RENEWABLE ENERGY

The energy crisis all over the world in the seventies warned the mankind and forced to think about the appropriate utilization of the energy resources on the earth for the sustainable development. In history, the energy crisis had led to many innovations as well as research and development programs in all sectors related to the energy. It is well known that energy sector has its own impact on the progress and development of any nation. The availability of various energy resources and in house capability to use it in the appropriate manner for productive development of a nation is the key factor in the economic growth of the country. Keeping this long term need in mind and with the vision of then university leadership, University of Pune has established School of Energy Studies in 1978 to cater the need of training manpower, to undertake research and development programs and extension activities related to conventional and non conventional energy sources.

The School of Energy Studies was established under the flag ship of University of Pune, to promote interdisciplinary research, development and teaching activities in the field of energy and renewable energy sources. The major objective of this effort was to bring and to bear, the expertise and facilities that are available in the various science departments on the university campus, for purpose of teaching and solving some of the frontline problems, both of basic and applied nature.

Globally industrial production and energy consumption are outpacing the renewal capacity of natural resources and the capacity of governments to manage pollution and wastes. Industrial growth indeed has helped raise tens of millions of people out of poverty in many countries. However, it is evident that economic growth and urbanization have not come without a price. This phenomenon has adversely burdened the environment and urban services, including recycling systems, waste water treatment and sewage systems, drainage, water supply, sanitation, and solid waste management. Such deficiencies inhibit economic growth, place further stress on natural systems, and damage public health and the investment climate. The poor are disproportionately affected by environmental degradation and lack of access to clean, affordable energy services. Intensified competition for scarce resources, including energy and water, may not only amplify conflicts within the industrial context but will further intensify already

worrying trends of environmental degradation. Resource efficiency and low-carbon economic development can thus lessen the pressures and help to avert some important root causes of social conflict. The three year course on ‘RENEWABLE ENERGY', at University of Pune is the outcome of such initiative and aims at imparting and inculcating the required skills among those interested through highly professional trainers encompassing both reputed Academic Institutes and Industries.

B. VOC IN RENEWABLE ENERGY

YEAR I (THEORY)

1. Digital and Analog Electronics
2. Basic concept of Solar Energy and its applications
3. Basics of Mechanical Engineering
4. Biochemistry
5. Bioenergy

YEAR I – SKILLS (PRACTICALS)

1. Design and Build a biogas plant
2. Solar water heater maintenance and Assembly
3. To design improved cook stoves (smokeless)
4. Solar Drying
5. Assembling, Soldering of Printed circuit boards for electrical/Electronic gadgets

Job Openings after the course

In Industries for smokeless stove, Erection of Biogas plant, Solar water heating, entrepreneurship also encouraged.

Industry Associates :

1. Thermax Ltd,Wakdewadi,Pune
2. Samuchit Enviro Tech Pvt.Ltd
3. Nirmiti Electronics Pvt.Ltd