Guidelines for Establishment of Research Centres

Jawaharlal Nehru Technological University Hyderabad
Directorate of Research & Development
Kukatpally, Hyderabad - 500085, Telangana State, INDIA
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MESSAGE

I am happy to note that the Research and Development Unit of Jawaharlal Nehru Technological University Hyderabad is bringing out this booklet of Policies and guidelines for establishment of Research Centres in Engineering Colleges / Institutions / Organizations. I complement the Director and Staff for their effort in detailing the procedure and activities involved in the establishment of Research Centre and I am sure it will definitely help the Colleges / Institutions / Organizations pursuing the research programmes and research activities.

Jawaharlal Nehru Technological University Hyderabad is the first technological University in the Country and today it is one of the largest affiliating Universities in the state of Telangana. There is an increase in demand for research programmes and the University is taking all measures to maintain the quality, while providing the research environment on the campus and off the campus.

I wish the Directorate of Research and Development all the best and success in their future endeavour.

Prof. A. Venugopal Reddy
Vice-Chancellor

Hyderabad
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CONTENTS

1. INTRODUCTION

Jawaharlal Nehru Technological University Hyderabad (JNTUH) is focusing on research programmes on need-based technologies and solutions for societal problems. Accordingly an independent Directorate of Research and Development (DRD) was established in the year 2005 to promote and monitor the research programmes of the University. The DRD administers Ph.D./M.Phil./M.S.(by Research) programmes in part-time and full time modes and monitors the research progress of the scholars.

The DRD coordinates with the Directorate of Admissions for selection and admission of research scholars, interfaces with Directorate of Evaluation for conduct of Pre-Ph.D. examinations and issue of provisional and original degree certificates, interacts with the constituent units of the University for academic activities of research degrees and also with Directorate of University Foreign Relations for the students of foreign nationals.

DRD conducts Research Review Meetings once in every six months to evaluate and monitor the progress of the scholars and conducts viva-voce examinations for the award of the Ph.D./M.Phil./M.S.(by Research) degrees in the faculties of Engineering, Science & Technology, Pharmacy, Management and Humanities & Social Sciences.

2. Policy of Research Centre

The University encourages the establishment of Research Centre at various levels of the organization that will enhance and facilitate disciplinary and interdisciplinary research collaboration, knowledge transfer and training. Faculty may be involved in one or more of the projects in a Research Centre and be active in more than one

research project. The University is committed to develop and maintain high-quality programs of research and encourages to have inter or multi disciplinary faculty in carrying out research on societal needs. Presently, Directorate of Research and Development offers M.Phil., M.S. (by Research) and Ph.D. programmes in the following disciplines and the list of subjects may vary from year to year.

Sl. No.	Faculty	Subject
01	Engineering	Aeronautical Engineering
		Chemical Engineering
		Civil Engineering
		Computer Science & Engineering
		Electrical & Electronics Engineering
		Electronics & Communication Engineering
		Energy Systems
		Industrial Engineering
		Mechanical Engineering
		Metallurgical Engineering
		Transportation Engineering
02	Science & Technology	Bio-technology
		Chemistry
		Environmental Science & Technology
		Earth & Atmospheric Sciences
		Food Technology
		Mathematics
		Nano Science & Technology
		Pharmaceutical Sciences
		Physics

		Spatial Information Technology
		Water Resources
03	Management	Management Sciences
04	Humanities & Social Sciences	English
		Physical Education

3. UNIVERSITY RESEARCH ADVISORY COMMITTEE

University has constituted University Research Advisory Committee (URAC) with the following objectives:

- To identify thrust areas, funding agencies, guiding and advising the University to go forward in research front.

- To guide the Departments to do research in thrust areas as identified by national and international research organisations.

- To identify gap areas in industry and to create the awareness for the sponsored and industrial research.

- To work as a bridge between University and Industry with special reference to attract the projects so as to generate internal revenue and to convert technical knowhow into operational mode with industry interface.

- To work on any other research related activities as directed by the University.

- To monitor and evaluate the progress of various Research Centres under the administrative control of the University.

- Any difference/discrepancy/issue may be placed before URAC for its recommendation to forward to the University for necessary approvals.

