Department of Civil Engineering

		B. Tech Scheme 2022-23
SEMESTER		1
	Course	-
Category	Code	Course Title
BSC	1FY2-01	Engineering Mathematics-I
BSC	1FY2-03	Engineering Chemistry
HSMC	1FY1-04	Communication Skills
ESC	1FY3-06	Programming for Problem Solving
ESC	1FY3-09	Basic Civil Engineering
BSC	1FY2-21	Engineering Chemistry Lab
HSMC	1FY1-22	Human Values Activities
ESC	1FY3-24	Computer Programming Lab
ESC	1FY3-27	Basic Civil Engineering Lab
ESC	1FY3-28	Computer Aided Engineering Graphics
SODECA	1FY8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		2
Category	Course Code	Course Title
BSC	2FY2-01	Engineering Mathematics-II
BSC	2FY2-02	Engineering Physics
HSMC	2FY1-05	Human Values
ESC	2FY3-07	Basic Mechanical Engineering
ESC	2FY3-08	Basic Electrical Engineering
BSC	2FY2-20	Engineering Physics Lab
HSMC	2FY1-23	Human Values Activities
ESC	2FY3-25	Manufacturing Practices Workshop
ESC	2FY3-26	Basic Electrical Engineering Lab
ESC	2FY3-29	Computer Aided Machine Drawing
SODECA	2FY8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		3
Category	Course Code	Course Title
BSC	3CE2-01	ADVANCE ENGINEERING MATHEMATICS-I
HSMC	3CE1-02	TECHNICAL COMMUNICATION
ESC	3CE3-04	Engineering Mechanics
PCC	3CE4-05	SURVEYING
PCC	3CE4-06	FLUID MECHANICS



SODECA	3CE8-00	Social Outreach, Discipline & Extra Curricular Activities
PSIT	3CE7-30	Industrial Training
PCC	3CE4-25	Geology Lab
PCC	3CE4-24	Civil Engineering Maretials Lab
PCC	3CE4-23	Computer Aided Civil Engineering Drawing
PCC	3CE4-22	Fluid Mechanics Lab
PCC	3CE4-21	Surveying Lab
PCC	3CE4-08	ENGINEERING GEOLOGY
PCC	3CE4-07	BUILDING MATERIALS AND CONSTRUCTION

SEMESTER		4	
Category	Course Code	Course Title	
BSC	4CE2-01	ADVANCE ENGINEERING MATHEMATICS-II	
HSMC	4CE1-03	MANAGERIAL ECONOMICS AND FINANCIAL ACCOUNTING	
ESC	4CE3-04	BASIC ELECTRONICS FOR CIVIL ENGINEERING APPLICATIONS	
PCC	4CE4-05	STRENGTH OF MATERIALS	
PCC	4CE4-06	HYDRAULICS ENGINEERING	
PCC	4CE4-07	BUILDING PLANNING	
PCC	4CE4-08	CONCRETE TECHNOLOGY	
PCC	4CE4-21	Material Testing Lab	
PCC	4CE4-22	Hydraulics Engineering Lab	
PCC	4CE4-23	Building Drawing	
PCC	4CE4-24	Advanced Surveying Lab	
PCC	4CE4-25	Concrete Lab	
SODECA	4CE8-00	Social Outreach, Discipline & Extra Curricular Activities	

SEMESTER		5
Category	Course Code	Course Title
ESC	5CE3-01	CONSTRUCTION TECHNOLOGY AND EQUIPMENT
PCC	5CE4-02	STRUCTURE ANALYSIS-I
PCC	5CE4-03	DESIGN OF CONCRETE STRUCTURES
PCC	5CE4-04	GEOTECHNICAL ENGINEERING
PCC	5CE4-05	WATER RESOURCE ENGINEERING
PCC	5CE5-13	Town Planning
PCC	5CE5-14	Repair and Rehabilitation of Structures
PCC	5CE4-21	Concrete Structures Design
PCC	5CE4-22	Geotechnical Engineering Lab
PCC	5CE4-23	Water Resource Engineering Design
PSIT	5CE7-30	Industrial Training

SODECA	5CE8-00	Social Outreach, Discipline & Extra Curricular Activities	
SEMESTER		6	
Category	Course Code	Course Title	
ESC	6CE3-01	WIND AND SEISMIC ANALYSIS	
PCC	6CE4-02	STRUCTURAL ANALYSIS-II	
PCC	6CE4-03	ENVIRONMENTAL ENGINEERING	
PCC	6CE4-04	DESIGN OF STEEL STRUCTURES	
PCC	6CE4-05	Estimating & Costing	
PCC	6CE5-12	SOLID AND HAZARDOUS WASTE MANAGEMENT	
PCC	6CE5-16	Geographic Information System & Remote Sensing	
PCC	6CE4-21	Environmental Engineering Design and Lab	
PCC	6CE4-22	Steel Structure Design	
PCC	6CE4-23	Quantity Surveying and Valuation	
PCC	6CE4-24	Water and Earth Retaining Structures Design	
PCC	6CE4-25	Foundation Design	
SODECA	6CE8-00	Social Outreach, Discipline & Extra Curricular Activities	
SEMESTER		7	
Category	Course Code	Course Title	
PEC	7CE4-01	Transportation Engineering	
OE	7AG6- 60.2	Environmental Engineering and Disaster Management	
PCC	7CE4-21	Road Material Testing Lab	
PCC	7CE4-22	Professional Practices & Field Engineering Lab	
PCC	7CE4-23	Soft Skills Lab	
PCC	7CE4-24	Environmental Monitoring and Design Lab	
PSIT	7CE7-30	Practical Training	
PSIT	7CE7-40	Seminar	
SODECA	7CE8-00	Social Outreach, Discipline & Extra Curricular Activities	
SEMESTER		8	
Category	Course Code	Course Title	
PEC	8CE4-01	Project Planning and Construction Management	
OE	8TT6-60.2	Disaster Management	
PCC	8CE4-21	Project Planning & Construction Management Lab	
PCC	8CE4-22	Pavement Design	
PSIT	8CE7-50	Project	
SODECA	8CE8-00	Social Outreach, Discipline & Extra Curricular Activities	

