

SHRI G. S. INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

Department of Humanities and Social Sciences

COURSE ARTICULATION MATRIX & CO-PO ATTAINMENT [CO-PO/PSO MAPPING]

Academic Year: 2023-2024

SEM B: JAN 2024 - JUNE 2024

B.TECH. II Year

Subject: Values, Humanities and Professional Ethics

COURSE OUTCOMES: after completion of course, the students will be able to:

CO1. Explain and elaborate the social institutions through which the society and nation is governed.
CO2. Make self-exploration through understanding self, body and their needs & activities.
CO3. Apply ethical decision making and describe ethical dilemma.
CO4. Contextualize the ethics with engineering profession, attitude and approaches as per needs of society and values.
CO5. Explain and illustrate the process of Social, Political and Technological changes in-context to global changes.

HU22881: Electrical Engineering

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		1				2	1	2		1		1	1	1	
CO2	1	1				2		3	1	2		2	1	1	1
CO3	1			1		2		3	1	1		1	2		1
CO4	1	1	2	1		3	2	3	1	1		3	2	1	1
CO5	1	1	2		1	2	3	2	2	1		2	1	1	2
Average	1	1	2	1	1	2.2	2	2.6	1.25	1.2		1.8	1.4	1	1.25
Final PO Attainment	0.9	0.9	1.7	0.9	0.9	1.9	1.7	2.3	1.1	1.0	0.0	1.6	1.2	0.9	1.1

Over all Course
Attainment = 2.6

PROGRAM SPECIFIC OUTCOMES:

PSO 1	Demonstrate ability to apply fundamental knowledge of mathematics, science and engineering to identify, formulate, analyze, investigate, and design complex problems in the field of electrical engineering.
PSO 2	Demonstrate ability to apply the appropriate techniques and modern engineering tools to manage and solve complex electrical engineering projects, adapt in multi-disciplinary environments, and engage in lifelong learning.
PSO 3	Able to propose & implement engineering solutions in the context of the environment, society, economy, and professional ethics and have good communication skills.

HU24881: Computer Science Engineering

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		1				2	1	2		1		1	1	1	
CO2	1	1				2		3	1	2		2	1	1	1
CO3	1			1		2		3	1	1		1	1	1	
CO4	1	1	2	1		3	2	3	1	1		3	2	2	1
CO5	1	1	2		1	2	3	2	2	1		2	2	2	2
Average	1	1	2	1	1	2.2	2	2.6	1.25	1.2		1.8	1.4	1.4	1.3333
Final PO Attainment	0.8	0.8	1.7	0.8	0.8	1.8	1.7	2.2	1.0	1.0	0.0	1.5	1.2	1.2	1.1

Over all Course
Attainment = 2.5

PROGRAM SPECIFIC OUTCOMES:

PSO 1	To develop conceptual understanding and application of learned concepts to different domains.
PSO 2	To imbibe professional ethics, communication abilities and quest for continuous learning.
PSO 3	To gain capability to use state of art techniques, skills and tools with mind-set inclined towards innovation and research.

HU25881: Electronics and Telecommunication Engineering

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		1				2	1	2		1		1	2	1	2
CO2	1	1				2		3	1	2		2	1		1
CO3	1			1		2		3	1	1		1		1	1
CO4	1	1	2	1		3	2	3	1	1		3	1		3
CO5	1	1	2		1	2	3	2	2	1		2	2	1	2
Average	1	1	2	1	1	2.2	2	2.6	1.25	1.2		1.8	1.5	1	1.8
Final PO Attainment	1.0	1.0	1.9	1.0	1.0	2.1	1.9	2.5	1.2	1.2	0.0	1.7	1.4	1.0	1.7

Over all Course
Attainment = 2.9

PROGRAM SPECIFIC OUTCOMES:

PSO 1	Develop an ability to analyze and design Electronics and Telecommunication systems and sub systems, using the knowledge of basic sciences, and applying mathematical and engineering fundamentals, or, research knowledge to solve complex engineering problems.
PSO 2	Develop competency for placement, higher studies and entrepreneurship in the relevant areas of Communication, RF & microwave, Computer networks, Data analytics and VLSI technology with the aid of various state of art hardware and software tools.
PSO 3	To solve the practical problems of different domains in Electronics & Telecommunication Engineering as an individual as well as a team through curricular, co-curricular and extracurricular activities, maintaining professional ethics for the sustainable development of a society as a whole.

HU27881: Electronics and Instrumentation Engineering

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1		1				2	1	2		1		1	1	1	1
CO2	1	1				2		3	1	2		2	1		1
CO3	1			1		2		3	1	1		1	2		2
CO4	1	1	2	1		3	2	3	1	1		3		1	2
CO5	1	1	2		1	2	3	2	2	1		2		2	2
Average	1	1	2	1	1	2.2	2	2.6	1.25	1.2		1.8	1.3333	1.3333	1.6
Final PO Attainment	0.9	0.9	1.7	0.9	0.9	1.9	1.7	2.2	1.1	1.0	0.0	1.5	1.1	1.1	1.4

Over all Course Attainment =	2.6
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PROGRAM SPECIFIC OUTCOMES:

PSO 1	Capable of solving complex problems in the field of Instrumentation with hands on different compatible platform.
PSO 2	Should be able to associate the learning from the course related to Process control and PLC/SCADA system to arrive at solution to real world problems.
PSO 3	Capability to comprehend with the technological advancements in VLSI Design & semiconductor technology with modern EDA tools