023-2024

CLASS: -FY - E (ECE & VLSI Design Tech.) TERM:-1ST WITH EFFECT FROM: 07/08/2023 CLASS ROOM NO.: 11,13,14

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	EM-I SNA CR13	CPC HH CR13	W/S → E1+E2 ← EM → E3+E4(PDA)		EM RMS CR11	EM RMS CR11
TUESDAY			Engg. Chem. JGW CR14	EM-I SNA CR14	EM RMS CR13	EM RMS CR13
WEDENSDAY	EM-I SNA CR13	Engg. Chem. JGW CR13	W/S → E1+E2 ← Engg. Chem. → E3+E4(JGW)			
THURSDAY		CPC HH CR11	Engg. Chem. JGW CR14	EM-I SNA CR14	Engg. Chem. → E1+E2(JGW) ← W/S → E3+E4	
FRIDAY	CPC HH CR13	BEEE RUM CR13	BEEE VRK CR11	Engg. Chem. JGW CR11	EM → E1+E2(PDA) ← W/S → E3+E4	
SATURDAY						

SNA- S. N. Admankar (EM-I – Engineering Mathematics - I)

JGW-J. G.Wankhade(Engg. Chem. - Engineering Chemistry)

RMS -R. M. Sawant (EM-Engineering Mechanics)

HH-Hashmi Hadiya (CPC- Computer Programming In C)

VRK – V. R. Kshirsagar (BEEE- Basic Electrical & Electronics Engineering)

RUM-R. U. Magre (BEEE- Basic Electrical & Electronics Engineering)

FY Coordinator
PESCOE, Chh. Sambhajina.

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P. E. S. College of Engineering, Nagsenvana, Aurangabad

TIME TABLE FOR THE YEAR 2023-2024

CLASS: -FY - A (MECHANICAL & CIVIL) TERM:-2ND WITH EFFECT FROM: 01-02-2024 CLASS ROOM NO.: 15

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	EM-II SNA	EM NKK	BEEE KBG	Engg. Chem. ADD	W/S→ A1+A2 Engg. Chem.→ A3+A4(ADD)	
TUESDAY	Engg. Chem. ADD	BEEE VRK	EM NKK	EM-II SNA	W/S→ A1+A2 EM → A3+A4(NKK)	
WEDENSDAY		EM NKK	CPC HH	Engg. Chem. ADD	Engg. Chem.→ A1+A2(ADD) W/S → A3+A4	
THURSDAY	EM-II SNA	CPC HH	EM→ A1+A2(NKK) W/S → A3+A4		SEMINAR APP / SRP	SEMINAR APP / SRP
FRIDAY	Engg. Chem. ADD	CPC HH	EM NKK	EM-II SNA		
SATURDAY						

SNA –S. N. Admankar (EM-II – Engineering Mathematics–II)

ADD –A. D. Deshmukh (Engg. Chem.– Engineering Chemistry)

NKK –N. K. Kad (EM-Engineering Mechanics)

HH–Hadiya Hashmi (CPC- Computer Programming in C)

KBG – K. B. Gawale (BEEE- Basic Electrical & Electronics Engineering)

VRK – V. R. Kshirsagar (BEEE- Basic Electrical & Electronics Engineering)

APP – A. P. Paliwal (SEMINAR- Dept. of Mech&Auto -Roll No. A1 to A17)

SRP – S. R. Phulpagar (SEMINAR- Dept. of CIVIL -Roll No. A24 to A45)

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TIME TABLE FOR THE YEAR 2023-2024

CLASS:-FY -B(CSE) TERM:-2ND WITH EFFECT FROM: 01-02-2024 CLASS ROOM NO.: 14

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	Engg. Phy SSS	EM-II SRA	CS RBA	CS RBA	EG → B3+B4(AMB)	
TUESDAY	BCME APP	EM-II SRA	EG → B1+B2(AMB) Engg. Phy→ B3+B4(SSS)		E&EE KBG	Engg. Phy SSS
WEDENSDAY	CS → B1+B2(RBA) CS → B3+B4(RBA)		Engg. Phy SSS	EG AMB	SEMINAR MNB/HH	SEMINAR MNB/HH
THURSDAY	BCME SRP	EM-II SRA	Engg. Phy SSS	EG AMB	EG → B1+B2(AMB)	
FRIDAY	E&EE NKK	EM-II SRA	Engg. Phy→ B1+B2(SSS) EG → B3+B4(AMB)			
SATURDAY						

