

Prospectus  
*for*  
Ph.D. Programmes

2011-12

PEC University Of Technology,  
Chandigarh

## 1. Objective

The PEC University of Technology has a mission to develop high quality scientific and engineering specialists having strong base of principles of science and the scientific methods, deep understanding of their chosen areas of specialization, the motivation to learn continually, interact with multi-disciplinary groups and to handle new challenges offered by the front-end technologies.

The Ph.D. Programme is designed to impart knowledge, and consolidate concepts and intellectual skills through courses, seminars, projects, and thesis work. Above all, it helps the scholars to develop the capacity for free and objective enquiry, courage and integrity, awareness and sensitivity to the needs and aspirations of the society.

The Programme provides the candidates an enabling research experience during their stay in the Institute thus helping them to enter their professional life with right perspective and knowledge related to their respective fields of specialization.

## 2. Areas of Research

The Ph.D. Programme can be pursued in the disciplines of Applied Sciences and Management, Civil, Electrical, Mechanical, Metallurgical and Production Engineering.

## 3. Admission to Ph.D. Programme

Admission to the Ph.D. Programmes is made on the basis of Written Test and Interview. Exemption from the Written Test will be given to those who have qualified NET or GATE test. The entrance test will be based on objective type questions based on specialization as mentioned below:

Sr. No.	Department	Area of Specialization	No. of Seats
1.	Aeronautical Engg.	• Aeronautical Engg.	02
2.	Applied Science	• Physics • Chemistry • Humanities • Geology	01 * 01 * 01 01
3.	Civil Engg.	• Structural Engg. • Highways Engg. • Irrigation & Hydraulic Engg. • Environmental Engg. • Geotechnical/Geo-Environmental Engg.	05 08 01 14 02
4.	Computer Sc. & Engg.	• Computer Sc. & Engg	07
5.	Electrical Engg.	• Power System • Power Electronics & Drives • Control Systems	12
6.	E&EC Engg.	E&EC Engg.	03
7.	Mechanical Engg.	• Design • Production	02 02
8.	Metallurgy Engg.	• Material & Metallurgical Engg.	01
9.	Production Engg.	• Production Engg.	05

\* Preference will be given to full time net qualified candidate.

30-50 no. of questions will be asked in one hour. The qualifying marks for the exam will be 40%. There will not be negative markings.

Applications are invited from candidates by advertising the programmes in The Tribune and Hindustan Times on 01<sup>st</sup> December, 2011.

Admission to Ph.D. Programme is also possible any time during the year through Department / Centre Admission Committee with the approval of the Chairman Senate through Dean Academic Affairs for all categories of scholars although the course registration, where required, will be possible only at the beginning of next semester.

The Ph.D. Admission Committee of a department / centre will consist of concerned RDC plus all potential Ph.D. supervisors.

#### **4. Categories of Ph.D. Programme Admissions**

- Full-time Non-Sponsored
- Full-time Sponsored
- Part-Time

#### **5. Categories of Scholars/Admissions**

- Full-time Non-Sponsored with scholarship
- Full-time Non-Sponsored without scholarship
- Full-time Sponsored
- Part-Time

Financial aid /Assistantship may be granted subject to availability of grants from PEC / UGC / DST / CSIR, etc.

#### **6. Eligibility Criteria for Admission to Ph.D. Programme**

##### ***6.1 For Full-time Non-Sponsored Scholars:***

##### **Minimum Eligibility:**

1. Master's degree in Engineering/Technology or Master's degree in Science / Humanities / Management or equivalent in a relevant discipline with 55 % marks in aggregate for general category.
2. The candidate must have a valid GATE score or must have been admitted to the M. Tech Programme with a valid GATE score. For admission to Ph.D. Programmes in Science/Humanities/Management the candidates must have a NET Fellowship (UGC / CSIR) valid from the current year in relevant areas.
3. Provided that the condition for GATE / UGC NET will not be applicable to Full-time Non-Sponsored without scholarship category of candidates.

##### ***6.2 For Full-time Sponsored Scholars:***

**Minimum Eligibility:** Master's degree in Engineering/Technology or Master's degree in Science/Humanities or equivalent in relevant discipline with 55% marks in aggregate for general category. These candidates must have served with the sponsoring organization for a minimum

period of 2 years on full-time basis. The sponsoring organization needs to provide an undertaking as per Note 5 of the NOTES given later.

### **6.3 For Part-Time Scholars:**

**Minimum Eligibility:** Master's degree in Engineering/Technology or Master's degree in Science/Humanities or equivalent in relevant discipline with 55% marks in aggregate for general category. These candidates must have continued to serve the present organization for a minimum period of 2 years. The candidate must provide a No-Objection Certificate from the employer as per NOTES given later.

## **7. Ph.D. Course Work**

After having been admitted, a Ph.D. candidate shall be required to undertake course work for minimum period of one semester. For this purpose, the Ph.D. scholar has to take at least a minimum number of two courses subject to the condition that a minimum of 6 total credits for the Ph.D. Course Work will be mandatory. Further, one of the courses offered during the course work will be a course on Research Methodology, which may include quantitative methods and computer applications. It may also involve reviewing of published research in the relevant field. The other course(s) will be based on the recommendations of the supervisor. The minimum requirement to pass the Ph.D. Course work will be a CGPA of 6.5. The Course work may span over more than one semester subject to the other conditions in these rules as applicable.

