

NTPC Limited
POWER MANAGEMENT INSTITUTE
Summary to Circular dated 18.06.08
Applications for acquiring M.Tech from IIT Delhi

Applications are invited for sponsorships for M.Tech from IIT Delhi .This year 10 executives will join regular PGT M.Tech courses, 02 Executives will be earmarked for Energy Technology and they will join regular M.Tech /PGT Courses and 02 candidates will join M.Tech in other areas. (Ref Pg 03 of Detailed Circular).

Eligibility Criterion and Selection Procedure:

Courses	Regular PGT	Earmarked for Energy Technology (ET)	M.Tech in other areas offered by IITDelhi
No of seat	10	02	02
Qualification B.Tech/B.E/ B.Sc Engg	Elect,Mech, C&I	Elect,Mech C&I,Chemical,Computer	Elect,Mech C&I, Civil,Computer
Selection Criterion	Written test and interview	Written test , Interview and Project*	Interview

- **Minimum 07 Years of power sector experience/02 years for Energy Technology earmarked candidates.**
- **Age not exceeding 45 years as on 1st April 2008.**
- **Min 65% marks in Engineering**

* **Refer Energy Technology Project List.**

Important Dates:

Activities	Dates
Last Date to reach application in PMI	30 June 2008
Short listing and Information to concerned executives	1st July 2008
Written Test (At PMI)	3rd July 2008
Interview (At IIT Delhi)	4th July 2008 (By IIT-Delhi)
Declaration of final result after interview	4th July 2008 (By IIT-Delhi)
Starting of M.Tech. Course at IIT, Delhi	14th July 2008

NB: The summary is only an abridged version of the circular. For details, please refer to the enclosed circular dated 18th June , 2008. For any query / clarification, please contact Pankaj Ekbote / A.K Shukla, PMI/NOIDA, Tele No. 0120-2515204 / 2478289.Application form can be downloaded from PMI website(www.pmintpc.com)

(Pankaj Ekbote)
DGM (PMI)

NTPC Limited POWER MANAGEMENT INSTITUTE

01/PMI/M.Tech/XI Batch

June 18th , 2008

C I R C U L A R

SUB: FULL TIME M.TECH PROGRAMME AT IIT DELHI.

To be in sync with the dynamics of technological and business scenario changes in the power sector, NTPC, as a learning organization, has been continuously promoting knowledge enhancement and skills upgradation. The Indian Institutes of Technology have always been at the forefront in providing the desired inputs to industries in this regard, whether by way of developing problem solving and innovative skills or simply by providing exposures to state of the art technologies. With the vision of having technically highly proficient leaders in its fold in the future, NTPC joined hands with IIT, Delhi way back in 1998, through its apex management development center Power Management Institute (PMI), by launching a unique M. Tech programme in Power Generation Technology to facilitate building up the techno-managerial competency of its executives.

During the last ten years of the journey together, this collaboration has produced not only highly qualified leaders but also a good number of research papers that earned appreciation at national and international forums. The collaboration has also enabled large numbers of implementable solutions to various technical and techno-commercial issues faced by the sector in general and NTPC in particular.

After acquisition of this cherished post-graduate degree, the high-performing employees have been placed in strategic locations to function as think tanks in the organization. While this programme has so far fulfilled the necessity of the day, it has to go a long way to ensure sustainable development of the organization and the sector as a whole.

To continue with efforts in this direction, PMI hereby announces the start of the Eleventh M.Tech. Programme at IIT, Delhi from July, 2008. This programme is a full time M.Tech. degree programme similar to other post graduate programmes at the IITs.

Benefits and allowances

While the employees are entitled for Basic pay, DA, Personal pay (if any), CCA/FCA and all other reimbursement as applicable to individual except incentive / ex-gratia/ rewards if any, they will also be entitled for a literature reimbursement of Rs. 1500/- per month. TA/DA are admissible as per rules of the company for journeys between the place of posting to New Delhi and back, as when required by Institute / Co-ordinator.

1. The Programme

- 1.1) In this four-semester course, first three semesters are devoted to the core and elective papers, associated laboratory work and a minor project work. The major project work would also start from third semester and the fourth semester is fully dedicated for the major project. A few management courses are also included as compulsory audit courses to enhance managerial competency of the executives.

- 1.2) 14 seats are available to NTPC and 10 will join regular PGT Course, 02 executives earmarked for Energy Technology will join regular M.Tech /PGT as per final selection of project. 02 executives will join specialized course as per final selection. **The programme is fully residential and only shared bachelor accommodation shall be provided at PMI/Township . This may please be noted that Family accommodation will not be provided.** Delhi based employees have an option for non-residential participation.
- 1.3) Participants from NTPC will be sponsored by NTPC and would be governed by company policy for sponsoring as contained in "NTPC scheme of facilities for higher studies" and further terms and conditions mentioned elsewhere in this circular.
- 1.4) Applications are invited from eligible executives, in the pro-forma enclosed for sponsoring their names for the programme. Applicants should mention clearly any one of selected course.

2. Eligibility Criteria

This year 10 executives will join regular PGT M.Tech courses, 02 Executives will be earmarked for Energy Technology and they will join regular /PGT Course and 02 candidates will join M.Tech in areas as per * given below.**

Eligibility Criterion and Selection Procedure

Courses	Regular PGT	Earmarked for ET *	M.Tech in other areas offered by IITDelhi ***
No of seat	10	02	02
Qualification B.Tech/B.E/ B.Sc Engg	Elect,Mech C&I	Elect,Mech C&I,Chemical,Computer	Elect,Mech C&I,Civil,Computer
Selection Criterion	Written test and interview	Written test interview and Project**	Interview

*ET earmarked executives may join regular M.Tech or PGT Course based their assigned project work. The selection of course work and project work shall be guided by Energy Technology.

