

**APPLICATION FORM  
&  
INFORMATION BROCHURE  
FOR ADMISSION TO  
M.TECH./M.PHARM. PROGRAMMES  
2012-13**



**INSTITUTE OF TECHNOLOGY  
BANARAS HINDU UNIVERSITY  
VARANASI - 221 005**

## **IMPORTANT TELEPHONE NUMBERS**

<b>Name of Department/School</b>	<b>Phone Numbers</b>	
	<i>Heads/Coordinators</i>	<i>Office</i>
Assistant Registrar (Academic), IT <i>(e-mail – academics@itbhu.ac.in)</i>	6702070, 2307003	6702067, 2307039
Department of Ceramic Engineering <i>(e-mail – head.cer@itbhu.ac.in)</i>	6701783, 2307042	6702890, 2307043
Department of Chemical Engg. & Technology <i>(e-mail – head.che@itbhu.ac.in)</i>	6702029, 2307044	6702024, 2307045
Department of Civil Engineering <i>(e-mail – head.civ@itbhu.ac.in)</i>	6702678, 2307015	6702679, 2307016
Department of Electrical Engineering <i>(e-mail – head.eee@itbhu.ac.in)</i>	6702843, 2307032	6702934, 2307033
Department of Electronics Engineering <i>(e-mail – head.ece@itbhu.ac.in)</i>	6701501, 2307010	6701248, 2307011
Department of Mechanical Engineering <i>(e-mail – head.mec@itbhu.ac.in)</i>	6702795, 2307020	6702799, 2307021
Department of Metallurgical Engineering <i>(e-mail – head.met@itbhu.ac.in)</i>	6701348, 2307080	6701305, 2307081
Department of Mining Engineering <i>(e-mail – head.min@itbhu.ac.in)</i>	6702409, 2307083	6701306, 2307082
Department of Pharmaceutics <i>(e-mail – head.phe@itbhu.ac.in)</i>	6702727, 2307048	6702729, 2307049
School of Biochemical Engineering <i>(e-mail – coordinator.bce@itbhu.ac.in)</i>	6702882, 2307070	6702882, 2307070
School of Biomedical Engineering <i>(e-mail – coordinator.bme@itbhu.ac.in)</i>	2307057	2307057
School of Materials Science & Technology <i>(e-mail – coordinator.mst@itbhu.ac.in)</i>	6702741, 2307046	6702741, 2307047

## INSTITUTE OF TECHNOLOGY

Institute of Technology, like all other Faculties and Departments of the Banaras Hindu University, owes its existence to the far-sighted vision and relentless efforts of its founder Mahamana Pandit Madan Mohan Malaviyaji. During the days of freedom struggle, three engineering and technology institutions were established by Malaviyaji, viz. The Benaras Engineering College (BENCO) in 1919, the College of Mining and Metallurgy (MINMET) in 1923 and the College of Technology (TECHNO) in 1932. *The first-ever degree programmes in Mining, Metallurgy, Ceramics and Pharmaceuticals in India were pioneered at B.H.U.* After India became independent, post-graduate and doctoral research programmes were also introduced. It is an established history that BENCO, MINMET and TECHNO produced outstanding engineers who manned various industries, academic institutions, R&D Laboratories and others, thus providing the much needed technological leadership/skills in various sectors of indigenous development.

After the establishment of the Indian Institute of Technologies (IITs), the three premier engineering institutions of our University viz., BENCO, MINMET and TECHNO were merged to form the Institute of Technology (IT-BHU) to provide a strong and integrated educational base. Thus our Institute came into full-fledged existence in 1971. To preserve its excellence and national character, the earlier system of region-wise admissions (via merit lists) was replaced by admission procedures through the Joint Entrance Examination (JEE of the IITs) for undergraduate programmes, Graduate Aptitude Test in Engineering (GATE conducted by the IITs and IISc.) for the post-graduate programmes in Engineering and Graduate Pharmacy Aptitude Test (GPAT conducted by All India Council for Technical Education) for post-graduate programme in Pharmacy from 2010 onwards.