The minimum qualifying requirement for allowing a student to proceed further with the writing of the dissertation will be as per those given in Para 8 and 9.

If found necessary, course work may be carried out by doctoral candidates in sister departments / institutes either within or outside the university for which due credit will be given to them.

## **8. Duration**

The minimum duration of the Ph.D. Programme will be 3 years from the date of admission. The maximum duration will be limited to 5 years from the date of registration. The Chairman Senate can grant extension beyond this period only after the candidate again presents a State-Of-Art Seminar with current status of research work and *this* is approved through the same channel as it was done in the first instance provided that the supervisor of the candidate recommends the extension.

## **9. Submission of Application form**

Application for admission must be filled in the candidate's own hand-writing and on the prescribed official form; the application form can be download from the institute website [www.pec.ac.in](http://www.pec.ac.in). It must be accompanied by the following documents:

- I. Date of Birth Certificate
- II. SC/ST Certificate (if applicable)
- III. Sponsorship/NOC Certificate (wherever applicable)
- IV. GATE Score Card (if applicable)
- V. Copies of Bachelor's & Masters Degrees
- VI. Migration Certificate(For candidates not having their Master's degree from PEC University of Technology)

## VII. Physical Handicap Certificate (if applicable)

### The application should reach:-

Officer In-charge Ph.D. Admissions  
PEC University of Technology,  
Sector – 12, Chandigarh, Pin – 160012

### NOTES:

1. The candidate may, if he/she so desires, give the choice of *possible* supervisors in his / her application for Ph.D. Programme. However, this would not be a limitation on the allocation of supervisor(s).
2. 15% seats are reserved for SC candidates and 7.5% seats are reserved for ST candidates.
3. For SC and ST candidates there will be a relaxation of 5% in the minimum aggregate marks required for admission for all categories of scholars.
4. Seats as per Institute norms are reserved for the physically handicapped persons in all the Ph.D. Programmes combined. The distribution of these seats will be coordinated centrally.
5. Sponsorship letter (on letterhead of the sponsoring organization) should include an undertaking stating that the period of study of the candidate will be treated as ‘on duty’ with usual salary/allowances, and he/she will be relieved for the period of studies.
6. Only employees of Government Departments or Research Development Organizations or Public Sector Undertakings or Registered Industries / Companies and also the faculty of an educational institution will be eligible for admission to Ph.D. Programme as Part-Time Scholars. A candidate under *this* category has to produce a ‘No Objection Letter’ from his/her employer stating that (i) He / she is on the regular payroll of the organization, (ii) He/she is permitted to pursue studies on a part-time basis, and (iii) His/her official duties will permit sufficient time for research.
7. Full-time, non-sponsored candidates with scholarship coming on study leave must show proof of at least 3 years study leave before being allowed to register after the selection.
8. In case an eligible degree does not bear the awards in percent, the following Conversion Formula will be used to convert CGPA into percentage of marks for the purpose of admission at PEC:  
Percentage of Marks = (CGPA – 0.5) x 10, on 10-Point Scale. For 4-point-scale following table may be used:

Percent Marks	GPA
55	2.10
60	2.30
65	2.50
70	2.70

9. The minimum prescribed percentage will be based on the marks obtained in aggregate of all the years/ semesters of the qualifying examinations as per the weightage followed by the concerned University.
10. The relevancy / equivalency of Master’s degree for admission to a given discipline will be defined / determined by the concerned RDC.
11. There is no residency requirement for local Ph.D. candidates (both full-time as well as part-time) who are residing within 50 km of PEC.

12. For the part-time Ph.D. candidates, who are residing beyond 50 km of PEC, a residency requirement of one semester duration is mandatory in the first year of Ph.D. Programme.
13. For full-time Ph.D. candidates, who are residing beyond 50 km of PEC, a minimum residency of four continuous semesters from the beginning of the Ph.D. Programme is mandatory.
14. The attendance of full-time Ph.D. candidates will be governed by the attendance requirements of the Institute.
15. Part-time Ph.D. candidates will be required to meet the supervisor at least eight times in a semester.

