**Suresh Gyan Vihar University -Centre of Excellence**

**1. Centre of Excellence Renewable and Sustainable Energy**

The transition from a fossil fuel driven energy system to the renewable energy based systems of the future requires a concerted effort for capacity building in the area of Renewable Sector. An estimated potential of solar power and wind in India is projected of the order of 748980 MW and 100000 MW respectively. The projections include all possible systems and improvement in the technology. Rajasthan has the highest Solar Power (142310 MW) potential in the country with its healthy resource of solar radiation and availability of vast land in the form of the Thar Desert. The Jawaharlal Nehru National Solar Mission (JNNSM) was launched on the 11th January, 2010 by the Prime Minister. The Mission has set the ambitious target of deploying 20,000 MW of grid connected solar power by 2020 is being revised to 100000 MW by 2020 by the government of India.

**Current Projects**

a. Solar Power Station (120 KW)
b. Green Power development & Energy Improvement Investment Program

# 2. Centre for Climate Change and Water Research (C3WR)

We are dedicated to provide a better understanding of critical, scientific and social issues related to climate change and sustainable development goals through guided research. We are engaged in various research activities ranging from understanding of atmospheric phenomena, climate simulation models, paleoclimate reconstruction, linkage between climate and river basin dynamics. Further, concentrating on flood hazards, impact on climate on hydrologic cycle and water resources and economic impact of climate change.

### ****3. Learning Centre of Excellence with Google****

Industrial teaching by a leading industry is a realistic augmentation for the students. SGVU has made it into the league of a few selected institutes across the country Industrial teaching by a leading industry is a realistic augmentation for the students.

### ****4. Centre of Excellence in Ecosystem for Innovation & Entrepreneurship****

EIE aspires to give a space to budding entrepreneurs so that they can apply their creative energies and innovation capabilities to solve problems of humanities. EIE has the objectives of infusing a culture of entrepreneurship in all the courses in SGVU.

EIE also aspires to bring out a regular e-magazine on innovations and entrepreneurship. It also aspires to incubate StartUps by students and alumni of SGVU to enable them to launch their innovations.

### 5. Centre for Democratic Reforms and Development

Taking from India’s Vision 2020, we are working on the type of governance which is responsive, transparent and corruption-free. We believe that democracy does not only stand for free and fair elections but participation of citizens in governance post elections as well.Our aim is to bring democratic emancipation in our society especially in the state of Rajasthan which even in today’s time is practicing the feudal system in spirits. We aim to make the civil society of Rajasthan stronger through various awareness campaigns, participation in research studies and training amongst citizens.

#### Achievements so far:

1. Study of the ICDS System in city of Jaipur
2. A pre election tracker of Punjab Elections of 2017

#### Current Project:

1. Promotion of Political Entrepreneurship in women of Rajasthan (ongoing)

### 6. Training and Research in Automation with Bosch Rexroth

There has been a momentous advancement in the turf of technology and science over past few decades. The world is bursting benefits of technology. The technology around us is evolving at a breathtaking pace, thus giving birth to the need for a highly skilled workforce. In an effort to metamorphose the University into a nursery producing the technocrats of tomorrow, SGVU has tie-up with the leading specialist in Drive and Control Technologies, BOSCH Rexroth. The University is privileged with cutting edge technology to better train its young techies, and a Centre of Excellence to achieve technological culmination.

**Current Project**– Automation Centre

### 7. Centre of Excellence in House Keeping and Cleaning

“Lifelong learning and practical exposure is more important than it’s ever been, and the future of the Hotel industry appears bright” The Collaboration between Dangayach Group of Hotels with Suresh Gyan Vihar University will provide a suitable and much needed platform for students and learners.

### 8. Centre for Agricultural Research

Centre For Agricultural Research mission is to build sustainable farming systems capable of feeding ten billion human beings by 2050 while preserving the environment. It considers that to develop long term and draft appropriate public policies, societies have to participate in generating the knowledge they need. On a local and a global level, through its long-term partnerships, it contributes to the development of farming systems that benefit all, and particularly smallholders, who make up the majority of farmers. In this way, it responds to the global challenges of food security and climate change, and also the 17 UN Sustainable Development Goals (SDGs) and the Paris agreement on climate change.

**9. Centre for Skill Development and Extra Mural Studies**

Prime Minister’s National Council on Skill Development has spelt out policy advice, and direction in the form of “Core Principles” and has given a Vision to create 500 million skilled people by 2022 through skill systems (which must have high degree of inclusivity), Suresh Gyan Vihar University, Jaipur has taken upon itself the task of coordinating the skill development efforts of a large number of Central Ministries/Departments and States. The Centre for skill development and extra mural studies has geared itself for preparing comprehensive action plans and activities which would promote PPP models of financing skill development.

**10. Centre for Sustainable Development**

To develop human settlements into equitable living environment where the community has access to health, education, housing, basic infrastructure and livelihood options irrespective of their social and economic status. Centre for Sustainable Development supports an integrated development approach for the improvement of living conditions in the slums by convergence of various local initiatives, national and regional programmes in the fields of urban environment, social and technical infrastructure, poverty alleviation, education and health.

**11. Centre of Cloud Infrastructure & Security, In Collaboration with Amazon Web Services (AWS)**

Cloud Infrastructure & Security Research Centre (CIS) is being setup at the Suresh Gyan Vihar University, Jaipur. The primary focus of CIS is to conduct high quality research in the general areas of cloud computing, security, and performance optimization in Networking, at affordable costs. The Centre will be a platform to provide defence against other threats such as information warfare. Our mission is to develop information infrastructures into more secure and reliable cloud infrastructures and to enhance the communication networks and protocols of today’s best-effort Internet. The goal is to explore allied areas of cloud computing, IOT , Big data networking data protection, with the emphasis on verified designs, implementation, and evaluation of secure network systems, protocols, and applications. University research facilities include campus wide wired and wireless networks as well as a heterogeneous collection of computing systems and some new infrastructure. In effect, Suresh Gyan Vihar University is an extensive test bed with several thousand wireless networked computers and active users.