

**REGULATIONS
FOR
PH.D. DEGREE IN ENGINEERING, SCIENCE
&
HUMANITIES AND SOCIAL SCIENCES
(EFFECTIVE FROM ACADEMIC SESSION 2007-08)**



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

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1. Introduction

- 1.1 The Institute provides facilities for research leading to the Degree of Doctor of Philosophy (Ph.D.) in Engineering, Science, Humanities and Social Sciences in various disciplines as mentioned in Appendix—I.
- 1.2 The Ph.D. thesis shall be the report of the research work characterized by either discovery of new facts, new interpretation of known facts and theories, an independent design or development, development of a new instrument or technology, an exhaustive study and criticism of published work, or any applied research work that can be exploited for creation of wealth of for human well being.

2. Eligibility

- 2.1. The minimum qualification required for admission to Ph.D. programme in Engineering, Science, Humanities or Social Science is one of the following:
 - 2.1.1. M.E./M.Tech./M.Pharm in relevant discipline with at least 6.5 CGPA or 60 percent marks in aggregate in both B.Tech. (or M.Sc./M.Pharm/MCA) and M.Tech. levels from a recognized technical Institute or University.
 - 2.1.2. B.E./B.Tech./B.Pharm/MCA or equivalent in relevant discipline with CGPA of 7.0 or 65 percent marks in aggregate.
 - 2.1.3. M.Sc. in Basic Sciences with CGPA 7.0 or 65 percent marks in aggregate in relevant disciplines.
 - 2.1.4. M.B.B.S. with CGPA 6.5 or 60 percent marks in aggregate.
 - 2.1.5. M. Sc. /M.A. / MBA / M.Com. in Humanities or Social Sciences or Management with CGPA 6.5 or 60 per cent marks.
- 2.2. In computing the CGPA or percentage of marks, all papers of a B.Tech., M.Sc., M.Tech or any other programme will be considered both in numerator and denominator.
- 2.3. Universities some time record their own conversion of marks to grade or vice versa on their grade sheets. Under such circumstances NIT Rourkela will accept only the original mode of evaluation ignoring the conversion.
- 2.4. In exceptional cases, where the candidate has proven research experience, evidenced by published papers and/or unpublished documents, the Senate, or Chairman Senate on its behalf, can relax the mark requirement by 5 percent (or 0.5 in CGPA). Copies of the documents considered for the purpose must be presented to the Senate.

A further concession of 5% in B.Tech/M.Sc. marks or 0.5 in CGPA may be given by the Senate to candidates sponsored by Government departments or autonomous bodies under the Government who have put in at least 5 years of service in a relevant assignment. Such candidates will be required to complete at least 8 credits of undergraduate courses with minimum B grade in each, in addition to the normal course requirements.

- 2.5. Students with degrees in one discipline of Science or Engineering can enroll for Ph.D. in another discipline of Humanities, Science or Engineering, if such migration is considered relevant by the Departmental Academic Committee (PG & R). The constitution and functions of DAC (PG & R) are given in Appendix – VII. The Senate will announce, from time to time, a list of relevant departments and specializations for admission to Ph. D. programme in each discipline. In all other cases, the decision must be made by the Senate (or Chairman Senate on its behalf) on case to case basis depending on the fields involved, proposed research programme and academic preparation of the candidate. A list of required specializations for various departments is given in Appendix – II. Students without adequate background in the primary discipline (listed in Appendix – II) will be required to have 10% extra marks (1.0 in CGPA) to qualify over students with specialization in a primary discipline, unless explicitly exempted by the Senate.
- 2.6. Qualification in GATE or NET is not essential for admission to Ph.D. programmes. Students applying for Institute or Government scholarships / fellowships, however, shall need an M.Tech. degree or a valid NET (Lectureship or JRF) or GATE score, if required by the Government regulations.

- 2.7. The various categories of students (with or without financial support) mentioned below are eligible for admission to Ph.D. programme provided they satisfy the qualification requirements as given in section 2.1.
1. Full time student with Institute Fellowship /Assistantship (Institute Scholar)
 2. Full time student with External Fellowship (UGC/CSIR etc.)
 3. Full time student without Fellowship (self financed/self supported)
 4. NIT faculty
 5. NIT regular employees (Non teaching)
 6. Project Scholars (JRF/SRF/RA etc.) or project staff members
 7. QIP Scholars
 8. Sponsored student (Institute/Research Organisation/Industry)
 9. Sponsored student from Rourkela and vicinity [part time]
- 2.8 Unlike other academic programmes, mere possession of required degrees and a superior academic record do not guarantee admission to a student to the Ph.D. programme. Apart from academic record, the DAC will take into consideration the research aptitude, ability to work in a team, subject interest, availability of supervisors, facilities in the department and the department's research focus while selecting candidates to the Ph.D. programme.