SRA -S. R. Acharya (EM-II – Engineering Mathematics -II)

SSS - S. S. Surse (Engg. Phy - Engineering Physics)

AMB - A. M. Baviskar (EG –Engineering Graphics)

RBA– R. B. Avhad (CS-Communication Skills)

KBG - K. B.Gawale (E&EE- Energy & Environment Engineering)

NKK –N. K. Kad (E&EE- Energy & Environment Engineering)

SRP – S. R. Phulpagar (BCME- Basic Civil & Mechanical Engineering)

APP- A. P. Paliwal (BCME- Basic Civil & Mechanical Engineering)

MNB – M. N. Bhosale (SEMINAR- Dept. of CSE-Roll No. B1 to B65)

HH – Hadiya Hashmi (SEMINAR- Dept. of CSE-Roll No. B1 to B65)

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TIME TABLE FOR THE YEAR 2023-2024

CLASS:-FY C (CSE-DS) TERM:-2ND WITH EFFECT FROM: 01-02-2024 CLASS ROOM NO.: 13

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	EG → C1+C2(APP)		EM-II SNA	EG APP	Engg. Phy SSS	BCME SKU
TUESDAY	EG → C1+C2(APP) Engg. Phy → C3+C4 (SSS)		EM-II SNA	EG APP	SEMINAR HH/SAK	SEMINAR HH/SAK
WEDENSDAY	EM-II SNA	E&EE CRG	CS → C1+C2(RBA) CS → C3+C4(RBA)		Engg. Phy SSS	
THURSDAY	Engg. Phy → C1+C2 (SSS) EG→ C3+C4(APP)		E&EE RUM	EM-II SNA	Engg. Phy SSS	
FRIDAY	BCME SRP	Engg. Phy SSS	CS RBA	CS RBA		
SATURDAY	EG→ C3+C4(APP)					

SNA –S. N. Admankar (EM-II – Engineering Mathematics - II)

SSS - S. S. Surse (Engg. Phy - Engineering Physics)

APP- A. P. Paliwal (EG –Engineering Graphics)

RBA– R. B. Avhad (CS-Communication Skills)

RUM - R. U. Magare (E&EE- Energy & Environment Engineering)

CRG– C. R. Ghushinge (E&EE- Energy & Environment Engineering)

SRP – S. R. Phulpagar (BCME- Basic Civil & Mechanical Engineering)

SKU - S. K. Undirwade (BCME- Basic Civil & Mechanical Engineering)

HH – Hadiya Hashmi (SEMINAR- Dept. of CSE - Roll No. C1 to C67)

SAK – S. A. Khusro (SEMINAR- Dept. of CSE - Roll No. C1 to C67)

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TIME TABLE FOR THE YEAR 2023-2024

CLASS:-FY D (EE) TERM:-2ND WITH EFFECT FROM: 01-02-2024 CLASS ROOM NO.: 11

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	E&EE RUM	Engg. Phy SVM	EG→ D1+D2(ABG) Engg. Phy → D3+D4(SSS)			
TUESDAY	EM-II NKA	Engg. Phy SVM	CS RBA	CS RBA	EG→ D1+D2(ABG)	
WEDENSDAY	Engg. Phy → D1+D2(SSS) EG → D3+D4(ABG)		EM-II NKA	BCME SRP	SEMINAR IRK	SEMINAR IRK
THURSDAY	EG ABG	Engg. Phy SVM	CS → D1+D2(RBA) CS → D3+D4(RBA)		EM-II NKA	E&EE NKK
FRIDAY	Engg. Phy SVM	EG ABG	EM-II NKA	BCME SKU	EG → D3+D4(ABG)	
SATURDAY						