4. Definition and Purpose of Research Centre (RC)

Colleges / Institutions / Organisations may establish a centre for the purpose of undertaking research. This Centre conducts research programs, provide facilities and assistance for research and scholarly work, provide funds and advice the research students to provide a supportive infrastructure for interdisciplinary research. A Research Centre must be complementary to the academic goals of the University, but does not have jurisdiction over courses or curricula and cannot offer formal courses. Research Centre must include faculty members working in a critical realm from one or more Departments. Research Centres are established with internal start-up funding and should generally become self-sustaining within three to five years.

A Research Centre shall have a group of staff in an established area of academic strength having a broader focus, recognized nationally and internationally. The Centre will bring together a critical mass of scholars, from different Departments for collaborative work in a clearly defined area over an extended period of time beyond the life of one specific project.

The functions of Research Centre are **a)** to facilitate research and research collaborations, **b)** to disseminate research results through conferences, meetings and other activities, **c)** to strengthen the research activities by providing students with training opportunities and access to facilities and **d)** to seek extramural research funds.

- The Centre will provide an institutional platform from which to successfully apply for grant support for projects, develop postgraduate research opportunities and establish groups of postdoctoral activity.

- A Research Centre may also be involved in other appropriate activities, such

as working with professionals and commercial or governmental organisations to improve professional practice and publishing reports, proceedings or monographs. In all publications / patents, if any, as the outcome of the Research should include the "JNTUH Research Centre" followed by College / Institute / Organisation as affiliation.

- Research Center facilitates the academic and research functions of college / institute. The overall goal of the Research Centre is to provide a platform for Research and Strategic partnerships, an opportunity to evaluate the performance of research activities and return on investment.

- The Research Center is accomplished through a recurring schedule of data gathering, analysis, goal setting, and reporting.

5. Objectives of Research Centre

Research Centre is expected to develop their own objectives and measurable goals to meet the purposes stated in this policy.

Some of the objectives of Research Centre are:

- To promote and facilitate collaborative and/or interdisciplinary research and enhancement of research networking capacity and infrastructure under the umbrella of Jawaharlal Nehru Technological University Hyderbad in Telangana State.

- To increase and effectively manage the resources and research support for its stakeholders.

- To provide education and training in research and related skills, especially for Post Graduate and undergraduate students and thereby enhance the academic quality.

- To contribute to the University's strategic educational and research missions and to support synergies between research, teaching and learning and consultancy services.

- To enhance the reputation of faculty members, the constituent academic units, and the University through the quality of research.

6. Categories of Research Centres:

 I. Research Centres in JNTUH affiliated engineering colleges/Institutions.

 II. Research Centres in Public Sector.

 III. Research Centres in Private Sector.

7. Research Centre Establishment

A proposal to establish a Research Centre shall be submitted in writing to the University in a prescribed form given in Annexure. After careful scrutiny of the application, University standing Committee for recognition of Research Centres will visit the College / Institution / Organization and verify the facilities. Based on the recommendations from this committee, appropriate decision will be taken by the University.

Registration and Processing fee: Registration and processing fee of Rs. 50,000/- is to be paid along with application in the form of DD in favor of Registrar. JNTUH. If the proposed R&D Centre is not approved, 75% of this fee will be refunded.

8. Approval, Governance of Research Centre

- Research Centre is constituted formally as part of the University's organization and is subject to its direction, oversight, and strategic plans.

- Research Centre and their constituent academic units are expected to establish mechanisms to assure there is ongoing communication for purposes of coordinating resources, training, research activities, and strategic planning

- A Research Centre will normally be led by a faculty member of the college / Institute / Research Organisation.

- Funding for Research Centre can be made up of a combination of multiple internal and external sources.

- Vision and mission of the center and how does it connect to the overall growth of the college shall be defined.

9. Rules and Regulations

- It is mandatory that the College / Institute should have UGC autonomous status. Duration of the existence of the college should be one year more than the autonomous status requirement including the Department concerned.

- The affiliated College / Institution / Organization should apply for Research Centre in the prescribed Proforma. After careful scrutiny of the application, University Committee, for recognition of research centres will visit the College / Institution / Organization and verify the facilities in the proposed Departments / unit. Based on the recommendation of the Committee, approval for Research Centre may be granted to the College / Institution / Organization as per the University norms.