<u>List & Description</u> of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

CIVIL ENGINEERING DEPARTMENT

S.NO	NAME OF	YEAR	SEM
501(0	THE COURSE		22112
1	Project	IV	VIII
	Planning &		
	Construction		
	Management		
	<u>Description</u>	This course guides the planning of a project in available resources. We different types of visual one can get to know he a project to complete it of time by optimizing the Methods such as critical PERT are used to analy the project flow in a bettechniques are induced particular time.	n accordance with the ith the help of al graphs and figures ow someone can plan a specified interval the resources. al path method and yze the structure of etter way and others
2	Professional	IV	VII
	Practices &		
	Field		
	Engineering		
	Lab		
		This lab course helps s	
		detailed estimates of an	•
		work. By introducing s	
		as center line method,	•
		method one can easily	
		dimension of a buildin	
		students in understand	ing the basic

		concepts of rate analys	is, depreciation of
		building, salvage value	-
		6,	
3	Discipline & Extra	IV	VIII
	Curricular activity		
	V	The primary goals of e	xtracurricular
		activities focus on the	individual student
		level, the institutional l	level, and the broader
		community level. Thes	e activities exist to
		complement the univer	sity's academic
		curriculum and to augr	
		educational experience	. Extracurricular
		activities provide a sett	ting to become
		involved and to interac	t with other students,
		thus leading to increase	<u> </u>
		enhanced development	.• [
4	Communication	I	I
	Skills		
		This course helps stude	-
		professional communic	•
		successful business int	
		chapter focuses on a pa	
		communication in Eng	•
		speaking at meetings a	
		presentations, and netw Whether a person want	_
		potential employers, er	
		clients, better English	
		help them achieve their	
		professional goals. Thi	• •
		especially on making t	
		connections to take the	•
		the next level.	

5	Human Values	I	I
		The Courses Human V	alues envisages to
		instill the ethical value	s and to provide the
		knowledge about Ethic	es as a subject matter.
		The Course Human Va	lue Education is
		aimed at providing the	students with
		knowledge on Value S	ystem and its
		importance in Human	existence. The
		objective of the course	is listed as: Values
		are socially accepted n	orms to evaluate
		objects, persons, and si	ituations that form
		part and parcel of socia	ality. A value system
		is a set of consistent va	llues and measures.
		Knowledge of the valu	es are inculcated
		through education. It c	ontributes in forming
		true human being, who	are able to face life
		and make it meaningfu	1.
6	Human Values	I	II
	Activities		
		Human Values involve	es various classroom
		activities through which	
		measure of and improv	
		inherent qualities, inclu	
		confidence, co-operation	on, respect and
		empathy.	2.1.
		Each activity featured	-
		innovation is focused of	-
		values. The positive ch	•
		learning environment t	•
		activities can be ensure	· · ·
		out on a regular basis t	•
		course. Activities Inclu	
		Guides, Planning, Imp	
		Surveying and many m	iore.

7	Technical	II	III/IV
	Communication		
		In this course students	will practice
		designing and giving s	*
		presentations. Students	<u> </u>
		communicate across cu	
		generations, how to cre	_
		and leadership presenc	e and how to hold
		effective meetings with	n global teams.
		Students will learn how	v to handle difficult
		conversations, and hov	v to handle crisis
		communication; studer	nts will also learn
		writing skills immedia	tely applicable in
		their daily activities.	
8	Social	II	III/IV
	Outreach,		
	Discipline &		
	Extra		
	Curricular		
	Activities	TT1 1 C	
		The primary goals of e	
		activities focus on the	
		level, the institutional level. Thes	
		•	
		complement the univer	•
		educational experience	
		activities provide a set	
		involved and to interact	•
		thus leading to increase	,
		enhanced development	_
9	Technical	III	IV
	Communication		·
		In this course students	will practice
		designing and giving s	-
		presentations. Students	s will learn how to
		communicate across cu	ultures, genders, and

		generations, how to create and leadership presence effective meetings with Students will learn how conversations, and how communication; students writing skills immediately activities.	e and how to hold n global teams. v to handle difficult v to handle crisis nts will also learn
10	Disaster	their daily activities. IV	VIII
	Management	Disastar Managamant	provides detailed
		Disaster Management knowledge to students	
		preparedness, reducing	
		rehabilitation. This cou	
		with a regional, nation	-
		perspective on disaster	management.
11	Solid and	III	VI
	Hazardous		
	Waste		
	Management	This course provides s	tudants with an
		overview of the munic	
		management situation	-
		income countries. It co	
		the waste management	•
		technical, environment	al, social, financial
		and institutional aspect	
		understanding the chal	•
		be introduced to appro	•
		applied solutions throu studies.	igh selected case
		stadios.	
12	Environmental Engineering	III	VI
		Environmental enginee	ering is a subfield of
		engineering that is con	cerned with the

		nuotoation and mass-	otion of the
		protection and preserva	
		environment and envir	
		as well as the protection	n of populations
		from environmental th	reats. Environmental
		engineers study popula	tion growth and
		monitor air and water of	
13	Environmental	III	VI
	Engineering		· -
	Lab		
	Lab		
		The Environmental Enpractical provides good different experimental Environmental Engine performs various test of sewage samples to che dissolved solids, BOD suspended particles etc.	I insight into methods relevant to ering. In this lab we n drinker water and ck pH value, total and COD, total
14	Environmental	IV	VII
	monitoring &		
	Design Lab		
		Environmental monitor	ring lab uses
		instruments to carry ou	~
		baseline and compliance	
		walk of sectors like per	
		cement, highways, hou	
		infrastructure for EIA	•
		Sampling and Testing	
		Air, Water, Soil, Noise	
		·	
		Stationary Sources, Sta	•
		and Hazardous Wastes	•
		Hydrocarbons, Fugitiv Indoor gas quality, Me	

