

COMPUTER LABORATORY

The lab is equipped with top notch computing machines along with cutting edge research software. Lab offers access to all major Journals and research platforms available via Higher Education Commission. The Lab offers high performance Modeling/Simulation open to researchers from different backgrounds. The lab is provided with internet which helps the users to conduct a broad research for their assignments and projects.

LAB MISSION

To explore innovative, creative and imaginative methods to improve research, teaching and learning with an advance computational facility.

RESEARCH PORTFOLIO

- Advance software for energy applications
- Research and development in applied energy research

RESEARCH EQUIPMENT

- HP Elite Desk | Elite Desk800 | Corei5,8GB,500 GB
- HP Prodesk | Prodesk 400 | Corei7, 16Gb, 1TB



RESEARCH EQUIPMENT

Software Name	Description
ANSYS CFD and Chemkin	To provide insights of designs and analyze qualitative and quantitative results for predictions of fluid flow and combustion.
Design Builder	Models complex buildings and simplifies energy plus thermal simulation.
PV*SOL Premium, GeoT*SOL, T*SOL	Dynamic simulation PV program with 3D visualization and detailed shading analysis of photovoltaic systems with storage systems
Meteonorm	Offers access to the Global Energy Balance Archive Data and national weather services and fulfils the quality criteria of the World Meteorological Organization.
MATLAB	MATLAB is a multi-paradigm numerical computing environment. Used for Modelling, Simulations, and analysis of different types of multi-disciplinary systems
Power factory	Provides analysis modules coupled with a wide range of power equipment models, integrated tools and features.
Homer	Used to design and evaluate technically and financially the options for off-grid and on-grid power systems.
TRNSYS	Used to simulate the behavior of solar thermal transient systems.
F-chart	Comprehensive solar system analysis and design program.
Software for Photovoltaic systems	For the study, sizing and data analysis of complete PV systems.
Edesign Suite	Able to suggest products and topologies for various types of application like power conversion.
Sketch Up	Architectural, interior design, landscape architecture.