

# Any other additional information

UPES has the vision to be an Institution of Global standing for developing professionally competent talent contributing to nation building. One of the missions of UPES is to create global knowledge eco-system through training, research & development and consultancy. As also, practice and promote high standards of professional ethics and develop harmonious relationship with environment and society. Along the same lines department of R&D at UPES has the vision to enable UPES become a leading institution of global repute known for its sustainable research excellence.

Administration at UPES is committed to realizing the vision and accomplish the mission and has taken a number of initiatives to encourage maximum participation in research activities from both faculty and student. In order to equip the researchers (faculty and student) R&D conducts workshops viz a viz Research Paper Writing, Patent Filing, Research Proposal Writing and Research Collaboration. Dedicated research groups are in place to bring together researchers with common research interests. Researchers are provided SEED research funds to test their ideas and write projects for external grants.

UPES is perhaps one of the few universities across the nation with access to both SCOPUS and Web of Science citation databases. State-of-the-art Central Instrument Centre (CIC) enables researchers to perform cutting edge research. Performing researchers are adequately incentivized for their contributions. Support is also available to enable faculty attend national and international conferences/workshop/seminars.

In order to encourage students to become innovators and entrepreneur UPES provides student support under SODH. Both UG and PG students are encouraged to submit original research ideas. The SODH initiative aims at adopting 'students as innovators' approach and has a particular focus on encouraging the students through supporting research dissemination. This initiative provides the testing ground for student to test their research, develop new technology or design products that would lead to technology or product development, research papers, patents and/or startups that can be taken up by the UPES Centre for Innovation and Incubation to help the student become an entrepreneur.

#### **Research support system**

#### Workshops/Seminars/Invited Lectures

We at UPES understand the importance of equipping the faculty and student with the right tool to perform cutting edge research. In order to update the faculty and student with the latest developments in the field, as also to equip them with the tools and techniques to do innovative research, UPES conducts workshops, seminars, invited talks on diverse state-of-the-art research topics.

Following is an illustrative list of distinguished speakers who have visited UPES to deliver invited talks:

- 1. Bharat Ratna Prof. C. N. R. Rao (March 26, 2015)
- 2. Padma Bhushan Prof. K. S. Valdia (October 14, 2015)
- 3. Padma Vibhushan Prof. J. V. Narlikar (September 4-5, 2015)
- 4. Padma Bhushan Prof. S. K. Joshi (September 5, 2016)
- 5. Padma Bhushan Prof. V. K. Sraswat (November 8-9, 2013)
- 6. Padma Vibhushan Dr. R. Chidambaram (February 27-28, 2014)
- 7. Padma Vibhushan Prof. M. M. Sharma
- 8. Prof Devang V. Khakhar, Director IIT Bombay
- 9. Dr. R. K. Malhotra, Director IOCL (August 12-13, 2013)
- 10. Dr. Dr. B. K. Gairola, Mission Director (e-governance)

Additionally, a number of workshops on IPR, project and paper writing have been conducted across various schools.



Workshop *on* Intellectual Property Rights: Technology Development and commercialization (IPRTDC – 2019), UPES, Bidholi Campus, August 28, 2019



Workshop on Intellectual Property Rights, 10th November 2017



Indo-French Thematic School & Workshop on Water Treatment and Management, 28-29 March 2018



Workshop on "NANOMATERIALS FOR BIOSENSOR", 11th December 2017



Workshop on "Implementation of Neural Models for Pattern Recognition" 23rd Nov, 2017







# Citation Databases and Journal Subscription

Access to authentic citation database is paramount to doing credible research. In order to equip the researchers with authentic research UPES has subscribed to the two leading citation databases – SCOPUS and Web of Science. The researcher can build their literature review using the two citation databases backed by subscription to leading research journals in various discipline of science and engineering.

### Central Instrumentation Centre

In addition to providing access to word's leading citation databases and subscription to high quality peer reviewed journals. UPES has a central Instrumentation Centre (CIC) which has state-of-the-art experimentation facility.