Department of Computer Science Engineering

В. 1	Tech Scheme 2022-23	
	1	
Course Code	Course Title	
1FY2-01	Engineering Mathematics-I	
1FY2-03	Engineering Chemistry	
1FY1-04	Communication Skills	
1FY3-06	Programming for Problem Solving	
1FY3-09	Basic Civil Engineering	
1FY2-21	Engineering Chemistry Lab	
1FY1-22	Human Values Activities	
1FY3-24	Computer Programming Lab	
1FY3-27	Basic Civil Engineering Lab	
1FY3-28	Computer Aided Engineering Graphics	
1FY8-00	Social Outreach, Discipline & Extra Curricular Activities	
<u>. </u>	2	
Course Code	Course Title	
2FY2-01	Engineering Mathematics-II	
2FY2-02	Engineering Physics	
2FY1-05	Human Values	
ATT 70 0=		
2FY3-07	Basic Mechanical Engineering	
2FY3-07 2FY3-08	Basic Mechanical Engineering Basic Electrical Engineering	
2FY3-08	Basic Electrical Engineering	
2FY3-08 2FY2-20 2FY1-23 2FY3-25	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop	
2FY3-08 2FY2-20 2FY1-23	Basic Electrical Engineering Engineering Physics Lab Human Values Activities	
2FY3-08 2FY2-20 2FY1-23 2FY3-25	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing	
2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab	
2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular	
2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular	
2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities	
2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities	
2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title	
2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00 Course Code 3CS2-01	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title Advanced Engineering Mathematics	
	Course Code 1FY2-01 1FY2-03 1FY1-04 1FY3-06 1FY3-09 1FY2-21 1FY1-22 1FY3-24 1FY3-27 1FY3-28 1FY8-00 Course Code 2FY2-01 2FY2-02 2FY1-05	

PCC	3CS4-06	Object Oriented Programming
PCC	3CS4-07	Software Engineering
PCC	3CS4-21	Data Structures and Algorithms Lab
PCC	3CS4-22	Object Oriented Programming Lab
PCC	3CS4-23	Software Engineering Lab
PCC	3CS4-24	Digital Electronics Lab
PSIT	3CS7-30	Industrial Training
SODECA	3CS8-00	Social Outreach, Discipline & Extra Curricular
		Activities
SEMESTER		4
Category	Course Code	Course Title
BSC	4CS2-01	Discrete Mathematics Structures
HSMC	4CS1-03	Managerial Economics and Financial Accounting
ESC	4CS3-04	Microprocessor & Interface
PCC	4CS4-05	Database Management System
PCC	4CS4-06	Theory of Computation
PCC	4CS4-07	Data Communication and Computer Networks
PCC	4CS4-21	Microprocessor & Interfaces Lab
PCC	4CS4-22	Database Management System Lab
PCC	4CS4-23	Network Programming Lab
PCC	4CS4-24	Linux Shell Programming Lab
PCC	4CS4-25	Java Lab
SODECA	4CS8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		5
Category	Course Code	Course Title
ESC	5CS3-01	Information Theory & Coding
PCC	5CS4-02	Compiler Design
PCC	5CS4-03	Operating System
PCC	5CS4-04	Computer Graphics & Multimedia
PCC	5CS4-05	Analysis of Algorithms
PCC	5CS5-12	Human-Computer Interaction
PCC	5CS4-21	Computer Graphics & Multimedia Lab
ESC	5CS4-22	Compiler Design Lab
PCC	5CS4-23	Analysis of Algorithms Lab
PCC	5CS4-24	Advance Java Lab
PSIT	5CS7-30	Industrial Training
SODECA	5CS8-00	Social Outreach, Discipline & Extra Curricular Activities

SEMESTER		6	
Category	Course Code	Course Title	
ESC	6CS3-01	Digital Image Processing	
PCC	6CS4-02	Machine Learning	
PCC	6CS4-03	Information Security System	
PCC	6CS4-04	Computer Architecture and Organization	
PCC	6CS4-05	Artificial Intelligence	
PCC	6CS4-06	Cloud Computing	
PCC	6CS5-11	Distributed System	
ESC	6CS4-21	Digital Image Processing Lab	
PCC	6CS4-22	Machine Learning Lab	
PCC	6CS4-23	Python Lab	
PCC	6CS4-24	Mobile Application Development Lab	
SODECA	6CS8-00	Social Outreach, Discipline & Extra Curricular	
002207	000000	Activities	
SEMESTER	_	7	
Category	Course Code	Course Title	
PEC	7CS4-01	Internet of Things	
OE	7CE6-60.2	Disaster Management	
OE	7AG6-60.2	Environment Engg and Disaster Management	
PCC	7CS4-21	Internet of Things Lab	
PCC	7CS4-22	Cyber Security Lab	
PSIT	7CS7-30	Industrial Training	
PSIT	7CS7-40	Seminar	
SODECA	7CS8-00	Social Outreach, Discipline & Extra Curricular Activities	
SEMESTER		8	
Category	Course Code	Course Title	
PEC	8CS4-01	Big Data Analytics	
OE	8AN6-60.2	Factor of Human Interactions	
PCC	8CS4-21	Big Data Analytics Lab	
PCC	8CS4-22	Software Testing and Validation Lab	
PSIT	8CS7-50	Project	
SODECA	8CS8-00	Social Outreach, Discipline & Extra Curricular Activities	

List & Descriptions of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

COMPUTER SCIENCE & ENGINEERING

S.NO	NAME OF THE COURSE	YEAR	SEM
1	Disaster Management	IV	VII
	<u>Description</u>	Disaster Management knowledge to stupreparedness, reduction rehabilitation. This learners with a regimernational perspension of the state of the sta	dents on disaster ing the effect and course provides gional, national and
2	Communication skills	I	I
	Description	emails, speaking interviews, giving networking online. wants to commun	nication in English ess interactions. Each a particular area of English: writing at meetings and presentations, and Whether a person nicate to potential es, partners or clients, nunication can help eir language and his course will focus ng those important

