

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
KUKATPALLY : HYDERABAD - 500 085.**

NOTIFICATION

ADMISSION TO EXTERNAL Ph.D./M.S./M.Phil. RESEARCH PROGRAMMES - 2012

Advt. No. JNTUH/External/Ph.D./M.Phil./M.S./Admns/2012

Dt.09.04.2012

Applications are invited for admissions to the **External Ph.D./M.S./M.Phil.** Research Programmes in major areas of Engineering, Science, Technology, English, Physical Education and Management at JNT University Hyderabad.

Areas of Research & Eligibility : The details of Areas of Research and eligibility are available on JNTUH website. www.jntuh.ac.in.

Application form and other details can be downloaded from JNTUH web site www.jntuh.ac.in . Filled in application form with required certificates and a crossed Demand Draft for External Research Programmes, for ₹ 1,000/- (non refundable) in favour of **“The Registrar, JNT University Hyderabad”** payable at Hyderabad dated not earlier than **09.04.2012** drawn on any Scheduled Bank recognised by RBI should reach “ The Director, Admissions JNTUH, Kukatpally, Hyderabad - 500 085 on or before **7th May, 2012 by 5.00 pm.**

DIRECTOR, ADMISSIONS

Last Date for Receipt of Applications

07.05.2012 by 5 pm

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
KUKATPALLY : HYDERABAD - 500 085, A.P.

APPLICATION FORM FOR ADMISSION TO
EXTERNAL Ph.D./M.S./M.Phil. RESEARCH PROGRAMMES – 2012

Details of Demand Draft for External Research Programmes is ₹ 1,000/- in favour of "The Registrar, JNT University Hyderabad" payable at Hyderabad

D.D.No.	Date	Bank	Amount
			₹ 1000/-

If the candidate is qualified in NET/SLET : (please put a [√] mark in the appropriate box) (Enclose qualified certificate)	NET	SLET	NO

External		
Ph.D.	M.S.	M.Phil.

Name of the Faculty (for example : Civil, Electrical, etc...)

(please put a [√] mark in the appropriate box)

1. Name (In block letters) : _____

2. Father's/Husband's Name _____

3. Address : _____

Phone / Mobile No. : _____

Email ID : _____

Affix latest Passport size
photograph attested by a
Gazetted Officer or
Employer with his seal

4. Gender

Male	Female

Date of Birth

Date	Month	Year

Category:

OC	BC-A	BC-B	BC-C	BC-D	BC-E	SC	ST

(please put a [√] mark in the appropriate box)

5. Details of Academic Qualifications : Starting from S.S.C.(Please enclose true copies of the Certificates).

Examination	Subject	College/School where studied	University / Board	Year of passing with Division	Aggregate Percentage

6. Details of employment for External Research Programme :

(Particulars of employment(s) from date of passing prescribed qualifying Examination till last date of application shall be provided. Enclose Certificates).

Name of Employer / Organisation	Designation	Duration of Employment		Salary	Nature of duties
		From	To		

7. Specific Area of Research with title of Research proposal (Please enclose a separate sheet of research proposal)

: _____

8. Name & Designation of the suggested Supervisor

: _____

The allotment of supervisor is done by concerned authorities, candidate's suggestion may or may not be conceded. Acceptance should be submitted as per Proforma given:

9. Name & Designation of the Co-Supervisor,

: _____

If the supervisor is outside JNTUH

10. Facilities available at the place of work/employment :

(Please attach a separate sheet of paper attested by the relevant authority)

11. Declaration by the Candidate :

I shall abide by the Academic Regulations of the JNT University Hyderabad. The particulars furnished above are correct and complete.

Date :

Place :

SIGNATURE OF CANDIDATE

(For External Research Programme)

12. Concurrence of the proposed Supervisor / Co-Supervisor (on a separate letter head with signature & seal).

SUPERVISOR (PROFORMA):

Acceptance of Supervisor
(should be typed on letter head)

I, Dr. , have done my Ph.D. in the area of
from the department ofUniversity. My present work of research is proceeding in the
same area / area of and I am working as with
following research facilities
.....
I am accepting to guide Mr./Ms. working as at
..... in this area.

Encl: (1). Bio data
(2). Three recent publications

Signature:
Seal:

CO-SUPERVISOR : (In case of necessity) (only if the Supervisor is outside JNTUH)

I agree to Co-Supervise the proposed Ph.D./ M.Phil./ M.S. work of Mr/Ms
Who is working under the Supervision of

SIGNATURE:
NAME:
DESIGNATION:
SEAL:

Date :
Place:

13. **“No Objection Certificate”** (For External Ph.D. candidates):

(To be issued by the Head of the Organisation of Place of work / employment of the candidate)

Mr / Ms will be permitted to pursue the proposed Research
work for the Ph.D./M.Phil./M.S. Degree of the JNT University Hyderabad by making use of the available
facilities in our organization mentioned at col. (12). The Supervisor(s) shall be permitted to visit the
organization periodically to monitor and assess the work of the candidate.