NKA -N. K. Awasarmol (EM-II – Engineering Mathematics -II)

SVM – S. V. Munde (Engg. Phy - Engineering Physics)

ABG - A. B. Gadekar (EG –Engineering Graphics)

RBA– R. B. Avhad (CS-Communication Skills)

RUM - R. U. Magare (E&EE- Energy & Environment Engineering)

NKK –N. K. Kad (E&EE- Energy & Environment Engineering)

SRP – S. R. Phulpagar (BCME- Basic Civil & Mechanical Engineering)

SKU - S. K. Undirwade (BCME- Basic Civil & Mechanical Engineering)

IRK – I. R. Kadri (SEMINAR- Dept. of EE - Roll No. D1 to D54)

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TIME TABLE FOR THE YEAR 2023-2024

CLASS:-FY E (ECE & VLSI Tech.) TERM:-2ND WITH EFFECT FROM: 01-02-2024 CLASS ROOM NO.: 11/13/14

PERIODS	1	2	3	4	5	6
TIMING	10:30 to 11:30	11:30 to12:30	1:15 to2:15	2:15 to3:15	3:30 to4:30	4:30 to5:30
MONDAY	CS → E1+E2(RBA)-CR-13 CS → E3+E4(RBA)-CR-13		EG VDS CR-11	Engg. Phy SVM CR-11	EM-II NKA CR-11	
TUESDAY	BCME SRP CR-13	EG VDS CR-13	E&EE RUM CR-14	Engg. Phy SVM CR-14	BCME SKU CR-13	EM-II NKA CR-13
WEDENSDAY	EM-II NKA CR-11	Engg. Phy SVM CR-11	Engg. Phy → E1+E2(SVM) EG → E3+E4(VDS)		EG → E1+E2(VDS)	
THURSDAY	CS RBA CR-13	CS RBA CR-13	EG → E1+E2(VDS) Engg. Phy → E3+E4(SVM)		SEMINAR VRK/SCK	SEMINAR VRK/SCK
FRIDAY	EG → E3+E4(VDS)		E&EE CRG CR-14	Engg. Phy SVM CR-14	EM-II NKA CR-14	
SATURDAY						

NKA -N. K. Awasarmol (EM-II – Engineering Mathematics -II)

SVM – S. V. Munde (Engg. Phy - Engineering Physics)

VDS - V. D. Shejwal (EG –Engineering Graphics)

RBA– R. B. Avhad (CS-Communication Skills)

RUM - R. U. Magare (E&EE- Energy & Environment Engineering)

CRG– C. R. Ghushinge (E&EE- Energy & Environment Engineering)

SRP – S. R. Phulpagar (BCME- Basic Civil & Mechanical Engineering)

SKU - S. K. Undirwade (BCME- Basic Civil & Mechanical Engineering)

VRK – V. R. Kshirsagar (SEMINAR- Dept. of ECE - Roll No. E1 to E30)

SCK – S. C. Kathar (SEMINAR- Dept. of VLSI - Roll No. E31 to E55)

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TEACHING PLAN (2023-2024 – 1st Semester)

SUBJECT:- ENGINEERING MATHEMATICS – I(BTBS101)