3	Technical	II	III/IV
	Communication		
	Description	In this course studesigning and giving presentations. Student communicate across and generations, how brand and leadership hold effective meeting. Students will learn how conversations, and how writing skills immediately activities.	g strong, persuasive ats will learn how to a cultures, genders, to create a personal presence and how to gs with global teams. Ow to handle difficult how to handle crisis lents will also learn
4	Social Outreach,	ĬI	III/IV
	Discipline &		
	Extra Curricular		
	Activities		
	<u>Description</u>	The primary goals activities focus on the level, the institution broader community levels to compleme academic curriculum student's education Extracurricular activities to become involved other students, thus learning and enhanced	ne individual student nal level, and the evel. These activities ont the university's and to augment the onal experience. ties provide a setting and to interact with leading to increased
6	Environmental	IV	VII
	Engineering and Disaster Management		
		Environmental engin of engineering that is protection and pr environment and env	s concerned with the eservation of the

	Description	as well as the prote from environmental engine growth and monitor a	nental threats. eers study population
8	Factor of Human	IV	VIII
	Interactions		
	<u>Description</u>	Factor of Human provide detail know evaluating the impacts of a prodevelopment, taking related socio-econo human-health impacts adverse.	ledge of process of likely environmental posed project or into account intermic, cultural and

Department of Electronics & Communication Engineering

	B. T	ech Scheme 2022-23
SEMESTER		1
Category	Course Code	Course Title
BSC	1FY2-01	Engineering Mathematics-I
BSC	1FY2-03	Engineering Chemistry
HSMC	1FY1-04	Communication Skills
ESC	1FY3-06	Programming for Problem Solving
ESC	1FY3-09	Basic Civil Engineering
BSC	1FY2-21	Engineering Chemistry Lab
HSMC	1FY1-22	Human Values Activities
ESC	1FY3-24	Computer Programming Lab
ESC	1FY3-27	Basic Civil Engineering Lab
ESC	1FY3-28	Computer Aided Engineering Graphics
SODECA	1FY8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		2
Category	Course Code	Course Title
BSC	2FY2-01	Engineering Mathematics-II
BSC	2FY2-02	Engineering Physics
LICRAC	2FY1-05	Human Values
HSMC	21 11 00	
ESC	2FY3-07	Basic Mechanical Engineering
		Basic Mechanical Engineering Basic Electrical Engineering
ESC	2FY3-07	
ESC ESC	2FY3-07 2FY3-08	Basic Electrical Engineering
ESC ESC BSC	2FY3-07 2FY3-08 2FY2-20	Basic Electrical Engineering Engineering Physics Lab
ESC ESC BSC HSMC	2FY3-07 2FY3-08 2FY2-20 2FY1-23	Basic Electrical Engineering Engineering Physics Lab Human Values Activities
ESC ESC BSC HSMC ESC	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop
ESC ESC HSMC ESC ESC	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab
ESC BSC HSMC ESC ESC ESC	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular
ESC BSC HSMC ESC ESC ESC	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular
ESC ESC HSMC ESC ESC ESC SODECA	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities
ESC ESC HSMC ESC ESC ESC SODECA	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities
ESC ESC HSMC ESC ESC ESC SODECA SEMESTER Category	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title
ESC ESC BSC HSMC ESC ESC SODECA SEMESTER Category BSC	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00 Course Code 3EC2-01	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title Advanced Engineering Mathematics-I Technical Communication
ESC ESC BSC HSMC ESC ESC SODECA SEMESTER Category BSC HSMC	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00 Course Code 3EC2-01 3EC1-02	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title Advanced Engineering Mathematics-I Technical Communication Digital System Design
ESC ESC BSC HSMC ESC ESC ESC SODECA SEMESTER Category BSC HSMC PCC	2FY3-07 2FY3-08 2FY2-20 2FY1-23 2FY3-25 2FY3-26 2FY3-29 2FY8-00 Course Code 3EC2-01 3EC1-02 3EC4-04	Basic Electrical Engineering Engineering Physics Lab Human Values Activities Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title Advanced Engineering Mathematics-I Technical Communication

PCC	3EC4-07	Electronics Devices
PCC	3EC4-21	Electronics Devices Lab
PCC	3EC4-22	Digital System Design Lab
PCC	3EC4-23	Signal Processing Lab
ESC	3EC3-24	Computer Programming Lab-I
PSIT	3EC7-30	Industrial Training
SODECA	3EC8-00	Social Outreach, Discipline & Extra Curricular
	0100 00	Activities
SEMESTER		4
Category	Course Code	Course Title
BSC	4EC2-01	Advanced Engineering Mathematics-II
		Managerial Economics and Financial
HSMC	4EC1-03	Accounting
PCC	4EC4-04	Analog Circuits
PCC	4EC4-05	Microcontrollers
ESC	4EC3-06	Electronics Measurement & Instrumentation
PCC	4EC4-07	Analog and Digital Communication
PCC	4EC4-21	Analog and Digital Communication Lab
PCC	4EC4-22	Analog Circuits Lab
PCC	4EC4-23	Microcontrollers Lab
PCC	4EC4-24	Electronics Measurement & Instrumentation Lab
SODECA	4EC8-00	Social Outreach, Discipline & Extra Curricular Activities
SODECA	4EC8-00	
SODECA SEMESTER	4EC8-00	
	4EC8-00 Course Code	Activities
SEMESTER	Course	Activities 5
SEMESTER Category	Course Code	Activities 5 Course Title
SEMESTER Category ESC	Course Code 5EC 3-01	5 Course Title Computer Architecture
SEMESTER Category ESC PCC	Course Code 5EC 3-01 5EC 4-02	5 Course Title Computer Architecture Electromagnetics Waves
SEMESTER Category ESC PCC PCC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05	5 Course Title Computer Architecture Electromagnetics Waves Control system
SEMESTER Category ESC PCC PCC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04	5 Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing
SEMESTER Category ESC PCC PCC PCC PCC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05	Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing Microwave Theory & Techniques
SEMESTER Category ESC PCC PCC PCC PCC PCC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05 5EC 5-12	Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing Microwave Theory & Techniques Embedded Systems
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05 5EC 5-12 5EC 4-21	Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing Microwave Theory & Techniques Embedded Systems RF Simulation Lab
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC ESC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05 5EC 5-12 5EC 4-21 5EC 4-22	Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing Microwave Theory & Techniques Embedded Systems RF Simulation Lab Digital Signal Processing Lab
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05 5EC 5-12 5EC 4-21 5EC 4-22 5EC 4-23	Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing Microwave Theory & Techniques Embedded Systems RF Simulation Lab Digital Signal Processing Lab Microwave Lab
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC PCC PCC P	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05 5EC 5-12 5EC 4-21 5EC 4-22 5EC 4-23 5EC 7-30	Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing Microwave Theory & Techniques Embedded Systems RF Simulation Lab Digital Signal Processing Lab Microwave Lab Industrial Training Social Outreach, Discipline & Extra Curricular
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC	Course Code 5EC 3-01 5EC 4-02 5EC 4-03 5EC 4-04 5EC 4-05 5EC 5-12 5EC 4-21 5EC 4-22 5EC 4-23 5EC 7-30	Course Title Computer Architecture Electromagnetics Waves Control system Digital Signal Processing Microwave Theory & Techniques Embedded Systems RF Simulation Lab Digital Signal Processing Lab Microwave Lab Industrial Training Social Outreach, Discipline & Extra Curricular