Date :
Place :

SIGNATURE & DESIGNATION
WITH SEAL OF OFFICE

Note : 1. If particulars in detail for items 7 to 13 are not furnished, the application will not be considered at all.

2. Fee once paid will not be refunded.

ORIGINAL

HALL TICKET

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD, A.P.
ENTRANCE TEST FOR ADMISSION TO EXTERNAL RESEARCH PROGRAMME-2012**

Faculty in which Admission for

External M.S./M.Phil./Ph.D. is sought:

Hall Ticket No.

Centre of Examination: **JNTUH College of Engg., Kukatpally, Hyd – 85.**

DATE OF EXAMINATION: _____ **TIME:** _____

(to be filled in by the Candidate)

Affix recent passport
size
Photograph duly
attested by
Gazetted Officer
with office seal

Name of the Candidate _____

Father's /Husband's Name _____

Identification Marks : (1) _____

(2) _____

DIRECTOR, ADMISSIONS

JNT UNIVERSITY, HYDERABAD.

Signature of Candidate

DUPLICATE

HALL TICKET

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD, A.P.
ENTRANCE TEST FOR ADMISSION TO EXTERNAL RESEARCH PROGRAMME-2012**

Faculty in which Admission for

External Ph.D./ M.Phil. / M.S. is sought:

Hall Ticket No.

Centre of Examination: **JNTUH College of Engg., Kukatpally, Hyd – 85.**

DATE OF EXAMINATION: _____ **TIME:** _____

(to be filled in by the Candidate)

Affix recent passport
size
Photograph duly
attested by
Gazetted Officer with
office seal

Name of the Candidate _____

Father's /Husband's Name _____

Identification Marks : (1) _____

(2) _____

DIRECTOR, ADMISSIONS

JNT UNIVERSITY, HYDERABAD.

Signature of Candidate

INSTRUCTIONS WITH ORIGINAL HALL TICKET

1. Candidates will not be admitted after the commencement of examination and not allowed to leave the hall until the end of the examination.
2. The Hall Ticket shall be produced at the time of examination, failing which the candidate will not be allowed to appear for the examination.
3. **Use HB pencil only to darken the circles in the OMR Answer sheet.**
4. THE HALL TICKET SHALL BE PRESERVED TILL THE TIME OF ADMISSION - without which the candidate is not eligible for admission.
5. No traveling expenses will be paid for journey undertaken for appearing for the Entrance Examination.
6. Adoption of any kind of unfair means at the time of examination or taking part in any act of impersonation will render the applicant liable for cancellation of his/her script and forfeiture of his/her claim for appearing for the examination. Decision of the Chief Superintendent of the Examination Centre shall be final in all these matters.
7. Issue of Hall Ticket and appearance at the Entrance Examination does not automatically entitle a candidate for admission.
8. Mathematical Tables, Calculators, Pagers, Mobile Phones and any other electronic gadgets are not allowed into the Examination Hall.

ADMISSION TO EXTERNAL Ph.D./M.Phil./M.S. RESEARCH PROGRAMMES - 2012

INFORMATION TO CANDIDATES

Admissions will be made to External Ph.D./M.Phil./M.S. Research Programmes offered by the J.N.T. University Hyderabad in the following faculties.

1. Ph.D :

CIVIL ENGINEERING:

Structural Engineering, Rehabilitation of Structures, Special Concretes, Static and Dynamic Analysis of structures, Bridges, Buildings using FEM, Pile foundations, Dynamic behavior of soils and Geo-environmental Engineering, Expansive Soils, Earthquake quake Analysis, Soil structure interaction, Modeling & Reclamation. Transportation Engineering, Traffic Analysis, Pavements, Hydraulics, water Resources and allied fields. Environmental Engineering, Air Pollution and waste water treatment.

MECHANICAL ENGINEERING:

I.C. Engines, Heat transfer, Thermodynamics Analysis of cycles, Fuels, Turbo machinery, CAD/CAM, Geometric modeling, Manufacturing, Optimization, Metal Cutting, Machine design and Industrial Engineering. Smart composites and allied fields.

ENERGY SYSTEMS :

Conventional, Non-conventional energy systems and allied fields.

