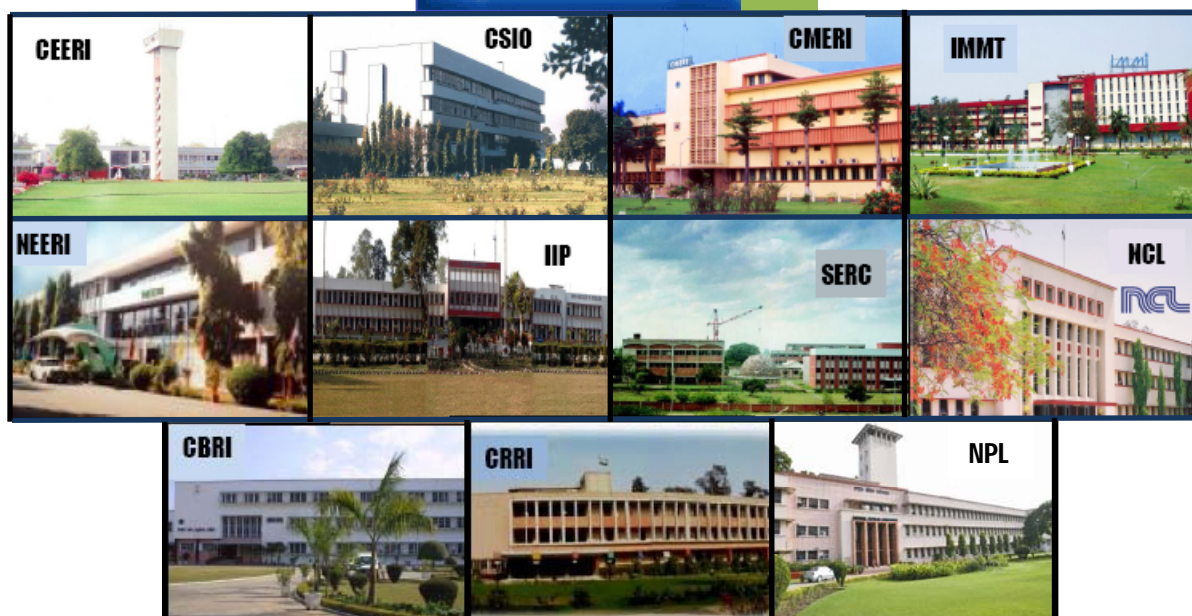


# Postgraduate Research Programme in Engineering (PGRPE)

## Brochure 2011-2012



Last date for submission of online application form is May 23, 2011



**Council of Scientific & Industrial Research (CSIR)**  
Anusandhan Bhawan, 2, Rafi Marg, New Delhi – 110 001  
[www.csir.res.in](http://www.csir.res.in)

Applications are invited for the two-year full-time residential **Post Graduate Research Programme in Engineering** in the cutting-edge technological areas. The salient features of the programmes are given below:

Programme	Coordinating Laboratory	Essential Qualification (BE/BTech or equivalent)	Number of Seats
<b>Advanced Electronic Systems</b>	Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani – 333 031 <a href="http://www.ceeri.res.in">http://www.ceeri.res.in</a>	Electronics/Electrical/ECE/EIE/EEE, Instrumentation, Engineering Physics, Radio Physics, Computer Sc./Engg, Mechatronics	8
<b>Advanced Instrumentation Engineering</b>	Central Scientific Instruments Organisation (CSIR-CSIO), Chandigarh-160 030 <a href="http://www.csio.res.in">http://www.csio.res.in</a>	All major branches of Engineering	10
<b>Advanced Materials Physics and Engineering</b>	National Physical Laboratory (CSIR-NPL) New Delhi-110012 <a href="http://www.nplindia.org">http://www.nplindia.org</a>	Materials Science, Metallurgy, Engineering Physics, Electrical, Electronics/ECE/EIE/EEE	10
<b>Advanced Petroleum Science and Technology</b>	Indian Institute of Petroleum (CSIR-IIP) Dehradun – 248 005 <a href="http://www.iip.res.in">http://www.iip.res.in</a>	Chemical	10
<b>Advanced Semiconductor Electronics</b>	Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani – 333 031 <a href="http://www.ceeri.res.in">http://www.ceeri.res.in</a>	Electronics/Electrical/ECE/EIE/EEE, Instrumentation, Engineering Physics, Radio Physics, Computer Sc./Engg, Mechatronics	8
<b>Chemical Engineering : Modeling &amp; Simulation and Materials &amp; Processes</b>	National Chemical Laboratory (CSIR-NCL) Pune 411008 <a href="http://www.ncl-india.org">http://www.ncl-india.org</a>	Chemical engg/tech, Polymer, Biochemical, Biotechnology, Material Science, Petroleum & Petrochemical	12
<b>Engineering of Infrastructure and Disaster Mitigation (Building/Roads)</b>	Central Road Research Institute (CSIR-CRRI) New Delhi 110020, <a href="http://www.crridom.gov.in">http://www.crridom.gov.in</a> Central Building Research Institute (CSIR-CBRI) Roorkee 247667, <a href="http://www.cbri.res.in">http://www.cbri.res.in</a>	Civil and Construction	18
<b>Engineering of Structures</b>	Structural Engineering Research Centre (CSIR-SERC), Chennai – 600 113 <a href="http://www.sercm.org">http://www.sercm.org</a>	Civil	10
<b>Environmental System Engineering and Modeling</b>	National Environmental Engineering Research Institute (CSIR-NEERI), Nagpur- 440 020 <a href="http://www.neeri.res.in">http://www.neeri.res.in</a>	Civil, Chemical, Environmental, Electrical, Mechanical	8
<b>High Power Microwave Devices and System Engineering</b>	Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani – 333 031 <a href="http://www.ceeri.res.in">http://www.ceeri.res.in</a>	Electronics/Electrical/ECE/EIE/EEE, Instrumentation, Engineering Physics, Radio Physics	8
<b>Materials Resource Engineering</b>	Institute of Minerals and Materials Technology (CSIR-IMMT), Bhubaneswar – 751 013 <a href="http://www.immt.res.in">http://www.immt.res.in</a>	Metallurgy, Materials, Chemical, Mechanical, Mining, Mineral, Ceramic	10
<b>Mechatronics</b>	Central Mechanical Engineering Research Institute (CSIR-CMERI), Durgapur – 713 209 <a href="http://www.cmeri.res.in">http://www.cmeri.res.in</a>	Mechanical, Electrical, Comp. Sc./Engg, Mechatronics, Electronics/ECE/ETC/EIE, Radio Physics & Electronics, Production, Manufacturing	10

The programmes are designed to give in-depth exposure and hands-on R&D experience to the candidates in the respective areas. The selected candidate will be designated as Scientist Trainee under QHS scheme and they will be trained on exciting live projects so that they emerge as research ready scientists/engineers for taking up challenging positions. Such candidates shall receive a consolidated emolument of Rs.25000/- p.m. and would also enjoy other benefits as applicable to QHS of CSIR.

PGRPE is a four-semester (2 years) programme. Extension beyond this period for completing the programme will be decided on a case-by-case basis.

In addition, on successful completion of the PGRPE with distinction, the candidates may be considered by CSIR for absorption in CSIR as Scientists in Pay Band-3 of the Government of India (Scale Rs. 15600 - 39100/- with Grade Pay of Rs. 6600/- plus other allowances as applicable).

The medium of instruction and examination will be English.

### Admission Process and Eligibility for Admission

Candidates should be graduates **in the relevant discipline of engineering** depending on the specific programme as stipulated in the above table with outstanding academic credential preferably with a valid GATE score. The age of the candidates should not be more than 25 years (for general and OBC category) and 28 years (for SC/ST category) as on July 01, 2011 for admission to the programme.

Please see the CSIR website <<http://www.csir.res.in/>> for on-line application form submission and additional details.