** Energy Technology Project List is enclosed at Page 06

*** These executives shall be sponsored any of following courses

- Environmental Engg
- Structural Engg
- Geotechnical and Geo Environment Engg
- Thermal Engg/ Industrial Engg
- Water Resources
- Construction Technology
- Computer Science and Engg
- Computer Technology
- Control and Automation
- Power Electronics/Power System

- 2.1) B.E. / B.Tech., / B.Sc.Engg ,and as per IITD norms, in above mentioned discipline with min 65% marks (Arithmetic mean of all semesters / years) in Engineering.

- 2.2) Minimum **07 years** of Post-qualification power sector experience. Employees already having M.Tech qualification would not be considered.
- 2.3) Minimum **02 years** of Post-qualification power sector experience for executives earmarked for energy technology.
- 2.4) Past performance record in NTPC.
- 2.5) Age not exceeding **45 years** as on **1st April 2008**.

3. Selection Procedure

- 3.1) **WRITTEN TEST:** Based on the above eligibility criteria including past performance record in NTPC, shortlisted candidates will be called to appear in a written test/examination, which would be conducted by IIT. The examination would broadly contain an aptitude section and engineering discipline section. The test would be conducted on **July 3rd , 2008** at PMI.
- 3.2) **INTERVIEW:** Candidates short-listed on the basis of written test would appear for final selection interview on 4th July ,2008 before the committee constituted by IIT-Delhi.
- 3.3) **FINAL SELECTION:** Total 15 NTPC candidates would be finally selected. A wait-list of 03 NTPC candidates would be prepared for meeting any shortfall to 15 seats.

4. Other Terms and Conditions

- 4.1) Selected employees are required to execute a service bond for Rs.3,00,000/- (Rs. Three lakh only) to cover the period of the study (**24 months**) and a further service period of **03 years** in NTPC.
- 4.2) Other entitlements to the selected candidates would be the same as for the previous batches of M.Tech candidates and would be governed as detailed in circulars 01:PERS:: dated 01.07.98, 05.11.98, 12.11.98. and 01:pers:HR:M.Tech dated 1.2.2000 and 18.7.2000 and 01:HR-Policy:7(4)/dated 01.10.2001. It is also clarified that no transport allowance is payable for bringing personal vehicles at place of study. Candidates will further governed by circular 01/PMI/M.Tech/XI,dated 18/06/2008.
- 4.3) Willing employees should send their applications in the prescribed proforma directly to **Sh.A.K Shukla, Sr Faculty Member, PMI, Noida**. Last date for receipt of the applications is 30th June , **2008**.
- 4.4) The application form can also be downloaded from PMI web site (www.pmintpc.com) and filled in form can be electronically sent to,ajay05038@rediffmail.com.

(Pankaj Ekbote)
DGM (PMI)

Encl: Application form.
Distribution
As per list enclosed

APPLICATION FOR SPONSORSHIP TO 11th BATCH M.TECH
(Last Date of application: 30th June , 2008, Exam Date 3rd July)

Sh. A.K Shukla (email:ajay05038@rediffmail.com)
Sr Faculty Member
PMI, Noida

Sub: Application For Sponsorship to 11th batch M.Tech (Power Generation Technology)
Programme at IIT-Delhi

In response to circular dated _____, I wish to apply for being sponsored to the 24 month regular programme of M.Tech _____ (PGT / Earmarked for Energy Technology*/ Other Discipline) at IIT-Delhi. I do not possess any M.Tech qualification .
My bio-data is as given below:

1.	Emp.No	
2.	Name	
3.	Design	
4.	Grade	
5.	Section	
6.	Project	
7.	Phone No.	
8.	Email id	
9.	DOB	
10.	DOJ(NTPC)	

Qualification:

	Course	Institution	Specialisation	Year	% Marks obtained
1.					
2.					
3.					
4.					

Experience (NTPC and Non-NTPC, including training):

	Organisation	Post held	Level/ Gr	From	To
1.					
2.					
3.					

* Please select your project from page 06.

I have read the terms and conditions of the circular. I shall execute the service bond for Rs.3,00,000/- on stamp paper of appropriate value, on receiving intimation of my selection to the programme.

I shall abide by all instructions/orders/guidelines issued by NTPC/IIT(Delhi) from time to time.

Date:
Place:

(SIGNATURE OF CANDIDATE)

List of Energy Technologies Project

1. Smart sensor system, wireless sensors, MEM,NEM'S
2. Sensors for online thickness measurements ,light weight, for integration with automation mechanisms,
3. Robotics for power plant maintenance applications
4. Computational models to predict emission behaviour from cooling towers
5. Development of SOFC,MOFC fuel cells with associated electronics
6. Power generation through combustion of H₂ gas
7. Ultra super critical technology
8. Solar energy
9. Energy storage systems,
10. Micro grids
11. Design of fuel treatment systems,
12. Water desalination technologies
13. Coal burner design improvements
14. Nuclear power generation
15. Turbulent CFD models development, CFD for boilers, turbines, heat exchangers, fuel cells, heat pipes
16. Optimal controller design
17. Flow visualization, particle image velocimetry, quantitative flow visualization(numerical algorithms),image processing, image based modeling
18. Design of fuel cell components
19. Special solar applications, flat plate collectors, heliostats design, thin film solar cells
20. Special power electronics,
21. Online condition monitoring for electrical equipments
22. Analysis, design and improvement of traditional control systems
23. Design of model predictive controllers