ELECTRONICS AND COMMUNICATION ENGINEERING:

Digital signal processing, VLSI, Computers Networks, digital circuits, Neural Networks, Micro Electronics, Image processing, Low Power design, Fault tolerance, Communications, Microwave Antennas, EMI/EMC, Computer Vision, Pattern Recognition and allied fields.

ELECTRICAL AND ELECTRONICS ENGINEERING

Power Electronics, Drives and Power systems, FACTS, Intelligent Systems, Control Systems, High Voltage Engineering, Instrumentation and allied fields.

COMPUTER SCIENCE ENGINEERING

Data warehousing and mining, Computers Networks and Information Security, Software Engineering, Image Processing, Speech recognition, mobile computing, Artificial Intelligence, Wireless Sensor Networks, Information Security, Natural Language Processing, Cloud computing, Information Retrieved and allied fields.

METALLURGY

Material Development, Material Testing, High temperature materials, Metal Forming, Metal Casting, Ceramics & Composites, Powder metallurgy, Surface Engineering, Extraction, Non-Destructive Testing and Welding, Extractive Metallurgy.

BIO-TECHNOLOGY

Microbial Biodiversity, Animal Cell Technology, Microbial Enzymes/ Products, Plant Bio-Technology, Industrial Bio-technology and allied fields.

SPATIAL INFORMATION TECHNOLOGY

Remote Sensing, Spatial Information Technology, GIS, GPS, Geodesy, Digital Image processing, Digital Photogrammetry, Topographical Surveying, Data Mining, Knowledge Management, Atmosphere-Earth Radiation Interaction and allied fields.

WATER RESOURCES

Surface Hydrology, Water treatment, Water quality, Water Pollution, Ground Water exploration, Water Resources Management, Rain Water Harvesting and allied fields, watershed management, water and soil conservation, Environmental impact of water resources projects.

ENVIRONMENTAL SCIENCES.

Bacterial Diversity & Bio prospecting, waste characterization and treatment, hydrogen production and storage, aromatic compound biodegradation & bioremediation, microbes for environmental management, environmental geomatics, water quality assessment, modeling and mapping.

PHARMACEUTICAL SCIENCES

Pharmacology, Pharmaceutics, Pharmacognosy and Pharmaceutical Chemistry.

NANO SCIENCE & TECHNOLOGY

Nano Science and Technology

PHYSICS

Fiber Optics & Sensors, Nuclear Radiation Physics, Bio-Physics, Solid State Physics, Material Science, Thin film Technology, Plasma Physics, Space Physics, High Voltage Engineering, Particles and Fields, Condensed matter Physics, Liquid Crystalline Phase Transitions, Ferro Electric and Anti-Ferro Electric liquid crystals, Switching times and Viscosity, Molecular Spectroscopy and allied fields.

CHEMISTRY

Organic Chemistry, Inorganic Chemistry, Analytical Chemistry, Environmental Chemistry, Physical Chemistry, Bio-inorganic Chemistry, Pharmaceutical Chemistry, Bio-Chemistry and Applied Chemistry.

MATHEMATICS

Number Theory, Operations Research, Non linear dynamical systems, Mathematical modeling, data and knowledge extraction and allied fields.

MANAGEMENT STUDIES

Management Studies, Accounting, Human Resource management and allied fields.

EARTH & ATMOSPHERIC SCIENCES

Atmospheric Science and Technology: Aerosol- Cloud Interactions: Precipitation Processes, Studies on Atmospheric, Boundary Layer, Studies on Clouds over Continental Tropical Convergence Zone: Formation, Lifecycle, Dissipation, Changing Trends in the Extreme Weather Events. Weather Modification Technology: Rainfall Enhancement, Hail Suppression, Fog Dispersal, Micro Climate Modification.

Ocean Science and Technology: Ocean Color Applications, Sea Surface Height Variations, Air-Sea Interactions- Monsoon Dynamics: Sea Surface Temperature, Wind, Water Vapor, Liquid Water Content.

Earth System Science and Technology: Carbon Sequestration and Deposition in Fossil Fuel Reservoirs, Geo- Exploration of Hydrocarbons & Minerals, Plate Tectonics, Earth Quakes.

CHEMICAL ENGINEERING

Petro Chemicals, Fluidization Engineering

PHYSICAL EDUCATION:

Bio Mechanical Studies in Physical Education, Analytical Studies in Physical Education, Discriptive Studies in Physical Education, Psychological Studies in Physical Education, Case Studies in Physical Education, Exercise physiology Related Studies

ENGLISH

(English Language Teaching), Indian Writing in English, American Literature, British Literature, Commonwealth Literature and Applied Linguistics.

2. **M.Phil.** : Mathematics, Physics, Chemistry and Management Science.