**Engineering graduates of 2010 and engineers graduating in 2011** with relevant disciplines as stated above for specific programme with minimum 70% marks or 7.0 CGPA are only eligible. A valid GATE score will be an added advantage.

Candidates who have passed their B.E./B.Tech or equivalent examination with disciplines as stated in the essential qualification column of application form before 2010 are not eligible.

Candidates whose final results are awaited, but who are otherwise eligible as per the screening criteria, can also apply. If selected, they will be provisionally admitted to the programme. Their continuation in the programme will be subjected to securing required percentage/equivalent grade (depending on the cut-off marks for screening for the specific programme) and submission of marks-sheet of their final result by October 30, 2011.

The candidates can exercise a maximum of **two preferences**. Candidates will be screened based on their preferences. Short-listed candidates are required to appear for interview (as per the venue information to be put on CSIR website) for selection.

Final selection will be based on performance of the candidate in the interview in addition to their academic performance.

### Fellowship

Fellowship amount of **Rs. 25,000 per month** will be awarded to selected candidates during the two-year programme.

## Programme Fee Structure

One-time Admission Fee (non-refundable)	:	Rs. 4,000
One-time Security Deposit (refundable)	:	Rs. 6,000
Semester Tuition Fees (non-refundable)	:	Rs. 24,000
Hostel Boarding and Lodging Charges	:	As per applicable norms

Total amount of Rs. 34,000 needs to be deposited at the time of admission. Subsequently, only the semester fee of Rs. 24,000 needs to be deposited before the start of every semester.

Hostel boarding and lodging charges need to be paid separately as per the applicable norms of CSIR laboratory conducting the programme.

## Refund of Fees

Students wanting to withdraw from the programme after deposition of fees and security amount will need to apply in writing for refund. If such an application is made on or before July 31, 2011 at the concerned CSIR laboratory, refund of fees/other charges will be made after deducting the admission fee amount of Rs. 4,000.

No refund of fees/other charges will be made if the student leaves after joining the programme except for the security deposit / caution money amount of Rs. 6,000.

## Important Dates

<b>Last date for receipt of on-line application form</b>	<b>May 23, 2011</b>
<b>Result of screening</b>	<b>June 14, 2011</b>
<b>Admission selection interviews</b>	<b>July 08-14, 2011</b>
<b>Declaration of the List of Selected Candidates</b>	<b>July 20, 2011</b>
<b>Last date for submission of programme fees</b>	<b>July 29, 2011</b>
<b>Admission from waiting list</b>	<b>August 02 – August 12, 2011</b>
<b>Reporting to concerned CSIR laboratory</b>	<b>August 08, 2011</b>
<b>Commencement of the academic session</b>	<b>August 09, 2011</b>

## Evaluation Procedure and Grading Scheme

The two-year programme is made up of 4 semesters with continuous internal evaluation and a semester-end examination for all courses.

Letter grades will be awarded for each course reflecting the student's proficiency and instructor's expectation. The grades and their description along with their equivalent numerical values, where applicable, are as follows:

Letter Grade	Performance	Numerical Value
A+	Outstanding	10
A	Excellent	9
B+	Very Good	8
B	Good	7
C+	Average	6
C	Not Qualified	5
S	Satisfactory (for thesis)	
X	Unsatisfactory (for thesis)	

Performance of the student will be evaluated by two indices, semester grade point average (SGPA) and cumulative grade point average (CGPA). These will be calculated as follows:

$SGPA = \{\text{Sum of (Course credit} \times \text{Numerical value of course grade)}\} / \text{Total course credits earned in the semester}$

$CGPA = \text{Cumulative points scored in all passed courses} / \text{Cumulative credits earned}$

A student needs to have a SGPA of over 6.0 in each semester and a CGPA of over 6.5 from second semester onward for continuation. Minimum grade point to be earned to pass any subject is 6.0.

For distinction, the student need to score CGPA = 8.0 or above.

For more details please visit : [www.csir.res.in](http://www.csir.res.in)

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