Lecture No.	TOPIC	% Syllabus
1	**Unit 1: Linear Algebra-Matrices:** Rank of matrix-Normal form	
2	Inverse of a matrix by Gauss-Jordan method	
3	Consistency of non-homogeneous system of linear equations	
4	Consistency of homogeneous system of linear equations	
5	Eigen values and eigen vectors and their properties	
6	Eigen values and eigen vectors and their properties	
7	Cayley- Hamilton Theorem (without proof) and its Applications.	
8	**Unit 2: Partial Differentiation:** Partial Derivatives of first and higher orders	
9	Partial Derivatives of first and higher orders	
10	Homogeneous functions-Euler's Theorem for two variables	
11	Homogeneous functions-Euler's Theorem for three variables	
12	Total derivative	
13	Change of independent Variables	
14	Change of independent Variables	
15	**Unit 3: Application of Partial Differentiation:** Jacobian	
16	Properties of Jacobian	
17	Taylor's theorem for function of two variables	
18	Maclaurin's theorem for function of two variables	
19	Maxima and Minima of Functions of two variables	
20	Maxima and Minima of Functions of two variables	
21	Lagrange's method of undetermined multipliers	
22	**Unit 4: Reduction Formulae and Curve Tracing:** Reduction formula for $_0\int^{\pi/2}\sin^n x\,dx, {}_0\int^{\pi/2}\cos^n x\,dx, {}_0\int^{\pi/2}\sin^m x\cos^n x\,dx$	
23	Reduction formula for $_0\int^{\pi/2}\sin^n x\,dx, {}_0\int^{\pi/2}\cos^n x\,dx, {}_0\int^{\pi/2}\sin^m x\cos^n x\,dx$	
24	Curve tracing in Cartesian form	
25	Curve tracing in Cartesian form	
26	Curve tracing in Polar form	
27	Curve tracing in Polar form	
28	Curve tracing in Parametric form	
29	**Unit 5: Multiple integral and their Applications:** Evaluation of Double integrals in Cartesian coordinates	
30	Evaluation of Double integrals in Cartesian coordinates	
31	Change of order of integration	
32	Evaluation of Double integral by changing to polar coordinates	
33	Triple integral	
34	Application of Multiple integrals to find area as double integral	
35	Application of Multiple integrals to find volume as triple integral	
36	Application of Multiple integrals to find surface area	

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TEACHING PLAN (2023-2024– 2ND Semester)

SUBJECT:- ENGINEERING MATHEMATICS – II (BTBS201)

Lecture No.	TOPIC	% Syllabus
1	**Unit 1: Complex Numbers:** Definition & geometrical representation	
2	De-Moivre's theorem	
3	Roots of complex numbers by using De-Moivre's theorem	
4	Circular & Hyperbolic function of complex variable	
5	Relation between circular and hyperbolic function	
6	Real and imaginary parts of circular and hyperbolic functions	
7	Logarithm of complex quantities	
8	**Unit 2: Ordinary Differential Eq^{n} of 1st Order and 1st Degree & Their Applications:** Linear equations	
9	Reducible to linear equations(Bernoulli's equation)	
10	Exact differential equation	
11	Equations reducible to exact equations	
12	Applications to orthogonal Trajectories	
13	Applications to mechanical systems	
14	Applications to electrical systems	
15	**Unit 3: Linear Differential Eq^{ns} with Constant Coefficients:** Introductory remarks – C.F. and P.I.	
16	Rules of finding complementary function	
17	Rules of finding particular integral	
18	Rules of finding particular integral	
19	Method of variation of parameters	
20	Cauchy's homogeneous equation	
21	Legendre's linear equation	
22	**Unit 4: Fourier Series:** Introductory remarks- Euler's formulae, Conditions for Fourier series expansion-Dirichlet's conditions	
23	Functions having points of discontinuity	
24	Change of interval	
25	Odd & even function- expansion of odd & even periodic functions	
26	Odd & even function- expansion of odd & even periodic functions	
27	Half range Fourier sine series	
28	Half range Fourier cosine series	
29	**Unit 5: Vector Calculus:** Scalar and vector fields, Gradient	
30	Divergence and curl	
31	Solenoidal and irrotational vector fields	
32	Line integral	
33	Green's lemma	
34	Gauss's divergence theorem	
35	Stoke's theorem	

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SRA

Teaching plan (A.Y. 2023-2024)
Course name: Engineering Physics (BTBS102/202 Engineering Physics 4 Credits)
Subject Teacher: Dr. Surekha Munde

