



Centralized Research Hub at RGPV (ATU) under TEQIP-III

Rajiv Gandhi Pradyogiki Vishwavidyalaya under TEQIP-III has initiated the process of establishment of a state-of-the-art centralized Research Hub, a flagship centralised laboratory for providing a shared research facility to researchers, Post Graduate Students, Under Graduate and faculties of all affiliating institutions of RGPV across the state of Madhya Pradesh. The objective of this Research Hub is to cope up with the vision/ policy of Government of India like Make in India, Skilled India, Start-up India & Scale up India to inculcate innovation & promote employability. Centralised Research Hub at the University campus will be equipped with state-of-the-art hardware's, Design Software's, instrumental facilities and supplemental resources for promoting extensive research. Following equipments have been procured and installed for centralized labs at RGPV campus.

1. Centre for Research in Earthquake Engineering & Disaster Management (CREED)

- Equipments of Earthquake Engineering lab

2. Centre for Alternative Automotive Fuels & Emission.

- Exhaust Gas analyzer
- Smoke meter
- Combustion Analyser Fuel Efficiency Monitor
- Four Stroke Petrol Engine
- Computer Controlled variable compression ratio Petrol engine

3. Centralized Renewable Energy Research Centre (RERC)

- 15 GHz VNA Master Combination analyzer with vector voltmeter
- Geo Signal Analyzer (Anemometer Enabled)
- Transient Temperature Signal Analyzer
- Solar Power Meter Analyzer and Data Logger

4. Centralized Research lab for research in Electrical & Electronics Engineering

- Real Time Digital Simulator
- Matrix Laboratory (**MATLAB**) software along with tools
- Laboratory Virtual Instrument Graphical User Interface Engineering Software (LABVIEW) along with hardware Kits
- MATLAB Simulink Based Real Time Simulator using both CPU & FPGA Co-Simulation Technology for Plant & Controller Simulation
- Proteus
- ANSYS HFSS + EM
- VLSI Design Tools Cadence PG Bundle
- PSCAD – Power System Design Software

5. Centralized Research lab for research in Computer Science and Information Technology

- IOT Lab
- ANEKA .NET Cloud Computing Software
- NETSIM or equivalent simulation software standard (R&D) for 5 users (Perpetual Licence)
- Python
- Machine Learning

6. Centralized Epigenetics & Cryopreservation Laboratory.

- Electronic Weighing Balance
- Ice Flaking Machine
- LN2 Device 2000
- Minus 80 Degree Freezer
- Dnase, Rnase Free water purification system
- Mini Centrifuge
- Powder X-ray diffraction (XRD)

7. Centralized Product design Research Lab

- CATIA Software
- ANSYS CFD and Mechanical
- Bentley STAAD PRO