- The Research Centre will be granted to the affiliated Engineering Colleges / Institution / Organization which comprises different departments/units for research activities such as guiding scholars leading to Ph.D. degree and

sponsored projects. Training programmes will be part of the Research Centre activity.

- The Departments of College / Institute which are proposed to be part of Research Centre should have atleast one M.Tech. programme running in the department.

- The Colleges / Institution / Organisation should maintain a corpus fund of Rs. 25,00,000/- (Rupees Twenty Five Lakhs Only) towards research activities and is to be maintained at all times.

- Dedicated Internet Bandwidth of 50 Mbps should be available.

- Access to e-journals of reputed publications should be available. (Past 3 years proof is mandatory).

- Infrastructural facilities such as office space and furniture should be provided to the research scholars.

- For Ph.D. guidance at least two eligible Supervisors should be available in the respective department/unit. A person is eligible to be a Supervisor if he/she posses Ph.D. in the respective stream / related discipline. All the admissions of Research Scholars in the recognized Research Centres will be done by the University Only.

- The Supervisor (proposed) should have prior length of service atleast for five years in the same College / Institution / Organisation.

- After the research scholar is allotted the supervisor should continue in the same College / Institution / Organisation atleast for three years after assigning the research scholar.

- In case of exigency, if the supervisor leaves the college/institute/organisation, it is the responsibility of the concerned host college / Institute / Organisation to

replace him with an equally qualified member with due intimation to the University before the said member is relieved.

- Preference will be given to those Institutions having NAAC / NBA accreditation / Sponsored research projects from UGC / DST / AICTE / and other Government Agencies / Corporate Sector (or) Public Sector undertakings. In-house R & D Centers recognized by Department of Scientific and Industrial Research (DSIR) will also be given due preference.

- The Centre shall have a small core of dedicated supporting staff in its own right, and a full-time Coordinator.

- The Coordinator of the Centre shall report to the Head of College / Institution / Organization.

- The Centre shall excel internationally in research activity in terms of originality, significance, rigour and impact.

- The Centre will provide a means for collaboration with external partners with community and private sector researchers.

- The Centre will sponsor and organise lectures, conferences, colloquia and workshops.

- The Centre will attract academic visitors, those on research leave from elsewhere and other scholars, researchers and academic visitors.

- The Centre will be able to attract research grants that are significant with respect to national norms for the thematic focus of the Centre.

- The tenure of the Research Centre shall be for four years. However the progress of Research Centre will be reviewed every year by University which may recommend for extension / withdrawal of approval.

- The College / Institute / Organization should maintain proper documentation for the R & D programs taken up and progress report should be sent to the University every six months including financial status and the corpus fund.

- If the Research Centre does not maintain the standards and procedures as per norms, the University has the right to withdraw the status of Research Centre. The University should have the right to review all the activities of Research Centre. Where there is any evidence of decline in standards of quality, the University may, after careful scrutiny, and in consultation with UGC, either help modify them, wherever possible, or cancel the recognition of Research Centre and also autonomous status of the college.

- Any Amendment/Changes/status of Research Centre shall be done with the prior approval of the University.

- The College / Institute / Organization should provide the following.

  a) Offer fellowship for full-time research scholars admitted through University as per University norms prescribed from time to time.

  b) Should provide expenditure for contingencies / financial support for attending Conferences / workshops, National/International to every full-time research scholars as per University norms.

  c) Extend the services of all eligible supervisors to various activities related to R & D of the University.

  d) Provide support for course work for research scholars.

  e) Faculty Development Programme (FDP), e-learning.

- Activities of Research Centre:

  a. Training and certification programmes.

  b. Sponsored Research and consultancy projects

  c. Organisation of seminars / workshops / conferences at national / international level

  d. Research Scholars - Full Time.

  e. Active Research programmes

  f. Any other programmes related to Research.

