

# Certificate course on Research in Biomedical engineering



# **Duration and Structure:**

Certificate course on Research in Biomedical engineering (40 Hours)

Proposed Maximum Duration: 3 months.

Mode of course delivery: 30 Hrs (Online) + 10 Hrs (Offline)

**Offered by:** Department of Mechanical Engineering and Department of Electronics and Communication Engineering VNIT Nagpur (Interdisciplinary Board)

## **Course Contents:**

- Introduction to history of biomechanical research
- Understanding the fundamentals, and basic definitions, Examples of class of levers in body
- Introduction to Orthopaedic related research
- Research projects related to Implant developments
- Software based research in the area of dentistry
- Product development based on the research
- Sports biomechanics and related research
- Body Sensor Networks

Attendance: 75% mandatory

Course Evaluation: Mid-term (30%) + End Term(30%) + Teacher's Assessment (40%)

**Fees**: Rs. 25,000 + 18% GST

**Application process:** If you are interested, please fill out the application form by clicking on the following link [Click Here]. For more details, please visit our website: [https://vnit.ac.in/admission].

- Sensor based research projects
- How to plan for a start Up
- Display of technologies and products developed
- Usage of software's available for research
- Visit to BETiC and Biomechanics Lab

### **Course Outcomes:**

- Discover key research areas and complete protocol
- Explore research avenues in future
- Realize the value of the research Understand

how to develop products and implement in clinical situations.

# **Course Co-Ordinator**

Dr. Rashmi V. Uddanwadiker

Professor, Department of Mechanical Engineering

Dr. Pradnya Ghare

Assistant Professor, Department of Electronics and Communication Engineering