

## **Integrated Ph.D after B.Tech**

The Institute will offer exciting opportunities to motivate talented Bachelor's degree holders with a keen sense of scientific enquiry for pursuing advanced research in the frontier areas of Computer Science and Engineering and Electronics and Communication Engineering in its 1<sup>st</sup> stage and in Electrical Engineering in the 2<sup>nd</sup> stage. The regulations for the same are follows as under:

### **R.1 Areas of Specialization**

Integrated Ph. D programme shall be offered in Computer Science and Engineering and Electronics and Communication Engineering in its 1<sup>st</sup> stage and in Electrical Engineering in the 2<sup>nd</sup> stage of the Institute. Specific areas (research topics) will be decided by the departments based on the following:

- a. Research interests of the Faculty,
- b. Research areas of mutual interest (considering NIT(AP)) and sponsoring industries if any), and
- c. Research areas of other sponsored research projects.

### **R.2 Educational Qualifications**

Candidate with B.E. / B. Tech in appropriate branch of engineering with minimum of 80 % marks or equivalent from recognized University / Institute.

### **R.3 Selection Procedure and Student Status**

- a. Candidates who apply to the Integrated Ph D programme should qualify the eligibility criteria.
- b. The selection will be based on the performance in the class XII, B.Tech / BE or equivalent examination / performance in the Test and in the Interview conducted by NIT(AP). Candidates with valid Gate score will be preferred.
- c. Candidates from abroad / NRI category / nominees of foreign Governments shall be accepted based on %age of marks secured in B. E. / B. Tech or equivalent examination along with in that in X+2 examination.

#### **R. 3 (b) Starting of session and reporting of students**

The candidates enrolled to the **Integrated PhD** programme should report to the Institute for completing admission formalities by **31<sup>st</sup> August each year** (Extenable or resonable grounds as to be decided by the Chairperson, Senate). The session will be commenced from 1<sup>st</sup> September each year. Other formalities are as under :-

- a. At the time of joining, candidates should have completed all the requirements for the award of the qualifying degree including all examinations, dissertation projects, viva-voce, etc.
- b. Only candidates who produce all the mark sheets and degree certificates (original or provisional) issued by the University Authority will be given regular admission.
- c. Candidates who are awaiting results but have completed all formalities for the award of a degree should produce at the time of joining, a Course-Completion Certificate, issued by the Head of the institution (The Principal/Registrar). Such candidates will be given only provisional admission, which will be regularized on their producing all the marks sheets and degree certificates (original, or provisional) etc., issued by the University Authority on or before **31<sup>st</sup> October each year**, (Extenable or resonable grounds as to be decided by the Chairperson, Senate) failing which, the provisional admission stands cancelled.
- d. Candidates who are given provisional admission are eligible for a scholarship only on regularisation of admission (on production of the required documents). They will be paid a scholarship with retrospective effect, i.e., from the date of joining.

#### **R.4 Duration of the Programme**

The programme shall, on average, need minimum of five years and under unavoidable circumstances may be extended for two more years with the permission of Chairman, Senate.

#### **R.5 Enrolment and recommended course work**

The recommended course work normally complements the student's academic strengths with the core and the advanced methodological skills needed for the research work. The recommended course work is as under:

- a. English for Technical Writing (Compulsory)-(ON LINE /Distance Mode is permitted)
- ii. One from the list of Interdisciplinary Subjects-(ON LINE / Distance Mode is permitted)
- iii. A list of subjects at the post-graduate level with a total credit loading as under:  
For a student admitted on the basis of B.E. / B. Tech in appropriate branch of engineering with minimum of 80% or equivalent from recognized University/ Institute, the lower and the upper limits (including the interdisciplinary subject) are  
  
Lower Limit: 30  
Upper Limit: 50
- iv. A mandatory short course on Research methodology for maximum 50 marks.