10. Appointment of Coordinator

The Coordinator of Research Centre, who must be a tenured faculty member, is appointed by the college competent authority after consultation with the BOG of the college. The Coordinator is responsible for the administrative functions of the Research Centre and for guidance of the unit's activities in accordance with its established goals. It is expected that the Coordinator will be appointed for a 4 year term. A brief succession plan should be in place in the event that the coordinator retires or leaves the position / organisation.

11. Advisory Committee of Research Centre

Research Centre may constitute an Advisory Committee at college level. Representatives should be recognized experts in the research field of the department and may come from both inside and outside the Institute/College. The Advisory Committee, may help in setting the goals and in critically evaluating its effectiveness on a continuing basis. An annual report shall be submitted to the University for its Subsequent Review by the University expert committee constituted for the purpose. The annual report of Research Centre should include the following:

- The Center Mission, goals, or focus of research activity that have occurred over the previous year.

- List of all researchers and staff involved in the Center over the past year, including a summary of how each person contributed to the Center's goals. Each researcher should describe contributions to the body of scholarship supported by the Center and benefits derived from the Center.

- Publications and professional conference presentations that are a part of the Center's programs for the previous year (please do not include articles or presentations prior to the past year).

- A listing of new research funding received, including source, amount, and title of project for the past year only.

- Total amount of current internal and external funding

- A listing of up to 10 highlights that reflect the accomplishments of the Center over the previous year that should be promoted by the University.

12. Annual Review of Research Centre

The performance of Research Centre will be reviewed every year by the University expert committee. Basing on report of the University expert committee the extension of recognition or withdrawal will be decided.

13. Credentials to the College / Institution:

The following credentials will be given to Research Centre of the Institute / College / Organization:

- The University will recognize the R&D Centre in the respective college / institution / Organization.

- The eligible supervisors of the Research Centre will be recognized by the University and they will be given preference in various activities related to

Research and Development including allotment of candidates as Full Time research scholars of the college.

- Collaborative projects with University and other National and International institutions will be encouraged.

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ANNEXURE

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
DIRECTORATE OF RESEARCH & DEVELOPMENT, KUKATPALLY, HYDERABAD – 500 085
Application for Recognition of College/Institution/Organization as
an Approved Research Center under JNTUH

1. Name and Address of the Institute : …………………………………………………
   (with Tel./Fax/e-mail)
2. Year of Establishment : …………………………………………………
3. UGC Autonomous Status : …………………………………………………
   (Copy to be enclosed)
4. Name and Address of the Principal/ : …………………………………………………..
   Director (with Tel./Fax/Mob/e-mail)

5. Name of the Dept./Branch in which : 1)…………………………………………...
   Ph. D. Programme is to be offered

   2)…………………………………………...

   3)…………………………………………...

6. Provide the following details for each of the above dept:
   a) No. of P.G. Programmes in the Dept: …………………………………………………..

   b) No. of Professors with Ph.D. in the Dept: ………………………………………………….

   c) Enclose list as per format # 1 for each P.G Programme in the Dept

   d) Has the Department been Accredited by NBA : YES / NO
      • If yes Period of Accreditation :………………………………....
      • Present Status (please tick) :ACCREDITED /
        APPLIED FOR ACCREDITATION/
        NOT ACCREDITED

7. Assurance from the Institute/Organization
   regarding Availability of allotted Supervisor(s)
   for the Research Programme Period
   continuously, till the expiry of Tenure : YES / NO
   (Maximum 6 years)

8. a) No. of Journal Publications of : i) International Jls . :
   Dept../Branch Faculty in last 5 Years   ii) National Jls. :

   b) Enclose Details as per format #2 : YES / NO

9. Academic/ Infrastructural Facilities : …………………………………………………..
   available at the Inst./Organization
   i) Library
      a) No. of International Journals : …………………………………………………..
         Subscribed for the Dept./Branch
      b) Enclose List as per format #3 : YES / NO

      c) No. of National Journals : …………………………………………………..
         Subscribed for the Dept./Branch
      d) Enclose List as per format #3 : YES / NO
      e) Digital Library Facilities : EXISTING / NOT AVAILABLE
         IF YES, enclose details : YES / NO
      f) Library Access Timings : ………………………………………………

ii) a) Laboratory /Equipment Facilities :   YES / NO
[Applicable for Research Work
In the Dept./Branch available
(costing > Rs.1 Lakh)]

     b) Assurance on the Availability of   :   YES /NO
the Research Lab./Equipment to
the Scholar as needed

iii) Computational/ Reprographic   :   YES / NO
Facilities (One PC shall be made
available to each Scholar)

iv) Assured Accommodation for   :   YES / NO
the Scholar within the Dept.