Since its formation, the Institute of Technology has not only thrived to become a premier educational institution producing graduate engineers with sound scientific and technological background, but also has grown into a centre which provides versatile post-graduate training and conducts advanced research in Engineering and Technology. A large number of alumni of the Institute are occupying top positions in many leading industries, educational institutions and research establishments in India and abroad. Many of them have established their own industries/ companies and several are serving in diverse Governmental departments/ agencies. The Institute has a full fledged Training and Placement Cell. The cell provides placement opportunities to UG and PG students through campus recruitment. Since last few years the number of offers to M.Tech./M.Pharm. degree holders is steadily increasing.

## Admission to M.Tech./M.Pharm. Programmes

### **1. General Eligibility:**

Candidates who have qualified in the Graduate Aptitude Test in Engineering (GATE) (conducted jointly by the IITs and IISc. Bangalore) for M.Tech. Programmes and Graduate Pharmacy Aptitude Test (GPAT) (conducted by the M.S. University of Baroda, Varodara on behalf of AICTE, New Delhi) for M.Pharm Programme and who, in addition, possess the requisite qualifications as indicated in the Brochure for the respective department/school, are eligible respectively for admission to Post-Graduate programme leading to M.Tech./M.Pharm. degree.

Candidates whose B.Tech./B.E./B.Pharm. results are not yet declared or who are due to appear in the qualifying examinations are also eligible to apply. But at the time of test/interview/counselling they will be required to produce a certificate from the institution concerned to the effect that they have **completed all requirements of the qualifying examination before the date of test/interview/counselling. There should be no examination, what so ever, pending for a later date.** Admission of all such candidates shall be provisional, till they produce documentary evidence of having passed the qualifying examination. If such evidence (mark-sheet) is not produced by 30<sup>th</sup> September, their provisional admission will stand automatically cancelled without any further notice.

Candidates have to fulfill other conditions as detailed in the respective prospectus of studies.

### **2. Duration of programme:**

The programme is of 24 months duration divided into four semesters. The 1<sup>st</sup> semester normally starts in the 2<sup>nd</sup> week of July.

### **3. Admission:**

- (i) Admission will be made on the basis of valid GATE/GPAT score and an interview and/or written test conducted by the concerned Department/School.  
NO T.A./D.A. WILL BE PAID BY THE DEPARTMENT/INSTITUTE/UNIVERSITY FOR ATTENDING THE INTERVIEW OR JOINING THE PROGRAMME.
- (ii) The Post-graduate Admission Committee of the Department/School reserves the right to restrict the number of candidates to be called for test/interview/counselling depending upon the number of seats and the GATE/GPAT score.
- (iii) Under normal situation a student, admitted once to a postgraduate programme, shall not be eligible for admission to another programme at the same Institution or any other Institution. Such cases will be decided by a competent authority on the basis of cogent reasons.

The GATE/GPAT score cards of the candidates selected for admission will be stamped with the remarks “ADMITTED IN M.TECH./ M.PHARM. IN .....” and signed by the Head of the Department/ Coordinator of School putting the Department/school Seal thereon.

- (iv) Each Department/School reserves the right not to offer any particular specialization during a given academic year depending upon the availability of teachers and other resources as well as adequate number of students in the concerned specialization (a minimum of 5 students).

#### **4. Opportunities & Requirements:**

The Institute of Technology offers the following programmes at the Post-graduate level leading to the Degree of M.Tech./M.Pharm.

<b>Discipline</b>	<b>Specialization</b>	<b>Eligibility Qualifications</b>
<b>A. PROGRAMME WITH SPECIALIZATIONS</b>		
<b>1. Civil Engineering</b>	a) Hydraulics and Water Resources Engineering	B.Tech. or an equivalent degree in the respective branch of engineering.
	b) Geotechnical Engineering	
	c) Structural Engineering	
	d) Environmental Engineering	
	e) Transportation Engineering	
<b>2. Mechanical Engineering</b>	a) Machine Design	B.Tech. or an equivalent degree in the respective branch of engineering.
	b) Heat Power Engineering	
	c) Production Engineering	
<b>3. Metallurgical Engineering</b>	a) Extractive Metallurgy	B.Tech. or an equivalent degree in Metallurgical Engg., Materials Science/Engineering, Mineral/Chemical/Ceramic /Mechanical Engg., Chemical Tech. or M.Sc. (Physics/ Chemistry) with specialization in Solid State Physics, Physical/ Inorganic Chemistry with 60% or above marks provided the candidate passed B.Sc./ B.Sc. (Hons.) Examination with Mathematics as one of the subject at undergraduate level
	b) Metals and Materials Processing	
	c) Alloy Technology	
<b>4. Mining Engineering</b>	a) Mine Environment	B.Tech. or an equivalent degree in the respective branch of engineering.
	b) Rock Mechanics	
	c) Mine Planning	

