

# Indian Institute of Information Technology Design and Manufacturing Kurnool

# **ORDINANCES AND REGULATIONS**

# Doctor of Philosophy Programme (Full time)

Effective from 2019-20

# Ph.D ORDINANCES AND REGULATIONS

# ORDINANCES

- 1 A candidate who has qualified for the award of Master's degree in Engineering/Technology or Master of Science of a recognized Institute or University in the discipline as prescribed in the regulations of the Institute, is eligible to apply for the Ph.D. programme in Engineering/Technology or Science respectively of this Institute.
- 2 A candidate who has qualified for the award of Bachelor's Degree in Engineering/Technology with exceptionally good academic background in the discipline as prescribed in the regulations of the Institute is also eligible to apply for Ph.D programme in Engineering/Technology of this Institute.
- 3 The award of the Ph.D degree shall be in accordance with the regulations of the Institute.

# REGULATIONS

# R.1 Categories of Admission

Candidates will be admitted to the Ph.D programme of the Institute under any one of the following categories:

i. Regular full-time scholars with or without Institute fellowship or with project support.

# R.2 Eligibility

#### R.2.1 Minimum Educational Qualifications

The minimum educational qualifications for admission to the regular full time scholars into Ph.D programme of the Institute are as follows:

#### R.2.1.1 Ph. D. in Engineering

- i. Candidates with a M. Tech/M.S. (Research) degree in Engineering/Technology with a good academic record.
- ii. Candidates who have qualified for the award of Bachelor's degree in Engineering/Technology with exceptionally good academic record in an eligible discipline will be considered for direct admission to Ph. D. Programme as a regular full time scholar subject to the following conditions:
  - A B. Tech degree holder of an IIT with a minimum CGPA of 8.0 on a 10.0-point scale or with a valid GATE score.
  - A Bachelor's degree holder in Engineering/Technology from any other University who is among the top 10 rank holders in the University and having a valid GATE score.
  - A Bachelor's degree holder in Engineering/Technology from a reputed R&D organization and having a proven research record.

#### R 2.1.2 Ph.D. In Sciences

Master's degree in Sciences with a good academic record and having a valid score in GATE or UGC/CSIR-NET/NBHM or equivalent qualification in the relevant area / Master's degree in Engineering/Technology with a good academic record / B. Tech degree holder of an IIT with a minimum of CGPA of 8.0 on a 10.0-point scale with a valid GATE Score.

The Selection Committee may consider meritorious candidates from disciplines other than listed in the Admission notification if there is a good match between the educational/research background of the candidate and the proposed area of research.

The admission notification will also include details about inter-disciplinary research areas, which may be pursued by the research scholars for the Ph. D degree and the corresponding disciplines/specializations given by the Institute.

Additional criteria other than the minimum educational qualifications given in R.2.1 may be set by the Selection Committee from time to time for short listing candidates to be called for test and/or interview.

#### R.2.2 Upgradation of registration from M.S/M.Tech to Ph.D programme

Meritorious candidates who have registered for M.S/M.Tech programmes in the Institute are eligible to upgrade their registration to the Ph. D programme in the same department if they satisfy the following criteria:

- (a) The candidate should have successfully completed Two (2) semesters in the M.S/M.Tech programme.
- (b) Minimum CGPA of 8.0 in the prescribed courses.

In the case of an M.S. student, the General Test Committee of the M.S. student will consider the application for up-gradation to Ph.D. under the supervision of the same guide(s) and make its recommendation to the Senate. If approved, a Doctoral Committee as per R.9 will be constituted to replace the General Test Committee.

In the case of a M.Tech Student, a Committee duly constituted by the Director/Deputy Director will consider the application for up-gradation to Ph.D and make its recommendation to the Senate. If approved, a Doctoral Committee as per R.9 will be constituted and guide(s) as per R.6 will be allotted.

The candidate should pass the comprehensive examination (R. 13) within a semester after upgradation to the Ph.D. programme and within two attempts.

The candidate will be treated on par with one admitted directly after a Bachelor's degree, but the residency period and course work completed under the M.S/M.Tech. registration as decided by the Doctoral Committee will be taken into account to the Ph.D programme.

