

Course Code	21EE0306T	Course Name	SUSTAINABLE DEVELOPMENT PRACTICES	Course Category	O	OPEN ELECTIVE	L	T	P	C
							3	0	0	3

Pre-requisite Courses	Nil	Co- requisite Courses	Nil	Progressive Courses	Nil
Course Offering Department	Electrical and Electronics Engineering	Data Book / Codes / Standards	Nil		

Course Learning Rationale (CLR):		The purpose of learning this course is to:											
CLR-1:	gain a basic understanding on sustainable development												
CLR-2:	understand the necessity of societal development towards sustainability												
CLR-3:	familiarize the integrated strategies of sustainable development												

Course Outcomes (CO):		At the end of this course, learners will be able to:											
CO-1:	familiarize the necessity of sustainable development by various stake holders												
CO-2:	recognize the feasibility, approaches, techniques, and outcomes of sustainable development												
CO-3:	interpret various policies and integrated approaches for adaption of sustainable environment												

Program Outcomes (PO)												Program Specific Outcomes		
1	2	3	4	5	6	7	8	9	10	11	12			
Engineering Knowledge	Problem Analysis	Design/development of solutions	Conduct investigations of complex problems	Modern Tool Usage	The engineer and society	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO-1	PSO-2	PSO-3
-	-	-	-	-	-	3	3	-	-	-	-	-	-	-
2	-	-	-	-	-	3	-	-	-	-	-	-	-	-
2	-	-	-	-	-	3	-	-	-	-	-	-	-	-

Unit-1 - Introduction to Sustainable Development	9 Hour
Definition, scope and elements, Stake holders of sustainable development: People, Government, Investors, Industry, Judiciary, and international organizations working for sustainable development.	
Unit-2 - Developmental Needs of Indian Society	9 Hour
Poverty, unemployment, inadequate housing, unsafe drinking water, deficiency of energy sources and supply, sanitation, unscientific waste management, lack of transportation facilities, unskilled work force and apathy towards political activities.	
Unit-3 - Social Interventions for Sustainable Development	9 Hour
Education, skill development, people's participation in decision making, women empowerment, inclusive society, human rights, tolerance to diversity, reduction of health inequality, social safety net and Population control	
Unit-4 - Environment Protection Measures	9 Hour
Environment protection policies, waste management, pollution control, reduce the use, reuse and recycle, sustainable energy, preservation of forest and water sources.	
Unit-5 - Integrated Approaches	9 Hour
Innovative models of sustainable development. Public private partnership, decentralization of power. Strategies to become a developed country, Future trends in integrated approaches, case study	

Learning Resources	1. Ghate, P., "Indian microfinance: The challenges of rapid growth", SAGE Publications, first edition, 2007.	3. Chopra, K., Gopal, K., "Operationalising Sustainable Development", Sage Publications, first edition, 1999.
	2. Green, F.J., Chambers, B.W., "The Politics of Participation in Sustainable Development Governance", United Nations University Press, first edition, 2006.	4. Hans, C.B., Christina, V., "Sustainable Development in International and National Law", Groningen: Maunsbach Europa Law Publishing, first edition, 2008.

Learning Assessment							
	Bloom's Level of Thinking	Continuous Learning Assessment (CLA)				Summative Final Examination (40% weightage)	
		Formative CLA-1 Average of unit test (50%)		Life-Long Learning CLA-2 (10%)			
		Theory	Practice	Theory	Practice	Theory	Practice
Level 1	Remember	20%	-	20%	-	20%	-
Level 2	Understand	20%	-	20%	-	20%	-
Level 3	Apply	30%	-	30%	-	30%	-
Level 4	Analyze	30%	-	30%	-	30%	-
Level 5	Evaluate	-	-	-	-	-	-
Level 6	Create	-	-	-	-	-	-
	Total	100 %		100 %		100 %	

Course Designers		
Experts from Industry	Experts from Higher Technical Institutions	Internal Experts
1. Mr. M. Umasankar, Bharat Electronics Ltd, Andhrapradesh	1. Dr. S. S. Dash, GCE KJR	1. Dr. V. Pradeep, SRMIST
2. Dr. P. Kanagavel, NIWE, Chennai	2. Dr. A. Venkadesan, NIT Puducherry, Karaikal.	2. Dr. R. Ramya, SRMIST