SHARDA UNIVERSITY
Beyond Boundaries

NAAC A+ ACCREDITED

SHARDA SCHOOL OF ENGINEERING & SCIENCE

Department of Electrical Electronics and Communication Engineering

COURSE

Sustainable Living

(NV36101)

VALUE ADDED COURSE BROCHURE-30 HRS

2025-26

ABOUT THE UNIVERSITY

Sharda University envisions to serve the society by being a global University of higher learning in pursuit of academic excellence, innovation and nurturing entrepreneurship. It has 13,000+ students from 95+ countries, 29 states, and Union Territories, providing cultural diversity and global exposure to students. It has 26000+ alumni who are today leaders in their realms. Sharda University is **NAAC A+** University with Overall **NIRF Rank of 86**. Teaching Learning Center at Sharda University is to equip the faculty members with the expertise, skills and knowledge they need for capacity building of students. Teaching as a profession requires highly specialized skills and knowledge to impact significantly on student learning and therefore teachers must refine their conceptual and pedagogical skills.

ABOUT THE DEPARTMENT

Department of Electrical Electronics and Communication Engineering is one of the premier departments od School of Engineering and Sciences, Sharda University. The department offers B.Tech, M.Tech and Ph.D programmes. The department has people of eminence from academia as well as industry, who have exposure to future cutting – edge research programs in the field of Power system, Power electronics, control engineering, smart grid communication Engineering, Internet of Things, LTE, Embedded systems, Microwave Engineering, Wireless Sensor Networks and VLSI, Robotics.

VALUE ADDED COURSE (VAC)

The Value added Education Courses aim to provide additional learner centric graded skill oriented training, with the primary objective of improving the employability skills of students.

PURPOSE OF VALUE ADDED COURSE

VACs are relevant academic method in order to fill the gaps in students knowledge and add competitive edge to their job prospects. A well-defined of offspring VACs in the courses makes them extremely useful for improving employability quotient of students by building a range of competencies.

It helps students to build a creative foundation for their passion in an area (literary, visual and performing arts, etc) in additional to their professional courses creating dimensions which can help in converting their passion into profession.

VAC can also serve as top-up courses to make students industry-ready by exposing them to the current technology and practices than those covered in their formal degree courses.

RESOURCE PERSON

Dr. Shaheen Naz, presently working as Assistant Professor, Electrical Electronics and Communication Department, School of Engineering and Technology, Sharda University. She has an experience of 19 years. Her research areas are Material Science, Wireless Communication and Sensor Network. She published 12 + papers in reputed journal and 3 patents published.

SCHEDULE

S. No	Topic	Week
1.	Definition of sustainable, The three pillars of sustainability	1.
2.	Overall benefits of sustainable living	2.
3	What is energy conservation?	3
4	Why is it so important to save energy? Best ways to save energy at home	4
5	What is meant by reduce, reuse and recycle? How to reduce	5
6	Reusing home products, What is upcycling? Benefits of recycling, What not to recycle	6
7	Starting an organic garden	7
8	Grass-cycling	8
9	Edible weeds	9
10	A green home makeover	10
11	Homemade cleaning products	11
12	Case study-home automation using IoT	12

School: SSET **Program:** M.Tech **Branch:**	**Batch:** **Current Academic Year:** **Semester:**

1. Course Code	NV36101 / Paper ID: 18194	
2. Course Title	**Sustainable Living**	
3. Credits	0	
4. Contact Hours (L-T-P)	30 Hours	
Course Type	Value added course	
5. Course Objective	To impart knowledge on • Mechatronics, Sensors and PLC's • Basics of Hydraulic and Pneumatic systems • Typical Hydraulic and Pneumatic circuits • Ladder Programming and automation	
6. Course Outcomes	**CO1:** Clarifies its meaning and explains the necessity to make changes in our daily lives **C02:** Learn the benefits of sustainable living and how global organizations and individuals each play a part in the maintenance of a sustainable world. **C03:** Providing many ways to easily conserve water and energy as well as waste reduction and recycling in the home. **CO4:** Learn the benefits of sustainable gardening. **CO5:** Learn the benefits of sustainable living in homes with the applications of technology. **CO6:** Apply the basic concepts on Hands on applications	
7. Course Description		
8. Outline syllabus		CO Mapping
Unit 1	**AN OVERVIEW OF SUSTAINABILITY**	
A	Definition of sustainable	CO1
B	The three pillars of sustainability	CO1
C	Overall benefits of sustainable living	CO1
Unit 2	**CONSERVING ENERGY**	
A	What is energy conservation?	CO2
B	Why is it so important to save energy?	CO2
C	Best ways to save energy at home	CO2
Unit 3	**REDUCE, REUSE AND RECYCLE**	
A	What is meant by reduce, reuse and recycle? How to reduce	CO3
B	Reusing home products, What is upcycling?	CO3
C	Benefits of recycling, What not to recycle	CO4
Unit 4	**SUSTAINABLE LIVING IN THE GARDEN**	
A	Starting an organic garden	CO4
B	Grass-cycling	CO4
C	Edible weeds	CO5
Unit 4	**SUSTAINABLE LIVING IN THE HOUSE**	
A	A green home makeover	CO5
B	Homemade cleaning products	CO5
C	Case study-home automation using IoT	CO6
Mode of examination	Theory	
Weightage Distribution	CA MTE ETE 25% 75%	
Text book/s*	1. Sustainable Living: Practical Eco-Friendly Tips for Green Living and Self-Sufficiency in the 21st Century", Pearson India, 4th Edition, 2008 2. Jefferson W.Tester, "Sustainable Energy", MIT Press, 2nd Edition, 2012.	
Other References		