# **R.3 International Students**

Foreign nationals can only register as regular full-time scholars. Foreign nationals with degree from Indian Universities will be treated on par with Indian nationals for admission purposes. Foreign nationals with foreign degrees must meet the minimum educational requirements as given in R. 2. 1 equivalent to a Indian Master's degree in the relevant disciplines. In addition, they should have a valid GRE/GMAT/GATE/NET/ICAT /JMET/ TOEFL score or an equivalent examination score in the relevant discipline. International students are expected to have a working knowledge of English. Once admitted, the institute will apply for necessary clearance from the Government of India for study in India.

# **R.4 Selection Procedure**

Eligible candidates possessing the minimum educational qualifications and satisfying additional criteria set by the Director/Dy. Director from time to time, will be called for a test and/or interview, by the Selection Committee.

For candidates who have obtained PG degree 10 years earlier as on the last date prescribed for receipt of the completed application, a test may be conducted.

The applications of foreign nationals may be considered without a personal interview/test. Based on the academic record and the performance of the candidates in the interview and /or test, the Selection Committee will recommend to the Chairman, Senate, the names of Candidates found suitable for admission to the Ph.D. Programme.

# **R.5** Admission

- (a) Candidates whose selection is approved by the Chairman, Senate, will be admitted to the Ph. D. programme after payment of prescribed fees.
- (b) Under normal circumstances, a candidate is not eligible for re-registration for Ph. D. after cancellation of his / her earlier registration for any reason. Based on the merits of the individual case and taking into consideration any special circumstances, a candidate may be considered for re- registration.

# R.6 Choice of guide(s)

- (a) Allotment of research scholars to guide(s) will be made by the Director taking into consideration the preferences given by the research scholars and guides.
- (b) There shall be not more than two guides from the institute for a research scholar.

# **R.7** Eligibility for being Guides

The following members may be considered as a guide for a Ph. D scholar:

- All faculty members of the Institute.
- Scientific/Design staff of the Institute with a doctoral degree.
- Adjunct /Retired/Emeritus faculty with a doctoral degree
- (a) When a faculty member, who has guided a candidate for at least 3 years, retires, he will continue to be a guide. However, a co-guide who is in service will be appointed in addition. The guide who has retired will be invited for the Doctoral Committee meetings, synopsis presentation and the viva voce examination.
- (b) A faculty member who is to retire within 3 years may be permitted to become a guide to a

new scholar with another faculty member, who is not likely to retire within 5 years as coguide, at the time of registration itself. On retirement, the faculty member will continue to be a guide and will be invited to the Doctoral committee meeting and viva voce examination.

- (c) CSIR and other Emeritus Fellows / Scientists I Emeritus Professors, who hold office at this Institute for a period of 2 years or more, can become co-guides for scholars along with a guide from IIITDM, with at least 5 years' service still left at the time of registration of the scholar.
- (d) In case a faculty member who is a guide goes on leave exceeding one year duration, another faculty member will be identified to become a co-guide of the research scholar.
- (e) The induction of new guide after 3 years of registration of a research scholar will be considered by the Doctoral committee.

#### R.8 Change/Addition of guide

The Doctoral Committee of a research scholar may recommend change of guide or appointment of a co-guide for valid reasons.

#### **R.9 Doctoral Committee**

For a research scholar, his/her guide will communicate, by duly filling the prescribed form, to the Head of the Institution or his nominee, the area of research, the name(s) of guide(s) and faculty members together with their specializations, for constituting Doctoral Committee of that research scholar. This should be completed within 2 weeks from the date of joining of a research scholar.

The following is the composition of the Doctoral Committee:

1.	Head of the Institute or his nominee	Chairman
2.	Research Guide(s)	Member(s)
3.	A minimum of two faculty members from Department/Institute	Member(s)
4	One faculty member from the other reputed Institute	Member

In case any member goes on leave exceeding one year duration, or resigns from the Institute, the Chairman, Senate, or his nominee will nominate another member on the suggestion of the Chairman, Doctoral committee. Scientific/Design staff and others who are eligible to guide Ph.D. scholars may be nominated as members of the Doctoral Committee.