3. **M.S.** : Civil Engineering, Electrical & Electronics Engineering, Electronics & Communication Engineering, Mechanical Engineering, Computer Science, Pharmaceutical Sciences, Biotechnology and Spatial Information Technology.

I. METHODOLOGY OF RESEARCH:

As per the UGC Revised Guidelines, a course work of one semester is compulsory. The course work includes

- Two subjects at PG level with attendance and examinations.
- One subject "Research Methodology" with compulsory attendance and internal auditing.

Apart from the above course work, the Pre-Ph.D. examinations are also compulsory. The details of evaluation procedure of Ph.D. research work will be available in JNTUH website.

II. ELIGIBILITY:

1. Educational Qualifications: For Ph.D. and M.Phil.

(i). Candidates must have a Post Graduate Degree in concerned discipline with a minimum of 55 percent marks in aggregate. For SC / ST candidates the aggregate shall be 50%.

For Ph.D. programme in Management Science, candidates possessing MBA are eligible. The candidates possessing Post Graduate qualification in any other subject with 5 years of experience in managerial capacity are also eligible.

MCA or M.Sc. qualified candidates are not eligible for Ph.D. programmes in Computer Science and other Engineering Streams.

(ii). In Multi disciplinary areas:

(a). **Water Resources** : Any Post Graduate degree in the field of Water Resources / Hydrology / Watershed Management / Geology / Geophysics / Geo-Engineering / Meteorology / Agricultural Engineering / Agricultural Meteorology / Solid Sciences (Water resources aspects) and Agronomy.

(b). **Spatial Information Technology** : Post Graduate Degree in Spatial Information Technology Mathematics / Physics / Chemistry / Geology / Geography / Engineering / Agriculture / Atmospheric Sciences / Space Sciences.

(c). **Biotechnology** : Post Graduate Degree in Biotechnology / Chemical Engineering / Food Technology / Bio Chemical Engineering / Bio Chemistry / Microbiology / Life Sciences (Zoology, Botany, Genetics, Agricultural Sciences) / Pharmacy / Environmental Science and Technology.

- (d). **Energy Systems** : Post Graduate degree in Energy Systems / Mechanical Engineering Electrical and Electronics Engineering / Chemical Engineering or Technology.
- (e). **Environment** : Post graduate degree in Physical Sciences / Natural Sciences / Life Sciences / Environmental Sciences / Biotechnology / Environmental Engg. / Agricultural / Computer Sciences.
- (f). **Nano Technology**: M.E. / M.Tech. in Chemical /Mechanical /Aeronautical/ Electronics / Electrical / Metallurgical / Computer Engg./ Bio-Technology/ Material Science or Equivalent degree

(or)

M.Sc in Chemistry / Physics / Earth Sciences / Environmental Science & Technology or equivalent degree.

- (iii) **For M.S.** : Candidates must have a B.E. / B.Tech. / B. Pharmacy degree or its equivalent with a minimum of 55 percent marks in the aggregate in the concerned branch and for SC / ST candidates the aggregate shall be 50% only. M.S. is essentially a research programme for candidates in service. It is not a regular session based M.Tech. course.

III. **EMPLOYMENT** :

Candidates who are working in a well equipped Educational / Scientific / R&D / Industrial / Governmental Organisations and in Colleges affiliated to the Universities and engaged in Scientific / Technological / Engineering / Managerial activities, as the case may be, are eligible for admission as external candidates and shall continue to work in their own organizations. Faculty members of the J.N.T. University Hyderabad and its constituent colleges shall be admitted as internal candidates.

Candidates working in colleges affiliated to the universities are eligible, provided

- (i) the place of research work is either the institution in which they are working or the constituent college / unit of the university, where necessary facilities are available.
- (ii) The Research Supervisor is either from JNT University Hyderabad or from any recognized institution / organization.