	Code	
ESC	6EC 3-01	Power Electronics
PCC	6EC 4-02	Computer Network
PCC	6EC 4-03	Fiber Optics Communications
PCC	6EC 4-04	Antennas and Propagation
PCC	6EC 4-05	Information theory and coding
PCC	6EC 5-11	Introduction to MEMS
PCC	6EC 4-21	Computer Network Lab
ESC	6EC 4-22	Antenna and wave propagation Lab
PCC	6EC 4-23	Electronics Design Lab
PSIT	6EC 4-24	Power Electronics Lab
SODECA	6EC8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		7
Category	Course Code	Course Title
PEC	7EC5-11	VLSI Design
OE	7CE6-60.2	Disaster Management
OE	7AG6-60.2	Environment Engg and Disaster Management
PCC	7EC4-21	VLSI Design Lab
PCC	7EC4-22	Advance communication lab (MATLAB Simulation)
PCC	7EC4-23	Optical Communication Lab
PSIT	7EC7-30	Industrial Training
PSIT	7EC7-40	Seminar
SODECA	7EC8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		8
Category	Course Code	Course Title
PEC	8EC5-11	Artificial Intelligence And Expert Systems
OE	8AN6- 60.2	Factor of Human Interactions
PCC	8EC4-21	Internet of Things (IOT) Lab
PCC	8EC4-22	Skill Development Lab
PSIT	8EC7-50	Project
SODECA	8EC8-00	Social Outreach, Discipline & Extra Curricular Activities

List & Description of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

S.NO	NAME OF	YEAR	SEM
	THE COURSE		
1	Discipline &	IV	VII/VIII
	Extra		
	Curricular		
	activity		
		The primary goals of	extracurricular
		activities focus on the	e individual student
		level, the institutional	l level, and the broader
		community level. The	ese activities exist to
		complement the univ	ersity's academic
		curriculum and to aug	gment the student's
		educational experience	ce. Extracurricular
		activities provide a se	etting to become
		involved and to intera	act with other students,
		thus leading to increa	sed learning and
		enhanced developmen	nt.
2	Communication	I	I
	skills		
		This course helps stud	dents improve their
		professional commun	ication in English for
		successful business in	nteractions. Each
		chapter focuses on a	particular area of
		communication in En	glish: writing emails,
			and interviews, giving
		presentations, and ne	tworking online.
		1 -	nts to communicate to
		_	employees, partners or
		clients, better English	
		help them achieve the	eir language and

		professional goals. The especially on making connections to take the the next level.	
3	Human Values	I	I
		The Course Human V aimed at providing the knowledge on Value importance in Human objective of the course are socially accepted objects, persons, and part and parcel of social social social set of consistent v Knowledge of the value through education. It	les and to provide the ics as a subject matter. Value Education is le students with System and its existence. The se is listed as: Values norms to evaluate situations that form faility. A value system values and measures. The se are inculcated contributes in forming no are able to face life
4	Human Values Activities	I	II
		activities through who measure of and improinherent qualities, inconfidence, co-operate empathy. Each activity featured innovation is focused	eluding responsibility, tion, respect and d as part of this on specific human change in students and a through all these red by carrying these throughout the

		Guides, Planning, Im	plementation.
		Surveying and many	-
5	Technical	II	III/IV
	Communication		
		In this course student	s will practice
		designing and giving	strong, persuasive
		presentations. Studen	ts will learn how to
		communicate across	cultures, genders, and
		generations, how to c	reate a personal brand
		and leadership presen	ace and how to hold
		effective meetings wi	•
		Students will learn ho	
		conversations, and ho	
		communication; stud	
		writing skills immedi	ately applicable in
		their daily activities.	
6	Social	II	III/IV
	Outreach,		
	Discipline &		
	Extra		
	Curricular		
	Activities	T1 1 C	4
		The primary goals of extracurricular activities focus on the individual student	
		community level. The	l level, and the broader
		complement the univ	
		curriculum and to aug	•
		educational experience	
		activities provide a se	
		•	act with other students,
		thus leading to increa	•
		enhanced developmen	_
7	Technical	II	III
	Communication		
		In this course student	s will practice
		1	

designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities.