<b>5. Electrical Engineering</b>	a) Power Systems	}	B.Tech. or an equivalent degree in Electrical Engg.
	b) Electrical Machines and Drives		
	c) Control Systems		
	d) Power Electronics		
<b>6. Electronics Engineering</b>	a) Microwave Engg.	}	B.Tech. or an equivalent degree in Electrical or Electronics Engg. with valid GATE Score in Electronics Engg.
	b) Digital Techniques and Instrumentation		
	c) Microelectronics		
	d) Communication System Engg.		
<b>7. Pharmaceutics</b>	a) Pharmaceutics	}	B.Pharm. or an equivalent degree.
	b) Pharmaceutical Chemistry		
	c) Pharmacology		
	d) Pharmacognosy		

## B. PROGRAMMES WITHOUT SPECIALIZATIONS

<b>8. Chemical Engineering</b>	}	B.Tech. or an equivalent degree in Chemical Engg. or Chemical Technology
<b>9. Ceramic Engineering</b>		
	}	B.Tech. or an equivalent degree in Ceramic/Civil/Electronics /Electrical/Mechanical/Metallurgical Engg./Chemical Engg. and Technology/Materials Science & Technology/Silicate Technology or M.Sc. Physics (with special papers in Solid State/Electronics) or Electronics or Chemistry (with special papers in Physical/Inorganic/Solid State Chemistry) with 60% or above marks provided the candidate has passed B.Sc./B.Sc.(Hons.) Examination with Physics, Chemistry and Mathematics

## C. INTER-DISCIPLINARY PROGRAMMES

<b>10. Industrial Management</b> (Offered by the Mechanical Engineering Department)	}	B.Tech. or an equivalent degree in any branch of engineering

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| <b>11. Systems Engineering</b><br>(Offered by the Electrical Engineering Department)                      | } | B.Tech. or an equivalent degree in any branch of engineering  |
| <b>12. Material Science and Technology</b><br>(Offered by the School of Materials Science and Technology) | } | B.Tech. or an equivalent degree in Aeronautical/Ceramic/Chemical/Civil/ Computer/ Electrical/ Electronics/ Mechanical /Metallurgical/ Mining Engg./ M.Sc. degree in Materials Science/ Physics/ Chemistry with 60% or above marks provided the candidate has passed B.Sc./B.Sc. (Hons.) Examination with Physics, Mathematics and Chemistry/ Computer Science/Statistics. |
| <b>13. Biochemical Engineering</b><br>(Offered by the School of Biochemical Engineering)                  | } | B.Pharm./B.Tech. or an equivalent degree in Biochemical/ Biotechnology/ Chemical/Food Engg./ OR M.Sc. degree in Biochemistry/ Bio-Technology/ Microbiology or in Chemistry with specialization in Biochemistry or Physical Chemistry with 60% marks or above.   |
| <b>14. Biomedical Engineering</b><br>(Offered by the School of Biomedical Engineering)                    | } | B.Tech. or an equivalent degree in Biomedical/Ceramic/Chemical/Computer/ Electrical/Electronics/Mechanical/Metallurgical Engg. /OR M.Sc. degree in Physics with 60% marks or above.   |

- NOTE:** 1. Those desirous of applying for admission to different M.Tech. programmes must send separate applications to the concerned Department/School for M.Tech. Programme being offered by the Department/School. Separate applications are also required for inter-disciplinary programmes offered by the same department.
2. Not more than 40% of the seats in interdisciplinary programmes in schools will be open for any ONE branch of Engineering or Science.
3. The PG admissions committees of the respective Department/ School have the final authority in deciding the seat allotments.