Lecture no.	Planned syllabus	CO
	Unit One: Oscillation and Ultrasonics (07 Hrs)	
1	**Syllabus of Engineering physics as per DBATU, Lonere**	CO1
2	Oscillation: Definition of Free oscillation, damped oscillation, Forced oscillation	CO1
3	Differential equation for Free oscillation, damped oscillation, Forced oscillation	CO1
4	Resonance and Sharpness of Resonance	CO1
5	differential wave equation	CO1
6	Ultrasonic waves, production of ultrasonics	CO1
7	Piezoelectric effect, Magnetostriction effect	CO1
8	Applications of Ultrasonics	CO1
	Unit Two: Optics, Fiber Optics and Laser (07 Hrs)	
9	Interference of light in thin film, wedge shaped film	CO2
10	Newton"s rings	CO2
11	polarization of light, methods for production of polarized light(Reflection, Refraction & Double refraction)	CO2
12	Huygen"s theory of double refraction	CO2
13	Principle and structure of optical fiber, acceptance angle, acceptance cone, numerical aperture.	CO2
14	Principle of laser, Types of laser – Ruby and	CO2
15	He-Ne laser and their applications.	CO2
	Unit Three: Electron Optics, Nuclear and QuantumMechanics (07 Hrs)	
16	Motion of electron in Electric field (parallel and perpendicular)	CO3
17	Motion of electron in magnetic field, motion of electron in combined effect, Bainbridge mass spectrograph	CO3
18	G. M counter	CO3
19	Heisenberg"s uncertainty principle, Schrödinger"s time dependent wave equations	CO3
20	Schrödinger"s time dependent wave equations , physical significance of wave function.	CO3
	Unit Four : Crystal Structure, X-rays and Electrodynamics (07 Hrs)	
21	Unit cell, Bravais lattice, cubic system,	CO4
22	number of atoms per unit cell, coordination number, atomic radius	CO4
23	packing density, relation between lattice constant and density	CO4
24	lattice planes and Miller indices	CO4
25	X-ray diffraction,	CO4
26	Line and Continuous Spectrum of X-ray	CO4
27	Introduction of Maxwell equations (no derivation)	CO4
	Unit V: Magnetic, Superconducting and Semiconducting materials (07 Hrs)	
28	Types of magnetic materials (Diamagnetic, Paramagnetic and Ferromagnetic)	CO
29	B-H curve	CO
30	Superconductivity, types of superconductors,	CO
31	Meissner effect	CO
32	properties and applications of superconductor,	CO
33	Band theory of solids,	CO
34	conductivity of semiconductors	CO
35	Hall effect.	CO

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2023 – 2024

P.E.S College of Engineering
Nagsenvana, Chhatrapati Sambhajinagar
Teaching Plan

Course Name: Communication Skill **(BTHM104/204)**
Subject Teacher: Rameshwar B.Avhad

1.	**Unit 1: Communication and Communication Processes (04hrs)** Introduction to Communication,	% Syllabus Covered
2.	Forms and functions of Communication,	
3.	Barriers to Communication and overcoming them,	
4.	Verbal and Non-verbal Communication	
5.	Reading: Introduction to Reading, Barriers to Reading, Types of Reading: Skimming, Scanning, Fast Reading, Strategies for Reading,	
6.	Comprehension.	
7.	Listening: Importance of Listening, Types of Listening, and Barriers to Listening.	
8.	**Unit 2: Verbal & Non-verbal Communication (04 hrs)**	
9.	Use of Language in Spoken Communication,	
10.	Principles and Practice of Group Discussion,	
11.	Public Speaking (Addressing Small Groups and Making Presentation),	
12.	Interview Techniques, Appropriate Use of Non-verbal Communication,	
13.	Presentation Skills,	
14.	Extempore, Elocution.	
15.	Unit 3: Study of Sounds in English (02 hrs)	
16.	Introduction to phonetics, Study of Speech Organs,	
17.	Study of Phonemic Script, Articulation of Different Sounds in English.	
18.	**Unit 4:English Grammar (05 hrs)**	
19.	Grammar: Forms of Tenses,	
20.	Articles,	
21.	Prepositions,	
22.	Use of Auxiliaries and	
23.	Modal Auxiliaries,	
24.	Synonyms and Antonyms,	
25.	Common Errors.	
26.	**Unit 5: Writing Skills, Reading Skills & Listening Skills (04 hrs)**	
27.	Features of Good Language, Difference between Technical Style and Literary Style,	
28.	Writing Emails,	
29.	Formal and Informal English,	
30.	Technical Reports: Report Writing: Format, Structure and Types	
31.	Letter Writing: Types, Parts, Layouts,	
32.	Letters and Applications, Use of Different Expressions and Style,	
33.	Writing Job Application Letter and Resume.	
	Head of Applied Science Pro. S.R. Acharya	Subject Teacher Rameshwar .B.Avhad