Department of Electrical Engineering

B. Tech Scheme 2022-23		
SEMESTER		1
Category	Course Code	Course Title
BSC	1FY2-01	Engineering Mathematics-I
BSC	1FY2-03	Engineering Chemistry
HSMC	1FY1-04	Communication Skills
ESC	1FY3-06	Programming for Problem Solving
ESC	1FY3-09	Basic Civil Engineering
BSC	1FY2-21	Engineering Chemistry Lab
HSMC	1FY1-22	Human Values Activities
ESC	1FY3-24	Computer Programming Lab
ESC	1FY3-27	Basic Civil Engineering Lab
ESC	1FY3-28	Computer Aided Engineering Graphics
SODECA	1FY8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		2
Category	Course Code	Course Title
BSC	2FY2-01	Engineering Mathematics-II
BSC	2FY2-02	Engineering Physics
HSMC	2FY1-05	Human Values
ESC	2FY3-07	Basic Mechanical Engineering
ESC	2FY3-08	Basic Electrical Engineering
BSC	2FY2-20	Engineering Physics Lab
HSMC		
	2FY1-23	Human Values Activities
ESC	2FY1-23 2FY3-25	Human Values Activities Manufacturing Practices Workshop
ESC	2FY3-25	Manufacturing Practices Workshop
ESC ESC	2FY3-25 2FY3-26	Manufacturing Practices Workshop Basic Electrical Engineering Lab
ESC ESC ESC	2FY3-25 2FY3-26 2FY3-29	Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular
ESC ESC ESC	2FY3-25 2FY3-26 2FY3-29	Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular
ESC ESC ESC SODECA	2FY3-25 2FY3-26 2FY3-29	Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities
ESC ESC SODECA SEMESTER	2FY3-25 2FY3-26 2FY3-29 2FY8-00	Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities
ESC ESC SODECA SEMESTER Category	2FY3-25 2FY3-26 2FY3-29 2FY8-00 Course Code	Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title
ESC ESC SODECA SEMESTER Category BSC	2FY3-25 2FY3-26 2FY3-29 2FY8-00 Course Code 3EE2-01	Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title Advance Mathematics
ESC ESC SODECA SEMESTER Category BSC HSMC	2FY3-25 2FY3-26 2FY3-29 2FY8-00 Course Code 3EE2-01 3EE1-02	Manufacturing Practices Workshop Basic Electrical Engineering Lab Computer Aided Machine Drawing Social Outreach, Discipline & Extra Curricular Activities 3 Course Title Advance Mathematics Technical Communication

PCC	3EE4-07	Electrical Machine - I	
PCC	3EE4-08	Electromagnetic Field	
PCC	3EE4-21	Analog Electronics Lab	
PCC	3EE4-22	Electrical Machine-I Lab	
PCC	3EE4-23	Electrical circuit design Lab	
PSIT	3EE7-30	Training Seminar	
F 311	3LL7-30	Social Outreach, Discipline & Extra Curricular	
SODECA	3EE8-00	Activities	
SEMESTER		4	
0.1	Course	C T'll.	
Category	Code	Course Title	
BSC	4EE2-01	Biology	
HSMC	4EE1-03	Managerial Economics and Financial Accounting	
ESC	4EE3-04	Electronic Measurement & Instrumentation	
PCC	4EE4-05	Electrical Machine - II	
PCC	4EE4-06	Power Electronics	
PCC	4EE4-07	Signals & Systems	
PCC	4EE4-08	Digital Electronics	
PCC	4EE4-21	Electrical Machine - IILab	
PCC	4EE4-22	Power Electronics Lab	
PCC	4EE4-23	Digital Electronics Lab	
PCC	4EE4-24	Measurement Lab	
SODECA	4EE8-00	Social Outreach, Discipline & Extra Curricular Activities	
SODECA	4EE8-00		
SODECA SEMESTER	4EE8-00		
	4EE8-00 Course Code	Activities	
SEMESTER	Course	Activities 5	
SEMESTER Category	Course Code	Activities 5 Course Title	
SEMESTER Category ESC	Course Code 5EE3-01	5 Course Title Electrical Materials	
SEMESTER Category ESC PCC	Course Code 5EE3-01 5EE4-02	5 Course Title Electrical Materials Power System - I	
SEMESTER Category ESC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03	5 Course Title Electrical Materials Power System - I Control System	
SEMESTER Category ESC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04	5 Course Title Electrical Materials Power System - I Control System Microprocessor	
SEMESTER Category ESC PCC PCC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05	5 Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design	
SEMESTER Category ESC PCC PCC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05 5EE5-12	5 Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design Electromagnetic Wave.	
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05 5EE5-12 5EE5-12	S Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design Electromagnetic Wave. Power System - I Lab	
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC ESC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05 5EE5-12 5EE4-21	S Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design Electromagnetic Wave. Power System - I Lab Control System Lab	
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05 5EE5-12 5EE4-21 5EE4-22 5EE4-23	S Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design Electromagnetic Wave. Power System - I Lab Control System Lab Microprocessor Lab	
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05 5EE5-12 5EE4-21 5EE4-22 5EE4-23 5EE4-23	S Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design Electromagnetic Wave. Power System - I Lab Control System Lab Microprocessor Lab System Programming Lab	
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05 5EE5-12 5EE4-21 5EE4-22 5EE4-23 5EE4-23 5EE4-24	5 Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design Electromagnetic Wave. Power System - I Lab Control System Lab Microprocessor Lab System Programming Lab Industrial Training Social Outreach, Discipline & Extra Curricular	
SEMESTER Category ESC PCC PCC PCC PCC PCC PCC PCC	Course Code 5EE3-01 5EE4-02 5EE4-03 5EE4-04 5EE4-05 5EE5-12 5EE4-21 5EE4-22 5EE4-23 5EE4-23 5EE4-24	5 Course Title Electrical Materials Power System - I Control System Microprocessor Electrical Machine Design Electromagnetic Wave. Power System - I Lab Control System Lab Microprocessor Lab System Programming Lab Industrial Training Social Outreach, Discipline & Extra Curricular	

ESC	6EE3-01	Computer Architecture
PCC	6EE4-02	Power System - II
PCC	6EE4-03	Power System Protection
PCC	6EE4-04	Electrical Energy Conversion and Auditing
PCC	6EE4-05	Electric Drives
PCC	6EE5-11	Power System Planning.
PCC	6EE4-21	Power System - II Lab
ESC	6EE4-22	Electric Drives Lab
PCC	6EE4-23	Power System Protection Lab
PCC	6EE4-24	Modelling and simulation lab
SODECA	6EE8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		7
Category	Course Code	Course Title
OE	7CE6-	
02	60.2	Disaster Management
OE	7AG6- 60.2	Environment Engg and Disaster Management
PEC	7EE5-11	Wind and Solar Energy Systems
PCC	7EE4-21	Embedded Systems Lab
PCC	7EE4-22	Advance control system lab
PSIT	7EE7-30	Industrial Training
PSIT	7EE7-40	Seminar
SODECA	7EE8-00	Social Outreach, Discipline & Extra Curricular Activities
SEMESTER		8
Category	Course Code	Course Title
PEC	8EE4-11	HVDC Transmisssion System
OE	8AN6- 60.2	Factor of Human Interactions
PCC	8EE4-21	Energy Systems Lab
PSIT	8EE7-50	Project
SODECA	8EE8-00	Social Outreach, Discipline & Extra Curricular Activities