**5. Admission of Sponsored Candidates:**

5% seats are available as supernumerary quota (Wherever the percentage (5%) works out to be less than 1, such departments/schools may consider 1 seat & not more than 1 seat) for candidates sponsored by Government Departments/ Public Sector Undertakings/ Universities/ Colleges/R&D Laboratories/Educational Institutions of repute as well as well-established Industries where the candidate has relevant work experience for at least 2-years after qualifying examination, provided that the sponsoring industry/ institution undertakes to take the candidate back after the four-semester programme (Sponsorship certificate must be attached along with application in the prescribed format as per **Annexure-I**). Such sponsored candidates are exempted from the requirement of having a valid GATE/GPAT scores for admission and selection for admission will be made only on the basis of interview and/or written test to be conducted by the concerned Department/School.

### 6. Admission of Foreign Students:

5% seats are available as supernumerary quota (Wherever the percentage (5%) works out to be less than 1, such departments/schools may consider 1 seat & not more than 1 seat) of foreign nationals, who fulfill the minimum eligibility criteria as laid down in Clause I.1 of 2-years M.Tech./M.Pharm Ordinances, and whose applications are submitted either through the Indian Mission of their respective countries or through the Missions of their respective countries in India, will be considered for admission to the M. Tech/ M. Pharm courses under supernumerary quota, in addition to those eligible under Clause I.3 of 2-years M.Tech./M.Pharm Ordinances, according to the following guidelines:

- (i) Those foreign candidates who are selected under various scholarship schemes, either of the Ministry of Human Resource Development or the Ministry of External Affairs will be given admission on the recommendation/ sponsorship of the respective Ministries and the confirmation of their admission sent directly to the concerned agencies sponsoring their admission.
- (ii) The application of self financing foreign candidates have to be routed through the Ministry of External Affairs or Ministry of Human Resource Development.
- (iii) The candidates of foreign nationality are exempted from the requirement of having a valid GATE/GPAT score and appearing in any test, interview, etc. for admission.
- (iv) All foreign national candidates are also advised to route their applications through the International Centre, C/3/3, Tagore House, Banaras Hindu University, Varanasi – 221 005, for details visit <http://internet.bhu.ac.in/Centre/mtechadm.htm>.
- (v) The foreign students after admission will be required to undergo medical test for AIDS.

### 7. Availability of seats in different branches of Engineering and in Pharmacy the Institute as approved by the AICTE/UGC:

PROGRAMMES	Students Intake					
	GE	SC	ST	OBC	PC <sup>#</sup>	Total
<b>Two-Years M.Tech. Programmes</b>						
1. Ceramic Engineering	10	3	1	5	(1)	19
2. Chemical Engineering	25	7	3	12	(1)	47
3. Civil Engineering	25	7	3	12	(1)	47
4. Electrical Engineering	25	7	3	12	(1)	47
5. Electronics Engineering	25	7	3	12	(1)	47
6. Mechanical Engineering	25	7	3	12	(1)	47
7. Metallurgical Engineering	25	7	3	12	(1)	47
8. Mining Engineering	15	4	2	8	(1)	29
9. Biochemical Engineering	5	1	1	2	(0)	09
10. Biomedical Engineering	5	1	1	2	(0)	09
11. Materials Science & Technology	10	3	1	5	(1)	19
12. Industrial Management	5	1	1	2	(0)	09
13. Systems Engineering	5	1	1	2	(0)	09
<b>Two-Years M.Pharm. Programme</b>						
14. Pharmaceutics	15	4	2	8	(1)	29
<b>Grand Total of 2-Years Programmes</b>	<b>220</b>	<b>60</b>	<b>28</b>	<b>106</b>	<b>(10)</b>	<b>414</b>

# Student intake numbers for PC category has not been added in calculating total number of seats, as provision for the physically challenged candidate will be made from within the respective category.



- 7.1 If admission is sought under the OBC/SC/ST category, a certificate in the format given in **Annexure-II/Annexure-III** must be submitted along with the application.
- 7.2 For Physically Challenged (including leprosy-cured) Category applicants, 3% of the seats are reserved in each programme, with the sealing of 3% of the total permitted intake of the programme. Seat allotted to PC candidates will be adjusted against their respective category. For any category of disability (viz., locomotor, visual speech and hearing), benefit would be given to those candidates who have at least 40% permanent physical impairment in relation to a body part/system/ extremity/extremities/whole body, etc. All such cases will be first referred to the Medical Board constituted for the purpose at the Institute of Medical Sciences/Sir Sunder Lal Hospital, BHU

### **8. Scholarship:**

All candidates (except sponsored and Foreign candidates) admitted through GATE/GPAT will be paid the fellowship **as per UGC norms for the duration of the programme (24 months)**, so long as their progress in the programmes is satisfactory. Candidates admitted provisionally will not receive the scholarship till they submit proof of passing the qualifying examination within the specified date, i.e. September 30, of the year of admission.