Enrolment of a student for the Ph. D. programme is completed after the BoR approves the enrollment based on recommendations of the DC. The fellowship for an Institute research student is released after a student is enrolled for Ph. D. In deserving cases, the size of course work may be limited.

## **R.6 Integrated Ph.D Guide-ship**

- a) All faculty members of the Institute holding doctorate degree are eligible to guide M.S scholars.
- b) No Guide shall have more than two Ph.D scholars under NIT(AP), excluding the Candidates taken under sponsored projects, who are yet to submit the Synopsis of their Theses. The Guide can take subsequent candidates after submission of Synopsis by the existing Scholars.

## **R.7 Supervision**

- a. The Supervisor under whom a registered candidate shall have to work shall be a teacher of this University holding a Doctorate degree (at least one year after Ph.D degree) or possessing adequate research experience as evidenced by publications provided that if the teacher her/himself is registered for the Ph.D. degree, she/he shall not be eligible for appointment as Supervisor till she/he is awarded the degree.
- b. In special cases, interdisciplinary subjects and joint supervision, the Doctoral Committee may appoint a Supervisor from outside this University. A Teacher/Scientist from any University / Institute who wishes to supervise a registered candidate of this University for the first time has to apply in the prescribed form forwarded by the head of the institution, and this application is to be approved by the Doctoral Committee.
- c. The Doctoral Committee may appoint a supervisor from the Faculty members of the University holding a Doctorate degree and possessing adequate research experience as evidenced by publications, provided that faculty members (himself /herself) are registered for the Ph. D. degree, he/she shall not be eligible for appointment as Supervisor till he/she is awarded the degree. One joint Supervisor is mandatorily to be appointed from the NIT, A.P.

## **R.8 Submission of Thesis**

- a. A registered candidate shall have to work for a minimum period of five years after registration. If the Supervisor certifies that the candidate has carried on research for five years and that the thesis embodies at least five years work, then the Doctorate Committee may permit a candidate to submit his/her thesis four year after the successful completion of coursework. A student if register after completion of his/her M.Tech / ME or equivalent degree he may be permitted to submit his thesis for a minimum period work of three years.
- b. A students must have at least 3 (three) publications in a refereed journal out of his/her doctoral research work prior to submission and shall produce evidence for the same in the form of acceptance letter or offprint to the Doctorate Committee.
- c. Before final submission of the thesis a student who has satisfactorily completed the course work following clause R.3 must present his/her work at a meeting of the Ph.D. Research Committee (BoR & DC). Interested researchers may also attend the meeting as invitee. Any suggestion may be suitably incorporated under the advice of the supervisor(s).

- d. In exceptional cases a whole-time employee of this University may apply to the Doctoral Committee for permission to submit a thesis for the degree of Doctor of Philosophy without any supervision.
- e. Such an application shall be made through the Head of the Department/Director of School of the subject to which the subject matter of the thesis relates.
- f. The Doctoral Committee may grant the permission if it is satisfied that the applicant has carried on research for at least five years based on list of publications. Upon granting of permission and the payment of the registration fee, the names of such applicants shall be entered in the register of candidates for Ph.D. degree of relevant faculty. Requirements, such as course work and evidence of publications in referred journals, or any other as may be notified from time to time should be fulfilled and noted in the record of the candidate. On permission from the Doctoral Committee, the candidate may submit her/his thesis according to the regulations.
- g. The thesis shall be an original contribution to knowledge, and must bear evidence of the candidates having carried out individual investigations in her/his chosen field.
- h. She/he shall state in the preface on which the work is based and how the work contributes to the general advancement of knowledge. She/he shall also state the sources from which her/his information has been derived and shall indicate which portion(s) of her/his thesis she/he claims as her / his original contribution.
- i. A candidate cannot submit her/his thesis for the award of any other degree or diploma or other academic award.