#### **R.10 Registration**

The Doctoral Committee will meet normally within one week of being constituted, where the research scholar will make a presentation. The Doctoral Committee will fix/ approve the date of registration for the Ph. D. programme, consider the proposed research topic and prescribe/approve the courses of study in this meeting.

#### **R.11. Course Work**

The Doctoral Committee will normally prescribe courses of 12 credits. The prescribed courses shall be post-graduate level courses of the Institute or from courses offered in another reputed Institutes, if need arises.

(a) Research scholars in the Engineering shall complete the prescribed courses with minimum of 12 credits. In cases where the scholar is directly admitted to the Ph.D programme in Engineering with a Bachelor's degree in Engineering/Technology, the and Degradations. Db D. Degramme (Full Time)

scholar should successfully complete prescribed courses with minimum 24 credits.

- (b) Research scholars in the Sciences shall complete the prescribed courses with minimum of 16 credits. In cases where the scholar is directly admitted to the Ph.D programme in Sciences with a Bachelor's degree in Engineering/Technology, the scholar should successfully complete prescribed courses with minimum 24 credits.
- (C) In case of upgradation of the registration of a candidate from M.S/Ph.D programme, the courses already successfully completed by the candidate in M.S/M.Tech programme may be considered by the Doctoral Committee for course work requirement. The Doctoral Committee may prescribe additional courses for a candidate, wherever found necessary.
- (d) The Doctoral Committee may give credit to courses already undergone by a research scholar in this Institute or other Institutions, provided they are the same or equivalent to those prescribed, and the performance level of the scholar in them meets the minimum requirements. The Doctoral Committee may prescribe additional courses for research scholars wherever found necessary.

#### (e) Grades

Based on the performance of the research scholar, he/she is awarded a final grade at the end of the semester in each course. The grades and the corresponding grade points are as follows:

Grade	Points
S	10
А	9
В	8
С	7
D	6

Research scholars shall obtain a minimum CGPA of 7.5 in the courses taken by them subject to a minimum of "C" grade in the prescribed courses. If more than the minimum required electives have been taken, only the electives with the best performance will be considered for computing the CGPA.

A student is considered to have completed a subject successfully and earned the credits if he/she secures a grade other than D. Once a subject successfully completed, it cannot be repeated.

The GPA will be calculated according to the formula

 $GPA = \Sigma(C \times GP) \div \Sigma C$ 

Where C is the credit for the course and GP is the grade point obtained for the successfully completed course and  $\Sigma C$  is sum of credits of the courses that are successfully completed in that semester.

#### **R.12. Progress Report**

- (a) A research scholar shall submit a written report in the required format, annually for the first three years, and every six months thereafter.
  The report should be routed through the Doctoral Committee to the Academic section for further processing.
- (b) The progress made by a research scholar shall be reviewed by the Doctoral Committee every semester.

Continuance of registration and award/continuance of scholarship/Research Assistantship

will be based on the recommendation of the Doctoral Committee. Inadequacy of effort/progress can be a reason for cancellation of registration.

# **R.13. Comprehensive Examination**

- a. Every research scholar shall take and perform satisfactorily in a Comprehensive Examination. The comprehensive Examination shall be conducted by a Comprehensive Examination Committee, consisting of the supervisor and at least two other faculty members of the Institute nominated by the Chairman of Doctoral Committee.
  - i. If the performance of a research scholar in the Comprehensive Examination in the first attempt is not satisfactory, he / she will be given one more opportunity to appear for the comprehensive examination within six months of the first attempt.
  - ii. The registration of a research scholar who fails to complete successfully the Comprehensive Examination in two attempts, will be cancelled.
  - iii. The objective of the Comprehensive Examination is to test the general capability of the research scholar and the breadth of his / her field of research. The Comprehensive Examination will usually consist of a written test and/or oral examination.
  - iv. The Comprehensive Examination Committee shall intimate to the research scholar sufficiently in advance the scope of the Comprehensive Examination, to enable the scholar to prepare adequately for it.
- b. The research scholars are normally expected to complete successfully the Comprehensive Examination within a year after his/her registration in the Ph. D programme and in any case not later than three semesters after his registration in the Ph.D programme.

