

## **ADMISSION TO PhD PROGRAMME**

### **ELIGIBILITY**

- (i) A candidate seeking admission to the PhD programme must have obtained ME/MTech/MPhil/ MCA/MSc/MA or equivalent degree in relevant discipline with minimum of 6.00 CGPA (on 10 point-scale) or 55% marks in aggregate where marks are awarded or NET qualified.
- (ii) In exceptional cases, candidates with BE/BTech degree or equivalent in respective discipline with excellent academic record, minimum CGPA of 9.00 (on 10 point scale) or in marks 80% in aggregate, may be considered for direct admission. Relaxation of CGPA to 7 on a 10 point scale or in marks to 65% for the minimum eligibility conditions may be permitted for candidates with a BE/BTech degree or equivalent who have a minimum of 3 years of professional and/or research experience in the area in which the admission is sought. However, candidates admitted with BE/BTech or equivalent qualification will be registered for PhD after successful completion of at least four post-graduate level courses as prescribed by the concerned Department/School within a period of two years from the date of provisional registration. A minimum CGPA of 6 on a 10-point scale should be earned in the courses prescribed by the concerned Department/School.
- (iii) Part-time studies leading to PhD degree are permitted for local professionally employed personnel such as working engineers, scientists and teachers from R&D establishments Corporate Sectors and recognised educational institutions. Candidates working within a radius of 100 KM should be a regular employee of the organisation at the time of admission and be engaged in professional work in the area to which admission is sought.
- (iv) Candidates from R&D establishment, Corporate Sectors and recognised educational institutions (recognised by the University) may be considered for admission as external candidates. Such candidates would be required to work in the University for a minimum period of 6 months in one or two spells.

### **Notes:**

- (a) No residency requirement for TU qualified candidates.
- (b) Part-time candidates are required to submit the "No Objection Certificate" from their parent organisations/departments/schools/centres stating that the candidate is permitted to pursue studies on a part-time basis and that the candidate's official duties permit him to devote sufficient time for research.
- (c) In case of FN candidates, Research VISA endorsed to TU is required.

### **GENERAL INFORMATION**

TU offers PhD programme in almost all specializations of Engineering, Technology, Management and Sciences in the following Departments/Schools of the University (currently 251 PhD candidates are working for their PhD degrees in the University).

### **DEPARTMENTS**

#### **Biotechnology & Environmental Sciences Department**

Agro-Biotechnology, Plant Biotechnology, Bioremediation, Microbial Ecology, Food Technology, Food process and Safety, Plant Microbe Interaction, Tissue culture, Sustainable Agriculture, Bioinformatics.

#### **Chemical Engineering Department**

Bio-Chemical Engineering, Environmental Pollution, Mass Transfer, Pulp & Paper, polymers and composites, process Development, Mathematical Modelling and Simulation.

#### **Civil Engineering Department**

Structural Engineering, Geo-technical, Engineering, Transportation Engineering, Construction Engineering and Management and Computer Aided Design.

#### **Computer Science & Engineering Department**

Bio-Informatics, Software Engineering, Parallel & Distributed Computing, DNA & Quantum Computing, Network & Information Security, VLSI Design & Testing.

#### **Electrical & Instrumentation Engineering Department**

Optimal Power System Operation ; Electric Drives; Application of FACTS; Power Electronics ;Process Control & Instrumentation, Artificial Intelligence Applications , Biomedical Instrumentation, Embedded systems .

#### **Electronics & Communication Engineering Department**

Semi-Conductor Devices, Micro-wave integrated circuits, solid State & thin films, Digital Signal processing;VLSI, Mobile Communication, Optical Communication.

#### **Mechanical Engineering Department**

Heat Transfer; IC Engines; Energy Conservation and Management; Bearing & Lubrication; Computer Aided Analysis & Design; Industrial Engineering & Robotics and Fluid Mechanics.

### **SCHOOLS**

#### **School of Physics & Materials Science**

Solid State Physics; Materials Science; Nano Science; Liquid Crystal; Magnetic Material, Condensed Matter Physics, Nuclear Physics.

#### **School of Management & Social Sciences**

Humanities, Arts and Management

#### **School of Mathematics & Computer Applications**

Operations Research; Functional Analysis; Reliability; Fourier Analysis; Biomathematics; Differential Equations; Algebra; Pattern Recognition; Soft computing; Theory of fuzzy sets; Differential Geometry; Number Theory; Topology.

#### **School of Chemistry & Biochemistry**

Inorganic Analytical Chemistry, Synthetic Organic Chemistry, Organometallic Chemistry, Environmental Chemistry, Catalysis.

#### **L M Thapar School of Management**

Strategic Management, Strategic Cost Management, Marketing Management, Finance Management, Management of IT & Infrastructure, IT Strategic deployment, IPR.

### **GENERAL INSTRUCTIONS**

The application form along with attested copies of certificates must be submitted to the Registrar on or before June 25, 2009 for the odd semester and on or before Dec. 07, 2009 for the even semester. Incomplete application forms and those received after the prescribed date will not be entertained under any circumstances. No correspondence/enquiry from such candidates shall be entertained.

An interview for the admission will be held by the PhD Admission Committee in the office of the Head of Concerned Department/School on July 20, 2009 for odd semester and on Dec. 15, 2009 for even semester. No separate intimation will be sent in this regard. Application form must accompany:

- (i) Attested copies of the certificates of the examinations passed.
- (ii) One passport size photograph pasted on the application form in the space provided for the purpose.

### **DURATION**

The student shall submit his/her thesis to the Registrar within five years but not earlier than two years in case of regular and three years in case of part time student from the date of his/her registration i.e. from the date on which University Research Board approves his/her research proposal.

### **TEACHING ASSISTANTSHIP**

#### **ELIGIBILITY**

The assistantship may be granted to candidates out of those admitted to the PhD programme. Only those candidates will be considered who have obtained minimum CGPA of 6.75 (10.00 point scale) or first division in their qualifying examination.

#### **NUMBER AND VALUE OF THE ASSISTANTSHIP**

Two positions for Teaching Assistantship are allocated to each Department/School in the University.

Emoluments for the Teaching Assistantship will be Rs.10,000/- including house rent charges or as approved from time to time by the University.

A contingent grant of Rs.7500/- per annum per scholar (to be reimbursed on actual basis) is admissible to regular scholars

Suitable accommodation may be provided, if available in the University on rental basis.

#### **DURATION**

The assistantship will be tenable for one year at the first instance from the date of selection, to be renewed every year as per requirement of the Deptt./School.

#### **GENERAL CONDITIONS**

A scholar who has been selected for the award will be given 8-12 hours of teaching (Tutorials and Practicals) per week.

A scholar who has been selected for assistantship shall not be eligible for any other fellowship, stipend or scholarship from the University or from any other source.

A scholar who has been selected for assistantship shall be liable to pay tuition fee and other dues as prescribed by the University from time to time.

#### **Fee to be paid at the time of admission:**

Regular candidates: Rs 29225/-

Part time Candidates: Rs 28075/-

**Hostel Charges:** Rs 18,500 per semester