### **9. How to Apply:**

- (a) Application shall be on the prescribed form only.
- (b) Application form and information brochure are available on IT-website and BHU-Website ([www.itbhu.ac.in](http://www.itbhu.ac.in)/ [www.bhu.ac.in](http://www.bhu.ac.in)).
- (c) Candidate may download the application form, fill in the form and submit by hand or by post alongwith Demand Draft for ₹ 500.00 (non-refundable) for General and OBC Categories/₹ 250.00 (non-refundable) for SC/ST Category, in favour of "**Institute of Technology, BHU**", payable at the State Bank of India, Banaras Hindu University, Varanasi (Code 0211), **to the respective Heads of the Departments/Coordinators of Schools, Institute of Technology, Banaras Hindu University, Varanasi-221005 (UP), INDIA, on or before 15<sup>th</sup> May, 2012 for M.Tech. Programmes and 18<sup>th</sup> June, 2012 for M.Pharm. programme.**
- (d) Forms without Demand Draft will not be considered.
- (e) The GATE/GPAT result must be entered at appropriate place in the application form.
- (f) Incomplete applications and applications received late i.e. after the last date will not be considered.
- (g) Applicants who send their application form by post are advised to post their application sufficiently in advance, taking into consideration the postal transit delays.
- (h) Applicants who apply for admission to more than one programme must submit application to each such Department/School, with requisite fee separately.

- (i) The letter of provisional admission will be issued by the concerned Department/School. Any correspondence in this connection should be sent to the concerned Department/School.
- (j) Documents to be attached with the application for admission:-
- A letter of recommendation from the Head of the Department/ Institution where the candidate last studied or worked.
  - A certificate of medical fitness from any registered medical practitioner (in original).
  - Attested true copies of marks-sheets of all the examinations passed (Matriculation onwards).
  - Attested true copy of the GATE/GPAT score card.
  - OBC/SC/ST Certificate in the format shown as in **Annexure-II/ Annexure-III** in the Information Brochure, if applicable (preferably issued in the current calendar year).
  - Sponsorship certificate in the format as in **Annexure-I** in the Information Brochure, if applicable.
  - Physically Challenged (PC) Certificate, if applicable.
  - A self-addressed envelope of size 9"×4" stamped worth ₹22/-.**

### 10. Details of Fees

- The **Indian Nationals** selected candidates are required to deposit **₹ 15140/-** at the time of admission to cover the first instalment of fee.
- Foreign Nationals (both SAARC and NON-SAARC countries)** selected candidates are required to deposit at the time of admission:
  - ₹ 15140/-** in the concerned Department/School.
  - Additional Fee** at International Centre as specified in website <http://internet.bhu.ac.in/Centre/mtechadm.htm>.
- All payments should be made by a bank draft in favour of the "**REGISTRAR, BANARAS HINDU UNIVERSITY**", payable at the *State Bank of India, Banaras Hindu University (Code 0211)*. (payment in any other mode will not be accepted).

### IMPORTANT DATES

	M.Tech.	M.Pharm.
1. Date of Availability of Application form (download application form from website).	Monday, April 09, 2012	
2. Last Date for Receiving completed Application Forms in the Offices of the Respective Heads/Coordinators, Departments/Schools.*	Tuesday, May 15, 2012	Monday, June 18, 2012
3. Last Date for Receiving Completed Application Form from Foreign Students in the Respective Department/School.	Tuesday, May 15, 2012	Monday, June 18, 2012
4. Test/Interview/Counselling to be Informed by the Concerned Department/School.	Between June 25 to July 02, 2012	Between July 03 to 11, 2012
5. Registration: July 13 & 14, 2012		
6. Classes Commence: Monday, July 16, 2012		

**Note:** No extra consideration will be entertained for postal delays after the last date.