#### R.13 Enrolment

Every research scholar is required to register in person each semester on the stipulated date till the submission of his/her thesis, after payment of the requisite fees.

#### R.14 Minimum Period for submission of Thesis

The minimum period for regular full time research scholars from the date of registration to the date of submission of Ph.D thesis shall be

- i) 24 months for research scholars with Master's Degree in Engineering/Technology.
- ii) 36 months for research scholars
  - a) Directly admitted to the Ph.D programme with Batchelor's Degree in Engineering/Technology
  - b) Who upgrade from M.S/M.Tech programme to Ph.D programme
  - c) With Master's degree in Science.

#### R.15 Relief from Ph.D. Programme to take up Job

Ph.D. Scholars who got a job offer can get relief from the programme, while keeping their registration alive on payment of the requisite fees every semester, on the following conditions:

Scholars who take up jobs will be relieved on their request, based on the recommendations of

Doctoral Committee, if they have completed their

- a) Minimum residential requirement
- b) Course work
- c) Comprehensive examination.
- d) Completion of substantial research work as assessed by the Doctoral committee

The renewal of their registration for every semester, however, will be considered only if the Doctoral Committee finds his/her progress to be satisfactory and recommends continuance of registration.

# R.16 Maximum Duration of programme

Research Scholars should submit the thesis within 5 years from the date of registration. The Doctoral Committee may extend the period for submission of the thesis further 2 years for regular full time research scholars.

# R.17 Withdrawal from the programme

A scholar may be permitted by the Head of the Institute to withdraw from the programme for a semester or longer for reasons of ill health or other valid grounds duly recommended by the Doctoral Committee. Normally a scholar will be permitted to discontinue from the programme only for a maximum continuous period of two semesters.

# R. 17a Cancellation of Registration

- i. The registration of research scholar whose progress is not found to be satisfactory by the Doctoral Committee or who has not enrolled is liable to be cancelled.
- **ii.** The registration of a research scholar who has not submitted his/her thesis before the end of the maximum permissible period as in R. 16 will be cancelled

# R. 18 Reversion of upgraded Ph.D Registration to Master's Programmes

- a) A research scholar who updates his/her M. S. registration to Ph.D, may apply for reversion to the M.S. Programme under the supervision of the same guide(s) if he/she so desires and if he/she has completed three years after the date of original M. S registration.
- **b)** If a research scholar, who upgrades his/her M.S. registration to Ph. D, fails to pass the comprehensive examination in two attempts, he/she will be reverted to the M.S. Programme.

The Doctoral Committee will consider the application only if the scholar has completed all the course requirements prescribed originally by the General Test Committee when the scholar registered for the M.S. programme and if the research work carried out till date is found suitable for submission as an M.S. thesis. If the application is found acceptable, the Doctoral Committee may recommend reversion of registration. If the reversion is approved by the Institute, the Doctoral Committee will continue to function as the General Test Committee till the completion of the scholar's M.S. programme.

The scholar must complete the requirements of the M.S. degree within a maximum period of one year from the date of reversion of the registration from Ph.D to M.S.

#### R. 19 Synopsis

a) On satisfactory completion of the prescribed courses, the comprehensive examination and the research work, the scholar shall submit the requisite number of copies of the synopsis of his/her research work in the required format through proper channel to the Academic Section for further processing. Prior to submission of the synopsis, the scholar is required to give at least Ordinances and Regulations - Ph.D Programme (Full Time)

two seminars on the topic of his/her research and have at least one paper either published or accepted for publication as stated in R 19(b).

b) The research scholar shall present the synopsis before the Doctoral Committee. The Doctoral committee will, if it considers the work to be adequate and satisfactory (at least two research papers published/accepted for publication in SCI/e-SCI journals), permit the research scholar to submit the thesis and recommend a panel of at least ten examiners from outside the Institute (5 from abroad and 5 from reputed Institutions/R&D Organizations in India).

#### **R.20 Submission of Thesis**

The research scholar shall, within one month of acceptance of the Synopsis, submit required number of copies of the thesis as stipulated.