### List of equipment at CIC:

- 1. FT-IR (Frontier FT-IR/FIR, Perkin Elmer)
- 2. XRD (D8 Advance ECO Bruker)
- 3. Spectro Photo Meter UV-Vis (LAMDA 35, Perkin Elmer)
- 4. Atomic Force Microscope (NANOSURF AG)
- 5. CHNS-O Analyzer (Flash 2000 Series, Thermo Scientific)
- 6. ICP-OES (Plasma Quant 9000 Analytikjena)
- 7. Contact Angle Goniometer/Drop Shape Analyzer (DSA25, Kruss)
- 8. Nano Fluid Interferometer (Mittal Enterprises NF10)
- 9. Particle Size Analyzer (Zen1690, Malvern Instruments Ltd, 2013)
- 10. Photoluminescence Spectrophotometer (LAMBDA 45, Perkin Elmer, 2013)
- 11. Photentiostat-Galvanostat (CHI660E, CH Instruments, USA, 2013)
- 12. Rheometer (Model C-LTD80/QC, Anton Paar GMBH, Austria, 2013)
- 13. Thermo mechanical Analyzer (TA Instruments TMAQ400EM)
- 14. GC-MS (CLARUS SQ8S, Perkin Elmer)
- 15. ISE Measurements (Orion Dual Star, Thermofisher)
- 16. pH/ORP, DO, CD/TDS, Turbidity Meter (YK-2005WA, TU-2016, Lutron)
- 17. BOD Incubator (213, Evian)
- 18. HPLC
- 19. Colony Counter

# Research Groups

Groundbreaking research is central to growth of any university. In order to strengthen the research culture and develop UPES's research personality we have various research groups.

For the School of Business, we have the following research groups:

- 1. Green Transition, Power and Smart Cities
- 2. Name: Infrastructure and Project Management
- 3. Energy Economics
- 4. Logistics and Supply Chain
- 5. Petro Management
- 6. Functional Management Research
- 7. Transportation Sector Management
- 8. Service Sector Management

For the School of Computer Science, we have the following research groups:

- 1. Intelligent Systems & Technologies (IST)
- 2. Secure Computing Technologies (SCT)
- 3. Green Computing Technologies (GCT)

For the School of Engineering, we have the following research groups:

- 1. Alternate Energy Innovations
- 2. Application of advanced Nano materials
- 3. Sustainable Water Management
- 4. Enhance Oil Recovery (EoR)
- 5. High Speed Computing

#### **Research** Awards

We at UPES understand the importance of work done by active researchers, who contribute to the overall development of UPES in the form of project funding, patent, papers in peer reviewed high impact journals, etc. UPES recognizes and acknowledge such contributions in bi-annual award event established since September 5, 2014.





### SEED

UPES encourage all the faculty members to test the feasibility of their research ideas without fear of failure. SEED funding is an inhouse financial support that is available for consumables, mini equipment, travel grant, fees for characterization, software purchase and other operational expenses.

The intent of this initiative is to support the growth of the researchers by providing them flexible working capital and to leverage these limited funds into substantial external funding, industrial support or creative scholarship projects.

# SODH

UPES is committed to instilling research fervor in all the students. Under SODH support for students, UPES has started Research and Innovation for Science and Engineering (RISE), Research and Innovation for Students of Computer Science (RISCS), Research and Innovation for Students of Business (RISB) and Research and Innovation for Students of Law (RISL).

SODH support for student at UPES was started with the prime objective of inculcating a culture of innovation driven entrepreneurship through student projects and encourage students to be innovators and entrepreneurs. Student projects that respond positively to the emerging local and global challenges and opportunities relating to need for developing sustainable product/technology are encouraged. The SODH aims at adopting 'students as innovators' approach and has a particular focus on completion of the research cycle for students through supporting research dissemination. This initiative provides the testing ground for student to test their research, develop new technology or design products that would lead to technology or product development, research papers, patents and/or startups that can be taken up by the UPES Centre for Innovation and Incubation to help the student become an entrepreneur.

### Incubation Centre

The UPES Centre for Innovation and Entrepreneurship (UCIE) is a Business Incubator (BI) with focus on the technology sectors in Delhi NCR and Uttarakhand region belt.

The mandate of the Centre is to assist the UPES community entrepreneurs (faculty, staff, alumni and students) as well as the external community entrepreneurs commercialize their product/service ideas and/or accelerate their growth.

UCIE has the mission to synchronize and synergize the interactions between various stakeholders of Entrepreneurship Ecosystem with utmost importance on enabling young students to become successful.

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