10. Networking/ Internet Facilities   :   AVAILABLE / NOT AVAILABLE

    a) Service Provider and Bandwidth   :   …………………………………

11. Whether the Institute/ Organization is   :   YES / NO
willing to offer to the Scholar as per
JNTUH norms

10. Whether the Institute/Organization is   :   YES / NO
Willing to provide the expenditure for
Contingencies/ Conferences/ Field
Works/ Stationery etc.

11. Whether the Institute/Organization is   :   YES / NO
willing to share revenue outcomes - if
any, and share IPR with JNTUH

12. a) No. of – i) R & D Projects carried out :   …………………………………………….
by the Dept., -ii) Research or any other
Grants Sanctioned to the Dept./
Branch

    b) Enclose Details as per format #4   :   YES / NO

13. a) Any other Information regarding   :   YES / NO
Recognition of the Inst./Org. by any
Professional bodies or Academies or
Councils or Organizations, or MoU
With Industries/R&D Labs. etc.

    b) If YES, enclose proofs listing the   :   YES / NO
Recognition Status and Period of
Approvals.

14. A Brief write up(500 words) by the institute mentioning the STRENGTHS and
WEAKNESSES(SWOT analysis)that why the institute should be considered for
R&D center.

UNDERTAKING

We hereby certify that all the details and other information provided above are true and correct. We agree to have Joint Intellectual Property Rights on the Research Works and Contents of the Ph.D. with the University We agree to offer fellowship for Full-Time research scholars as per JNTUH norms prescribed from time to time. We agree to deposit and maintain an amount of 25 lakh rupees as corpus fund for R&D centre. We agree to provide support for course work of research scholars of Research Centre.

We also assure that under any circumstances, the activities of Research Centre will not be against the interest of the University.

1) Signature of the Principal/Director of the Institute
   (with Name, Designation, Seal and Address)

2) Signature of the Chairman/Secretary of the Trust/Organization
   (with Name, Designation, Seal and Address)

   DATE :

   PLACE :

Note : All the Formats mentioned below, may please be filled up as applicable, separately for each Department or Branch under consideration.

format 1 :

LIST OF FACULTY MEMBERS HOLDING PH.D. DEGREE IN THE DEPARTMENT(P.G Programme wise list)

S.No.	Name of the Faculty with Qualifications	Inst./Univ. from which Ph.D. is obtained/ Year	Designation	Fields of Speciali-zation	Date of Joining The present Institute/Org.	Research Experience No.of Years

format 2 :

LIST OF JOURNAL PUBLICATIONS FROM FACULTY within LAST 5 YEARS

S.No.	Name of the Faculty	Journal Name	Year & Month of Publication	Vol. No., Issue No., and pg.nos.	TITLE	Names of Authors (as published)
INTERNATIONAL JOURNALS :						
NATIONAL JOURNALS :						

format 3 :

LIST OF JOURNALS SUBSCRIBED BY THE INSTITUTE/ORGN. LIBRARY

S.No.	Name of the Journal Subscribed	Journal Name	Availability Of Journal Period	Hard Copy Availability (YES/NO)	Soft Copy (Details of Service Provider & No. of User Licenses taken with License Validity periods)
INTERNATIONAL JOURNALS :					
NATIONAL JOURNALS :					

format 4 :

LIST OF R&D PROJECTS CARRIED OUT BY THE DEPARTMENT, AND LIST OF RESEARCH/ ANY OTHER GRANTS SANCTIONED TO THE DEPT.

S.No.	Title of the R&D Project or Research Grant	Sanctioning Agency, and Date of Sanction	Names of the Principal and Co Investigators	Sanctioned Amount Rs. In lakhs	Status of the Project (completed/ on-going)
1) R & D Projects Sanctioned					
2) Research or Any Other Grants					