List & Descriptions of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

ELECTRICAL ENGINEERING DEPARTMENT

S.NO	NAME OF THE COURSE	YEAR	SEM
1	Discipline & Extra Curricular	IV	VIII
	activity		
	<u>Description</u>	activities focus on to level, the institution broader community exist to complem academic curriculum student's educat Extracurricular activito become involved	ities provide a setting and to interact with leading to increased
2	Communication skills	I	I
		professional communication in Englishing at meeting giving presentation	tudents improve their nication in English for interactions. Each a particular area of nglish: writing emails, ngs and interviews, as, and networking
	<u>Description</u>	communicate to employees, partner	potential employers, s or clients, better tion can help them

		goals. This course we making those important	rage and professional vill focus especially on ortant connections to business to the next
3	Human Values	I	I
	Description	The Courses Human Values envisages to instill the ethical values and to provide the knowledge about Ethics as a subject matter. The Course Human Value Education is aimed at providing the students with knowledge on Value System and its importance in Human existence. The objective of the course is listed as: Values are socially accepted norms to evaluate objects, persons, and situations that form part and parcel of sociality. A value system is a set of consistent values and measures. Knowledge of the values are inculcated through education. It contributes in forming true human being, who are able to face life and make it	
4	Human Values	I	II
	Activities		
	<u>Description</u>	Human Values involves various classroom activities through which teachers can take a measure of and improve the student's inherent qualities, including responsibility, confidence, co-operation, respect and empathy. Each activity featured as part of this innovation is focused on specific human values. The positive change in students and learning environment through all these	
			ured by carrying these

		course. Activities	basis throughout the Includes Scouts & g, Implementation, more.
5	Technical Communication	II	III/IV
	Description	In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities.	
6	Social Outreach,	II	III/IV
	Discipline & Extra		
	Curricular		
	Activities		
	Description	The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development.	
7	Technical	III	IV
	Communication		

	Description	In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities.
8	Biology	II IV
	<u>Description</u>	Objectives of this course provides a Purpose: To convey that Biology is as important a scientific discipline as Mathematics, Physics and Chemistry. Bring out the fundamental differences between science and engineering by drawing a comparison between eye and camera, Bird flying and aircraft. Mention the most exciting aspect of biology as an independent scientific discipline.
9	Disaster	IV VII
	Management	
	<u>Description</u>	Disaster Management provides detailed knowledge to students on disaster preparedness, reducing the effect and rehabilitation. This course provides learners with a regional, national and international perspective on disaster management.
10	Neural Network	III VI
	<u>Description</u>	The course has contents to develop Know the main provisions neuro mathematics, Know the main types of neural networks, Know and apply the methods of training

11	Sustainable Engineering	neural networks, Know the application of artificial neural networks, To be able to formalize the problem, to solve it by using a neural network. IV VII	
	Description	overview of awareness at areas of sust understand to technology development familiarity was used for system development system development of engineering	provides students with an of develop an increased mong students on issues in tainability, To make students the role of engineering and within sustainable, To give students some with the methods and tools sustainable product-service elopment, To establish in understanding of the role and engineering activities and decisions on environmental, economic well-being.

Department of Mechanical Engineering

B. Tech Scheme 2022-23			
SEMESTER		1	
Category	Course Code	Course Title	
BSC	1FY2-01	Engineering Mathematics-I	
BSC	1FY2-03	Engineering Chemistry	
HSMC	1FY1-04	Communication Skills	
ESC	1FY3-06	Programming for Problem Solving	
ESC	1FY3-09	Basic Civil Engineering	
BSC	1FY2-21	Engineering Chemistry Lab	
HSMC	1FY1-22	Human Values Activities	
ESC	1FY3-24	Computer Programming Lab	
ESC	1FY3-27	Basic Civil Engineering Lab	
ESC	1FY3-28	Computer Aided Engineering Graphics	
SODECA	1FY8-00	Social Outreach, Discipline & Extra Curricular Activities	
SEMESTER		2	
Category	Course Code	Course Title	
BSC	2FY2-01	Engineering Mathematics-II	
BSC	2FY2-02	Engineering Physics	
HSMC	2FY1-05	Human Values	
ESC	2FY3-07	Basic Mechanical Engineering	
ESC	2FY3-08	Basic Electrical Engineering	
BSC	2FY2-20	Engineering Physics Lab	
HSMC	2FY1-23	Human Values Activities	
ESC	2FY3-25	Manufacturing Practices Workshop	
ESC	2FY3-26	Basic Electrical Engineering Lab	
ESC	2FY3-29	Computer Aided Machine Drawing	
SODECA	2FY8-00	Social Outreach, Discipline & Extra Curricular Activities	
		Activities	
		Activities	
SEMESTER		3	
SEMESTER Category	Course Code		
		3	
Category	Code	3 Course Title	
Category BSC	Code 3ME2-01	3 Course Title Advance Engineering Mathematics-I	

PCC	3ME4-06 Materials Science and Engineering		
PCC	3ME4-07	Mechanics of Solids	
PCC	3ME4-21	Machine Drawing Practice	
PCC	3ME4-22	Materials Testing Lab	
PCC	3ME4-23	Basic Mechanical Engineering Lab	
PCC	3ME4-24	E4-24 Programming using MATLAB	
PSIT	3ME7-30	Industrial Training	
SODECA	3ME8-00	Social Outreach, Discipline & Extra Curricular Activities	

SEMESTER	4		
Category	Course Code	Course Title	
BSC	4ME2-01	Data analytics	
HSMC	4ME1-03	Managerial Economics and Financial Accounting	
ESC	4ME3-04	Digital Electronics	
PCC	4ME4-05	Fluid Mechanics and Fluid Machines	
PCC	4ME4-06	Manufacturing Processes	
PCC	4ME4-07	Theory of machines	
PCC	4ME3-21	Digital Electronics lab	
PCC	4ME4-22	Fluid Mechanics lab	
PCC	4ME4-23	Production practice lab	
PCC	4ME4-24	Theory of machines Lab	
SODECA	4ME8-00	Social Outreach, Discipline & Extra Curricular Activities	