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P.E.S. College of engineering

Nagsenvan, Aurangabad

Department of Civil Engineering [Academic Year 2023-2024]

SUBJECT: - BTES203 – Engineering Mechanics	Class -First Year
SUBJECT TEACHER: - **Prof. Nandini K. Kad**	B. Tech

Lesson Plan

Lect. No.	Topic	Portion Covered	
	Module 1: Basic Concepts		
1	Objectives of Engineering Analysis and Design, Idealization of Engineering Problems, Simplification of real 3D problems to 2-D and 1-D domain	100 %	1
2	Basis of Assumptions, types of supports, types of load, free body diagram		1
3	Laws of Motion, Fundamental principles, Resolution and composition of a forces		1
4	Resultant, couple, moment		1
5	Varignon's theorem, force systems		1
6	Centroid of composite shapes		1
7	moment of inertia of planer sectionsand radius of gyration		1
	Module 2: Equilibrium		
8	Static equilibrium, analytical and graphical conditions of equilibrium	100 %	1
9	Lami's theorem		1
10	equilibrium of coplanar concurrent forces, coplanar non concurrent forces		1
11	parallel forces,beams reactions		1
12	Simple trusses (plane and space),		1
13	method of joints for plane trusses		1
14	method of sections for plane trusses		1
15	**Friction:**Coulomb law		1
16	friction angles		1
17	wedge friction		1
18	sliding friction and rolling resistance		1
	Module 3: Kinematics		
19	Types of motions, kinematics of particles		1

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Lect. No.	Topic		
20	rectilinear motion		
21	constant and variable acceleration		
22	relative motion, motion under gravity		
23	study of motion diagrams		
24	angular motion, tangential and radial acceleration		
25	projectile motion		
26	kinematics of rigid bodies, concept of instantaneous center of rotation		
27	concept of relative velocity		
	Module 4: Kinetics		
28	Mass moment of inertia, kinetics of particle		
29	D'Alembert's principle		
30	applications in linear motion, kinetics of rigid bodies		
31	applications in translation	100%	
32	applications in fixed axis rotation		
	Module 5: Work, Power, Energy		
33	Principle of virtual work,		
34	virtual displacements for particle and rigid bodies		
35	work done by a force		
36	spring, potential energy		
37	kinetic energy of linear motion and rotation		
38	work energy equation	10%	
39	conservation of energy		
40	power, impulse momentum principle		
41	collision of elastic bodies		

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Subject Teacher

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Head

EG- V. D. Shejwal
2023 - 2024

TEACHING PLAN

(As per university syllabus)