IV. **SUPERVISOR (for External Registration)** :

1. Candidates applying for External Ph.D. may identify and suggest the Supervisor. An acceptance letter as per the proforma given should be attached. The suggested Supervisor may not be allocated. However the allotment is finalized by University authorization.
2. Professors, Assoc. Professors and Asst. Professor of JNT University Hyderabad who possess, a Ph.D. degree, a minimum of five years of academic / research experience and published at least 2 referred Journal papers and 2 reviewed Conference papers, to their credit, will be deemed as Supervisors.
3. Persons working in Universities / Scientific / Industrial / Governmental Organizations, who possess a Ph.D. degree, a minimum of five years of academic / research experience and published at least 2 referred Journal papers and 2 reviewed Conference papers, to their credit, will be deemed as external supervisors.
4. Candidates may have either Internal or External Supervisors.
5. If the eligible supervisor from JNTU Hyderabad, JNTU Anantapur and JNTU Kakinada, then **No Co-Supervisor** is required.
6. **If the Supervisor is from any affiliated colleges of JNTUH, then he/she must be ratified by the JNTUH (enclose ratified certificate of Supervisor)**
7. **The JNTUH retired professors are also eligible for Supervisor/Co-Supervisor in concerned subjects as per eligibility.**
8. In the case of interdisciplinary areas of research, a co-supervisor may also be permitted in addition to the supervisor, provided the supervisor and co-supervisor are from different disciplines.
9. Candidate must enclose bio-data of the proposed supervisor(s) and evidence to show that he/she satisfies the qualifications laid down. They must enclose attested copies of the degree certificates of the supervisor(s).
10. If the candidate concern area of research, is not offered by any recognized supervisor, then, the Candidate's will not be permitted to change the area.

V. **PLAN OF RESEARCH WORK (for External Registration) :**

Candidates must submit, along with their application form, a well conceived plan of research work, with evidence of having initiated a preliminary study (at least 500 words).

VI. **PLACE OF RESEARCH WORK AND FACILITIES AVAILABLE (for External Registration):**

In the case of external candidates, working in their organizations, details regarding the availability of the required research facilities at the place of work must be given. The place of work must be recognised by the University before the application for admission is considered.

External candidates working in their own organizations must produce, from the Head of the Organisation, a Certificate of "No Objection" for the candidate to take up the Research work, and permission for the supervisor from the university to visit the organization periodically to monitor and assess the work of the candidate.

VII. **NO. OF SEATS: No. of Seats are given in Annexure - I**

VIII. **MODE OF SELECTION :** Based on Entrance Examination and Interview.

ENTRANCE EXAMINATION:

- An entrance examination is of 100 multiple choice questions.
- Duration of entrance examination is 2 hours.
- The minimum qualifying marks at the entrance examination is 40% and for SC/ST category 25%.
- The entrance examination syllabus, subject wise is available in JNTUH web site.
- **The list of eligible candidates for entrance examination with their Hall Ticket Numbers will be displayed in JNTUH website www.jntuh.ac.in after the last date of submission.**
- **Candidates must collect their Hall Tickets, from the Director, Admissions, JNT University Hyderabad, Kukatpally, Hyderabad, two days before of the entrance examination between 10.00 am to 5.00 pm. The schedule of the entrance examination will be displayed in the JNTUH website www.jntuh.ac.in after the last date of submission. No separate intimation will be made in this matter.**

INTERVIEW:

Interview will be conducted for the candidates qualified in the

- Entrance examination conducted by JNTUH, Hyderabad.
- **The candidates who qualify the NET / SLET need not write the written test however they should get through in the interview process.**

IX. Candidates who are qualified in Entrance Test must appear before the admission committee for an interview at Hyderabad at their own cost. The date and time of interview will be as displayed in JNTUH website www.jntuh.ac.in. No separate intimation.

The University reserves the right to cancel admission / registration of any candidate to the research programme at any stage if it is noticed that the data furnished / certificates enclosed are incorrect.

In case of any disputes concerning admissions to the courses of JNT University Hyderabad, the jurisdiction shall remain with the Courts or Consumer forum in Hyderabad only.

X. FEE :

On selection for admission, candidates shall be required to pay the prescribed admission fee **Rs. 200/-** , Registration fee of **Rs. 20,000/- per annum and other admissible fee prescribed by the University for External Research Programme**. Thereafter the fee has to be paid every semester till the successful completion of the programme and submission of thesis or cancellation of the admission which ever the case may be.

Details of fee payment particulars for External Research Programmes and evaluation procedure can be known from the Director, R & D Cell, JNTUH, Kukatpally, Hyderabad.

XI. GENERAL :

Application complete in all respects (in A4 size) accompanied with a Demand Draft for ₹ 1,000/-, for External Research Programmes, drawn in favour of **“THE REGISTRAR, JNTUH, HYDERABAD”** payable at Hyderabad on any nationalized bank as Application Registration fee and **five(5) self addressed stamped envelopes of size 22 x 10 cms. (affixing Rs. 6.00 stamps)**, is to be submitted to **“The Director, Admissions, JNT University Hyderabad, Kukatpally, Hyderabad - 500 085”** either in person or by Registered post / Courier on or before **7th May, 2012 by 5.00 pm.**

The University is not responsible for delay or loss of application in transit.

Incomplete applications received after the last date will not be considered and fee paid will not be refunded.

DIRECTOR, ADMISSIONS

* * *