The Doctoral Committee may grant additional time beyond one month on request from the scholar for valid reasons.

#### **R.21** Panel of Examiners

The thesis shall be referred to two examiners chosen by the Chairman, Senate or his/her Nominee, from among the panel of examiners recommended by the Doctoral Committee, for evaluation.

#### **R.22** Thesis Adjudication

- a. The examiner is expected to send the report on the thesis within two months from the date of receipt of the thesis.
- b. In case of undue delay in receiving the thesis report, the Chairman, Senate or his/her nominee shall appoint another examiner in his/her place for evaluating the thesis.
- c. If one of the two examiners declares the thesis as not recommended, the thesis shall be referred to a third examiner from the panel for evaluation.
- d. If an examiner suggests resubmission of the thesis, after revision, the research scholar will be allowed to resubmit the theses within the time stipulated by the Doctoral Committee, failing which the revised thesis will not be accepted and his/her registration will be cancelled.
- e. If two examiners, after referral to a third examiner, if necessary, report the thesis as not recommended, the registration of the scholar shall stand cancelled.
- f. If reports of two examiners after referral to a third examiner, if necessary, declare the thesis as recommended, the Doctoral Committee will consider the reports and recommend for conduct of viva voce which will be conducted normally not earlier than two weeks from the date of the constitution of the viva voce board. The Doctoral Committee will suggest a panel of at least four expert members out of which one member will be nominated for the viva voce board.

In all other cases, not covered by the above Regulations, the matter will be referred to the Doctoral Committee for consideration.

#### **R.23 Viva Voce Examination**

a) The following is the composition of the viva voce Board:

1)	Head of the Institute or his/her nominee	Chairman
2)	The examiner of the thesis from within the country, or a specialist in the subject nominated by the Chairman, Senate or his/her nominee from the panel of examiners Approved by the Doctoral Committee.	Member
3)	Research Guide(s)	Member(s)
4)	A Specialist either from the Institute or outside from the panel approved by the Doctoral Committee and nominated by the Chairman, Senate, or his /her nominee	Member

- b) The Doctoral Committee members of the Research Scholar concerned will be invitees to the viva voce.
- c) The viva voce board will examine the scholar on his/her thesis work and evaluate his/her performance as satisfactory or otherwise. The viva voce board will ensure that the scholar answers satisfactorily the questions raised by the thesis examiner(s).
- d) If the viva voce board declares the performance of the research scholar not satisfactory, he/she may be asked to reappear for viva voce at a later date (not earlier than a month and not later than six months from the date of the first viva voce). On the second occasion, the viva voce board will also include the members of the Doctoral Committee.
- e) If the viva voce board on the second occasion also declares the performance of the research scholar not satisfactory, the matter will be referred to Senate for a decision.
- f) The viva voce board may also recommend revision to be made in the final version of the thesis after taking into consideration suggestions of the examiners who evaluated the thesis and the discussion at the viva voce. The Chairman of the viva voce board shall forward the thesis to the academic section certifying that the revisions recommended by the viva voce board, if any, have been incorporated in the copy of the thesis along with the report of the viva voce board.
- g) All the research scholars shall submit two copies of the final form of thesis in A4 size and an electronic version in PDF format after the viva voce board recommends the award of the Ph.D degree.

# R.24 Award of Ph.D Degree

If the performance of the research scholar in the viva voce is satisfactory, he/she will be awarded Ph.D. degree on the recommendation of the Senate and with the approval of the Board of Governors of the Institute.

# R. 25 Discipline

Every scholar is required to observe disciplined and decorous behavior both inside and outside the campus and should not indulge in any activity, which will tend to bring down the prestige of the Institute.

Any act of indiscipline of a scholar reported to the Head of the Institute will be referred to a Discipline and Welfare Committee nominated by the Senate from time to time.

The committee will investigate the charges and will recommend suitable punishment, if it finds the charges substantiated.

The recommendation of the Committee will be considered by the Head of the Institute to take appropriate action.

Head of the Institute will report the action taken at the next meeting of the Senate.

#### R.26 Power to Modify

Notwithstanding all that has been stated above, the AAC / Senate has the right to modify any of the above regulations from time to time.