



Refresher Course On

“Recent Advances in Emerging Areas of Engineering, Technical Education & Research”

(24th June- 6th July, 2019)

Organized by UGC-HRDC and Department of Chemical Engineering, SoS, Engineering & Technology, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) 495 009

Introduction

As of recent past scenario only 10% of engineering graduates are virtually employable out of some 10396 AICTE approved engineering institutes. The objective is to awaken the academicians, researchers and intellectuals in light of rejuvenation in technical education and research in India. Continuous deliberation is going on from top to bottom level stake holders in the context of course curricula development in various disciplines of engineering and technology, viz. Chemical, Mechanical, Civil, Electronics, Computer, Information Technology, Biotechnology. The young teachers of engineering and technology disciplines have to nurture their intellectual brains for developing the need based course curricula for the sake of selling their products like the students in industries, research and academic institutes. The participants have to be aware of the fundamentals and latest emerging trends of the research and technical fields in various disciplines. The present refresher course objective would be to educate the young technical participants in context with the fundamentals and recent advances in various technical disciplines.

Objectives

The Refresher Course will enable to:

- The participants of the various disciplines have to learn the fundamentals and research trends of inter-disciplinary areas.
- The young participants will be able to formulate the course curricula of their individual disciplines as per the need of the industries, research and academic institutes of the country.

Modules of Course

The course will be organized under tentative modules including mostly from following areas:

- ❖ Combustion and Energy Systems
- ❖ Fluidization Engineering Applications
- ❖ Plant Design and Process Design
- ❖ Modern Biotechnologies
- ❖ Simulation Tools
- ❖ Dynamics and Control
- ❖ Robotics
- ❖ Nanotechnology
- ❖ Fuel Cell
- ❖ UAV Development
- ❖ Advanced Materials
- ❖ Software
- ❖ Machine Learning
- ❖ Block Chain
- ❖ Artificial Intelligence
- ❖ Cyber Security
- ❖ Fibre Optics Communications
- ❖ Embedded Systems
- ❖ VLSI
- ❖ Environmental Engineering
- ❖ Soil Reinforcement and Geosynthetics
- ❖ Fibre Reinforced Concrete
- ❖ Damage and Fracture Mechanics
- ❖ University- Industry Linkage
- ❖ TQM in Higher technical Education
- ❖ Other Emerging Areas

About Human Resource Development Centre (HRDC)

UGC-Academic Staff College (ASC), presently upgraded as Human Resource Development Centre (HRDC) was initially established in Guru Ghasidas Vishwavidyalaya (A Central University) during 2009. HRDC is organising various kinds of training programmes to enhance the professional skills and knowledge of teaching and non-teaching staff. The

HRDC has the state of the art ICT Laboratory equipped with high speed internet & video conferencing facilities. The facilities of Central Library of Vishwavidyalaya, equipped with more than one lakh books and journals, Science Direct and INFLIB NET, have been extended to HRDC, which make possible an easy access to books, journals and e-resources for faculties. The HRDC has developed strong linkages with reputed national and international institutes and invites eminent academicians and researchers as resource persons as per the needs of the training programmes. The highly motivated faculty, eminent resource persons, state of the art facilities and excellent logistics are the strengths of HRDC and key to the successful organisation of many quality programmes.

About Department of Chemical Engineering, School of Studies, Engineering & Technology (Institute of Technology)

School of Studies, Engineering & Technology comprise seven departments namely Chemical Engineering, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Industrial & Production Engineering, Information Technology and Mechanical Engineering. Chemical Engineering department is running from the inception of this University Institute of Technology in 1997. Being the Director and Dean of the Institute of Technology, Prof. S. N. Saha has brought some Six UGC/ AICTE / Govt. projects worth some Rs. 95 lacs for this institute. B. Tech., Ph.D. programmes are running in this School, M. Tech. programme is running in departments of Chemical and Mechanical Engineering. Chemical Engineering department is enriched mainly by various laboratories like Mass transfer, Heat Transfer, Mechanical Operations, Process Control, Computer, Reaction Engineering, Fluid Mechanics and Fuel Combustion and Energy Technology. Civil Engineering department is enriched by labs like Survey, Material Testing, Transportation Engineering, Structural Engineering, Environmental Engineering. Computer Science and Engineering department runs the laboratories like Advanced Programming, DBMS, Networking, DLD, JAVA Programming etc. Electronics and Communication Engineering department runs with various laboratories including Switching and Pulse Theory, Analog Circuit, Signal and System, Microprocessor, VLSI etc. Industrial & Production, and Mechanical Engineering departments are enriched by Welding, SoM, CAD, Refrigeration and Air Conditioning etc. Information

Technology department comprises Microprocessor, Simulation and Modelling labs etc.

Eligibility and Application of Participants

1. The teachers who belong to Engineering and Technology disciplines including the relevant disciplines like Biotechnology are eligible to apply for the course.
2. University/ College teachers those already attended orientation programme or Refresher Course are eligible to attend a Refresher Course after a minimum gap of one year.
3. Selection will be made as per the guidelines of the UGC-HRDC and on first come first serve basis.
4. **The last date of receiving application is 14th June 2019.**
5. Limited number of accommodations are available in Guest House of HRDC.

The interested candidates are advised to apply via online application form at the earliest and the same application may be printed out for applying through proper channel from university web site: www.ggu.ac.in/hrdc with a registration fee (non-refundable) of Rs. 1000/- paid through NEFT/RTGS/NET BANKING/OTHER in the account of UGC-HRDC, GGV, Bilaspur (C.G.), Bank Account No.- 947410110001547, IFSC Code- BKID0009474, Branch- BOI, GGV Campus, Koni to secure the participation. The participants will be paid TA/ hospitality as per the norms of UGC-HRDC. Bilaspur city of Chhattisgarh is well connected by rail and roadways. Regarding any further queries related to the course and other details, please contact the Course Coordinator and Director.

Contact

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