#### **R.9 Examination of thesis**

- (a) The Doctoral Committee shall approve names of six persons who are well known authorities on the subject for appointment as examiners of a thesis by considering the list submitted by the Supervisor(s). Such examiners shall neither be teachers of this University nor persons who are supervising candidates for the PhD degree registered at this University. Two parallel Doctoral Committee to be appointed by the Chairperson of senate.
- (b) On recommendation of the Doctoral Committee, a Board of Examiners, consisting of two external experts and the supervisor(s) under whose guidance the candidate worked, shall be appointed by the Senate/Director of which at least one external expert shall ordinarily be from outside the country.
- (c) External examiners will state their opinion in the prescribed form for Ph. D degree awarding of candidates.
  - i. The candidate may be awarded the Ph.D degree of the University
  - ii. The candidate may be awarded the Ph.D degree of the University with modifications are addressed in a separate addendum. The Examiners present at the viva voce must certify that the modifications are satisfactorily addressed, failing which the thesis must be resubmitted after addressing the suggested modifications.
  - iii. The candidate may be awarded the Ph.D degree only after addressing the observation and modification as desired by External Examiners.
  - iv. The candidate not be awarded the Ph.D degree of this University. A

detailed report must also be submitted and signed by the external examiners.

- (d) A thesis which has been directed to be resubmitted by at least one of the external examiners may be submitted again after due revision, modification or alteration but not earlier than three months from the date of communication of the recommendation to the candidate and a fee shall have to be paid at the time of resubmission as decided by the University. External examiners appointed under (ii) will examine the resubmitted thesis again. A thesis may be resubmitted only once.
- (e) If there is a difference of opinion in the recommendations (clauses 9 (c) (i) to (iii) vis- vis (iv)) of the external examiners, all the reports and the thesis will be sent to a third external examiner appointed by the Doctoral Committee (DC) who will act as special adjudicator and her/his recommendation will be considered as binding.
- (f) If both the external examiners reject the thesis (clause 9 (c) (iv)), it shall not be further processed for award of the Ph. D degree of this University and it will be considered as not admitted.
- (g) If the external examiners are of the opinion that the candidate may be awarded the degree (clauses 10 (c) (i) & (ii)) or in case of a favourable opinion of the special adjudicator, he/she shall be asked to appear at the viva voce examination.

The Dean committees to be monitored of points (a) to (g) half yearly and yearly.

#### **R.10 Viva Voce Examination**

- a. There shall be an open viva voce examination for which notice should be issued 15 (fifteen) days before the examination and teachers of all faculties shall be invited to attend the examination. Other interested persons may also attend.
- b. The Senate on recommendation of the Doctoral Committee (DC) shall appoint one expert who is not a teacher of this University and is a well-known authority on the subject, and the Supervisor(s) of the candidate, as examiners for the oral examination. In case the Supervisor is not available, the University shall appoint another examiner in her/his place.  
  
In the event of a Ph.D. candidate proceeding abroad after submission of the thesis, two competent scholars in the field abroad may be appointed as an examiner for the open viva voce as a special case with the approval of the Chairman Senate.
- c. The examiners at the oral examination may ask questions beyond the subject of the thesis in order to satisfy themselves that the candidate has adequate knowledge of the particular branch of the subject on which s/he has submitted the thesis. If there is an addendum as mentioned under 10 (iii) (b), the examiners will certify that it is satisfactory.
- d. If the examiners are not satisfied, the candidate may be directed to appear again at the viva-voce examination after six months. Such a candidate shall pay an additional fee duly determined by the University.

- e. The degree will be awarded by this University if the examiners of the viva voce examinations are of the opinion that the candidate is a fit person to receive the degree.
- f. However the regulations as enumerated here must be at per with the Ph. D guidance as published by Kakod Kar Committee, MHRD.

**R.11 Honorarium**

The members of the Board of Examiners shall be paid an honorarium of US\$100 for external experts and Rs. 5000/- for internal expert by the University for the examination of the thesis and the oral examination separately. Honorarium will be paid to the examiners at the same rate as mentioned.