SEMESTER	5		
Category	Course Course Title		
ESC	5ME3-01	Mechatronics System	
PCC	5ME4-02	Heat Transfer	
PCC	5ME4-03	Manufacturing Technology	
PCC	5ME4-04	Design of Machine Element-I	
PCC	5ME4-05	Principles of Management	
PCC	5ME5-11	Steam Engineering	
PCC	5ME4-12	Automobile Engineering	
ESC	5ME3-21	Mechatronics Lab	
PCC	5ME4-22	Heat Transfer lab	
PCC	5ME4-23	Production Engineering lab	
PCC	5ME4-24	Machine Design Practice-I	
PSIT	3ME7-30	Industrial Training	
SODECA	5ME8-00	Social Outreach, Discipline & Extra Curricular Activities	

SEMESTER	6		
Category	Course Code	Course Title	
ESC	6ME3-01	Measurement & Metrology	
PCC	6ME4-02	Computer Integrated Manufacturing Systems	
PCC	6ME4-03	Mechanical Vibrations	
PCC	6ME4-04	Design of Machine Element-II	
PCC	6ME4-05	Quality Management	
PCC	6ME5-11	Refrigeration& Air Conditioning	
PCC	6ME4-21	CIMS Lab	
PCC	6ME4-22	Vibration Lab	
PCC	6ME4-23	Machine Design Practice-II	
PCC	6ME4-24	Thermal Engineering Lab-I	
SODECA	6ME8-00	Social Outreach, Discipline & Extra Curricular Activities	
SEMESTER		7	
Category	Course Code	Course Title	
PEC	7ME5-11	IC Engine	
OE	7AG6- 60.1	Human Engineering and Safety	
PCC	7ME4-21	FEA Lab	
PCC	7ME4-22	Thermal Engineering Lab II	
PCC	7ME4-23	Quality Control Lab	
PSIT	7ME7-30	Industrial Training	
PSIT	7ME7-40	Seminar	
SODECA	7ME8-00	Social Outreach, Discipline & Extra Curricular Activities	
SEMESTER		8	
Category	Course Code	Course Title	
PEC	8ME5-12	Supply and Operations Management	
OE	8TT6- 60.2	Disaster Management	
PCC	8ME4-21	Industrial Engineering Lab	
PCC	8ME4-22	Metrology Lab	
PSIT	8ME7-50	Project	
SODECA	8ME8-00	Social Outreach, Discipline & Extra Curricular Activities	

List & Description of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

DEPARTMENT OF MECHANICAL ENGINEERING

S.NO	NAME OF THE COURSE	YEAR	SEM	
1	Discipline &	IV	VII,VIII	
	Extra			
	Curricular			
	activity			
		The primary goals of extracurricular		
		activities focus on the individual student		
		level, the institutional level, and the		
		broader community level. These activities		
		exist to complement the university's		
		academic curriculum and to augment the		
		student's educational experience.		
		Extracurricular activities provide a setting		
		to become involved and to interact with		
		other students, thus leading to increased		
		learning and enhanced development.		
2	Human	IV	VII	
	Engineering and			
	Safety			
		A human engineering effort is conducted to develop or improve human interface of the system Achieve required effectiveness		
	.			
	<u>Description</u>	of human performance during system operation, maintenance and support and		
		make economical demands upon personnel		
		resources skills, training and costs.		
3	Communication skills	I	I/II	
		This course helps stu	idents improve their	

5	Human Values Activities	evaluate objects, per that form part and part value system is a set and measures. Know are inculcated through	rsons, and situations arcel of sociality. A cof consistent values yledge of the values gh education. It ng true human being,	
5	Human Values	evaluate objects, per that form part and part value system is a set and measures. Know are inculcated through contributes in forming who are able to face	rsons, and situations arcel of sociality. A cof consistent values yledge of the values gh education. It ng true human being, life and make it	
		evaluate objects, per that form part and part value system is a set and measures. Know are inculcated through contributes in forming	rsons, and situations arcel of sociality. A cof consistent values yledge of the values gh education. It ng true human being,	
		evaluate objects, per that form part and part value system is a set	rsons, and situations arcel of sociality. A cof consistent values	
		evaluate objects, per	rsons, and situations	
		Values are socially accepted norms to evaluate objects, persons, and situations		
		students with knowledge on Value System and its importance in Human existence. The objective of the course is listed as:		
		Education is aimed at providing the		
		instill the ethical values and to provide the knowledge about Ethics as a subject matter. The Course Human Value		
		The Courses Human Values envisages to		
4	Human Values	I	I/II	
		professional communication in English for successful business interactions. Each chapter focuses on a particular area of communication in English: writing emails, speaking at meetings and interviews, giving presentations, and networking online. Whether a person wants to communicate to potential employers, employees, partners or clients, better English communication can help them achieve their language and professional goals. This course will focus especially on making those important connections to take the career or business to the next level.		

		activities through which teachers can take a measure of and improve the student's inherent qualities, including responsibility, confidence, co-operation, respect and empathy. Each activity featured as part of this innovation is focused on specific human values. The positive change in students and learning environment through all these activities can be ensured by carrying these out on a regular basis throughout the course. Activities Includes Scouts & Guides, Planning, Implementation,		
		Surveying and many more.		
6	Technical Communication	II	III/IV	
		In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities.		
7	Social Outreach, Discipline & Extra Curricular Activities	II	III/IV	
		The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the		

		broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development.		
8	Technical	II	III	
	Communication			
		In this course students will practice		
		designing and giving strong, persuasive		
		presentations. Students will learn how to		
		communicate across cultures, genders, and		
		generations, how to create a personal		
		brand and leadership presence and how to		
		hold effective meetings with global teams.		
		Students will learn how to handle difficult		
		conversations, and how to handle crisis		
		communication; students will also learn		
		writing skills immediately applicable in		
		their daily activities.		
	1	men dany activities.		