Sr No.	TOPIC	SYLLABUS %
1	**Unit 1: Drawing standards and geometrical construction:** Drawing standard SP: 46, Type of lines,	4%
2	Lettering, dimensioning, scales conventions.	4%
3	Geometrical construction: Dividing a given straight line into any number of equal parts,	4%
4	bisecting a given angle, drawing a regular polygon given one side,	4%
5	Special methods of constructing a pentagon and a hexagon.	4%
6	**Unit 2: Orthographic Projections and Projections of Points:** Introduction to orthographic projection	4%
7	drawing of orthographic views of objects from their isometric views part 1	4%
8	drawing of orthographic views of objects from their isometric views part 2	4%
9	Projection of points lying in four quadrants	4%
10	Types Projection of points.	4%
11	**Unit 3: Projections of Straight Lines and Planes and their Traces :** Projections of lines parallel and perpendicular to one or both planes,	4%
12	Projections of lines inclined to one or both planes. Traces of lines.	4%
13	Projections of planes parallel and perpendicular to one or both planes	4%
14	Projection of planes inclined to one or both planes.	4%
15	**Unit 4: Projections of Solids:** Types of solids,	4%
16	projections of solids with axis perpendicular and parallel to HP and VP	4%
17	solids with axis inclined to one or both the planes	4%
18	Projections of spheres touching each other.	4%
19	**Unit 5: Sectioning of Solids, Isometric Projections :**	4%
20	Sectioning of solids: Section planes perpendicular to one plane	4%
21	Section planes perpendicular to one plane and parallel or inclined to other plane	4%
22	Isometric projections:	4%
23	Isometric scale, drawing of isometric projections from given orthographic views.	4%
24	Practice numerical on isometric projection	2%
25	Practice numerical on orthographic projection	4%
26	Practice numerical on projection lines	2%
Completion of syllabus		**100%**

Ashwini
FY Coordinator
PESCOE, Chh. Sambhajinagar

A.Y - 2023-24.
Sem - II.

Class:- FY - D.

TEACHING PLAN

Subject:- Engg. Graphics (AS PER UNIVERSITY SYLLABUS)

Prof. A.B. Gadekar

SR.NO.	TOPIC	% SYLLYBUS
1	Unit 1 - Drawing Standards & Geometrical Constructions - Drawing Standards - SP46.	20%
2	Types of Lines, lettering, dimensioning etc. Geometrical Constructions.	
3	Drawing regular polygon of given one side.	
4	Special Methods of constructing a pentagon & hexagon.	
5	Unit - II Orthographic Projections & Projections of Points:	40%
6	Introduction. Drawing of Orthographic views of object	
7	from their isometric views. Projection of points	
8	lying in four quadrants.	
9	Unit - III Projection of straight line & planes &	60%
10	their traces. Projection of lines parallel & perpendicular to	
11	one or both planes Projection of line inclined to one or both planes,	
12	projection of planes parallel & perpendicular to one or both plane.	
13	Projection of Solids (Unit - IV), Types of solids with	30%
14	axis - perpendicular & parallel to HP & VP. Solids with	
15	axis inclined to one or both planes. Projection	
16	of spheres touching each other.	
17	Unit V Sectioning of Solids, Isometric Projections.	100%
18	Sectioning of Solids, Section plane perpendicular	
19	to one plane & parallel or inclined to other plane.	
20	Isometric Projection from given orthographic views	
21		
22		
23		
24		
25		
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Prof. A.B. Gadekar

FY Coordinator
PESCOE, Chh. Sambhajinagar

P.E.S. College of engineering

Nagsenvan, Aurangabad

Department of Civil Engineering

SUBJECT: - BTES106 – Basic Civil and Mechanical Engineering Class – First Year

SUBJECT TEACHER: - **Prof. S.R. Phulpagar** B. Tech

Lesson Plan

Lect. No.	Topic	Portion Covered	Date
	Module 1: Introduction to civil engineering		
1	Various Branches, role of civil engineer in various construction activities		
2	Basic engineering properties and uses of materials: earth, bricks		
3	Timber, stones, sand, aggregates, cement, mortar		
4	Concrete, steel, bitumen, glass, FRP, composite materials.		
	Module 2: Module 2: Building Components & Building Planning		
5	Foundation and superstructure, functions of foundation, types of shallow and deep foundations		
6	suitability in different situation, plinth, walls, lintels		
7	beams, columns, slabs, roofs, staircases, floors, doors, windows,		
8	sills, Study of Building plans, ventilation, basics of plumbing and sanitation		
	Module 3: Surveying		
9	Principles of survey, elements of distance and angular measurements		
10	plotting of area, base line and offsets, introduction to Plane table surveying		
11	introduction to levelling, concept of bench marks,		
12	reduced level, contours		

Subject Teacher
Dr. S. R. Phulpagar

FY Coordinator
PESCOE, Chh. Sambhajinagar

Head