**PEC UNIVERSITY OF TECHNOLOGY, CHANDIGARH**

**APPLICATION FOR ADMISSION TO Ph.D. PROGRAMME**

**DEPARTMENT & SPECIALIZATION IN WHICH ADMISSION IS SOUGHT:**

\_\_\_\_\_

**ANY OTHER DEPARTMENT TO WHICH APPLICATION**

**HAS BEEN MADE:** \_\_\_\_\_

**PROPOSED STATUS (FULL-TIME NON-SPONSERED / FULL TIME SPONSORED/  
PART-TIME):** \_\_\_\_\_

**NAME:** \_\_\_\_\_

**SEX: MALE/ FEMALE** **DATE OF BIRTH:** \_\_\_\_\_

**FATHER'S NAME:** \_\_\_\_\_

**MOTHER'S NAME:** \_\_\_\_\_

**PERMANENT ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**ADDRESS FOR CORRESPONDENCE:** \_\_\_\_\_

\_\_\_\_\_

**Contact No:** \_\_\_\_\_ **Email-ID:** \_\_\_\_\_

**CATEGORY:** GENERAL/ SC/ ST/ HANDICAPPED

**QUALIFYING EXAMINATION**

**NAME OF QUALIFYING DEGREE:** \_\_\_\_\_

**UNIVERSITY/ INSTITUTE:** \_\_\_\_\_

**WHETHER PASSED OR APPEARED  
IN THE QUALIFYING DEGREE EXAM** \_\_\_\_\_

**AGGREGATE %AGE OF MARKS/ CGPA** \_\_\_\_\_

**ADDITIONAL QUALIFYING EXAMINATION**

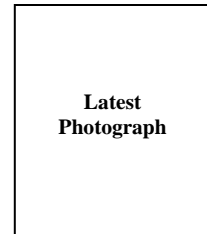
**1. GATE** **2. NET/UGC-JRF/CSIR/OTHERS (Please specify)** \_\_\_\_\_

**SCORE:** \_\_\_\_\_ **DATE OF EXAM:** \_\_\_\_\_

**VALID UPTO:** \_\_\_\_\_ **VALID UPTO:** \_\_\_\_\_

**DETAILS OF EXAMINATION OTHER THAN QUALIFYING EXAMINATION**

EXAMINATION	DISCIPLINE	INSTITUTE	YEAR OF PASSING	%AGE OF MARKS/ CGPA
Secondary (10 <sup>th</sup> )				
Senior Secondary (10+2)				



B.E. / B. TECH. / B.Sc. / B.A.				
M.E. / M.Tech				

**TITLE OF M.E./ M. TECH./M. PHIL/M.Sc. DISSERTATION:** \_\_\_\_\_

**EXPERIENCE IF ANY**

FROM	TO	DESIGNATION	ORGANIZATION

**NO. OF PAPERS PUBLISHED** \_\_\_\_\_  
**(ATTACH LIST GIVING DETAILS)**

**AWARDS AND SCHOLARSHIPS**

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**ANY OTHER RELEVANT INFORMATION**

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**DECLARATION BY THE APPLICANT**

- a) I hereby certify that the entries made by me in this form are correct to the best of any knowledge & I have not suppressed any information in any manner.
- b) I agree to observe & abide by all the rules & regulations of the institution & the hostel that may be laid down from time to time by the PEC University of Technology during the period of my studies & training & not to associate myself with any activity prejudicial to the discipline of the institution.
- c) I fully understand that for any violation or infringement of these rules & regulations, disciplinary action can be taken against my by the authorities.
- d) I hereby solemnly affirm & declare that I have never been disqualified by any Board/University or convicted on any account.
- e) I understand that if at any stage it is found that I have provided any wrong information or have suppressed any information to seek admission to this institution, my admission shall automatically stand cancelled and I will have no claim on the seat or the dues paid to the institution.

**DATE:**

**SIGNATURE**

## **GENERAL INSTRUCTIONS**

1. Separate application form should be used for each department if applying for more than one department.
2. Enclose self attested copies of relevant certificates.
3. Bring original certificates along with the Master's level Thesis at the time of interviews.
4. Tick ( ✓ ) the relevant entry wherever provided.
5. The filled application form must reach the Officer- in-charge Ph.D. Admissions, PEC University of Technology, Sector - 12 Chandigarh. Pin- 160012
6. Name of the department in which the admission is sought should be superscribed on the envelope.

## **CHECK LIST**

The photocopies of the following documents (whichever applicable) are required to be enclosed with application form.

1. Date of Birth Certificate
2. SC/ST Certificate
3. Sponsorship/NOC Certificate
4. GATE Score Card if applicable
5. Bachelors level Mark-Sheet/Degree
6. Masters level Mark-Sheet/Degree
7. Migration Certificate

## **FEE STRUCTURE FOR Ph.D. STUDENTS**

### **ONE-TIME (At Admission only)**

Admission Fee	:	Rs. 3000
Student services	:	Rs. 5000

### **RECURRING (Annual)**

Tuition Fees	:	Rs. 5000
Other facilities & services	:	Rs. 10000

<b>SECURITY (Refundable)</b>	:	Rs. 5000
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The other facilities and services fee will not be payable by students who are pursuing the programme on a part-time basis.

### **ADDITIONAL FEE FOR HOSTEL FACILITIES AT THE TIME OF ADMISSION:**

Refundable security	:	Rs. 5000
Hostel fees (Annual)	:	Rs. 10000
Hostel & mess establishment charges (Annual)	:	Rs. 8000
Mess advance	:	Rs. 2500

<b>Total additional sum payable for hostel facilities</b>	:	<b>Rs. 25500</b>
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Every component of fees is subject to revision by PEC University of Technology, Chandigarh from time to time.