3. Admission

- 3.1 All categories of candidates except the members of the Institute faculty, QIP scholars and scholars nominated by the Central Government have to be selected by Departmental Academic Committee (PG&R) on the basis of overall academic performance, written test and/or interview.
- 3.2 Candidates employed as SRFs/JRFs or as Full time Research engineers/officers in sponsored projects may be admitted to the Ph.D Programme under category 6. They need to obtain permission of the Principal Investigator and Dean (SRICCE) for admission. The project should have tenure of at least 18 months beyond the date of admission of the candidate to the Ph.D. programme. They also have to satisfy the qualifying marks requirement and will undergo selection procedure like other students. On termination of the project, their status will be full time student without scholarship (Category 3), unless offered another type of scholarship. Students who have earned a GATE/NET score or have M.Tech. degree and have availed at least 18 months of fellowship under a project will get first priority in award of Institute fellowship, irrespective of number of fellowship holders under the same supervisor or in the same department.
- 3.3 Members of teaching staff desirous of enrolment in Ph.D. programme can do so without any selection formality. No administrative permission is necessary. They will be guided by all other norms for Ph.D. registration and thesis submission as per regulation. They will apply to the Institute for admission in the standard application and enrolment forms. If the faculty member applies for admission to his own department, selection is automatic. But if he/she applies for admission in another department, the DAC of the destination department will examine the proposal. No formal interview is necessary. Admission will be given if DAC recommends.
- 3.4 Non-teaching staff of the Institute may be permitted to join the Ph.D. programme under following terms and conditions:
- (i) A member of non-teaching staff seeking permission to join the research programme must hold a permanent post in the Institute and must have a standing of at least 3 years service in the Institute in the same cadre.
 - (ii) The employee must be engaged in research as a part of his normal duty, so that his work output can qualify for the degree of Ph.D. Study towards Ph.D. cannot be done on a part time basis outside the working hours of the Institute.
 - (iii) The application for administrative permission to join a research programme by a member of non-teaching

staff must be submitted to the Director through the Head of the Department/Centre or the section in-charge, as the case may be where the candidate is employed. While submitting the application he/she must give an undertaking to the effect that he/she will abide by all rules and regulations.

- (iv) Administrative permission by the Director does not constitute academic approval of the Senate for admission.
 - (v) The application will be examined by the Departmental Academic Committee (PG & R) of the department where the candidate wants to be enrolled. The committee will interview the candidate to ascertain his suitability in the programme.
 - (vi) Regular non teaching staff appointed in sponsored research projects for carrying out research work may be given leave without pay from the Institute to work in the project and pursue Ph.D. programme simultaneously. In deserving cases, Director, at his discretion, may approve payment of partial salary (up to 50%) and waive lien charges, against services rendered to the Institute.
 - (vii) Every application for admission under this category shall be examined by the Research Programme Evaluation Committee(RPEC) taking into account whether the proposal for joining the programme for which permission is sought for arises out of genuine interest and ability, and whether the normal job assignment of the applicant sufficiently overlaps with the proposed research programme. Final permission will be accorded by the Senate.
 - (viii) The members of the non-teaching staff applying for Ph.D programme must satisfy the minimum qualification requirement as mentioned in para 2.1.
- 3.5 Candidates sponsored by major public and private sector employers are given concessions in admission and subsequent requirements. The norms for admission of sponsored candidate are given in Appendix - X.
- 3.6 Students enrolled in the M.Tech (Res) programme may shift to the Ph.D. programme on recommendation of the Masters Scrutiny Committee and approval of the Senate. All such proposals will be examined by the RPEC before presentation to the Senate. In such a case the Senate will appoint a DSC and work out course requirement, and the student can submit Ph.D. thesis only after satisfying all requirements of the Ph.D. programme.
- 3.7 Candidates desirous of pursuing Ph.D. programme must apply in prescribed form (Form AC/301) to the Deputy/ Assistant Registrar (Academic) either on their own or against an official advertisement. These applications will be scrutinized by the Departmental Academic Committee (Form AC/302) of the concerned department. The recommended candidates, on approval of Dean(AA), will be called for personal interview with the Departmental Academic Committee.

The Committee, through written or oral examination, or a combination of both components, shall ascertain suitability of the candidates to the Ph.D. programme and give its recommendation to the Dean (AA) for approval (Form AC/303).

While selecting a candidate for studentship with or without scholarship, Departmental Academic Committee will consider not only the merit (career, depth and breadth of knowledge in chosen and allied fields) of the candidate, but also the research aptitude and ability to work in a team and motivation to complete the programme. The Committee shall also ascertain that at least one faculty member of the Department is available and willing to supervise the candidate if selected in his/her chosen field. [The faculty member will not have the option to refuse, if the candidate opts to work under him after joining.] A candidate should not be selected if the Department does not have physical resources and supervising faculty to do justice to the candidate's academic interest.

If a candidate recommended for admission has a close relative serving in the Institute as an Officer or a member of the faculty, the application should be so identified and sent to Director for approval. The Director may, at his discretion, approve the recommendation or refer to a committee on conflict of interest.

- 3.8 The admission letter (Form AC/304) will be issued by the Deputy/Assistant Registrar (Academic) to a successful candidate on the basis of recommendation of the Department and approval of Dean (AA)/Director.
- 3.9 On joining the Institute, submitting the enrolment form (Form AC/305) duly forwarded by the Department and after paying the prescribed fees, the candidate will be assigned a Roll number by the Academic Section.

- 3.10 The Academic Section will allot the candidate to a hall of residence. Students not desirous of staying in a hall must seek permission from the Dean (AA) to stay outside. A student permitted to stay outside the halls shall be attached to a hall and will be required to pay appropriate hall fees.
- 3.11 Admission to the programme may be given at any time of the year. The fees, however will be for a full semester. Summer is included in the Spring semester.

4. Supervisors

- 4.1 All candidates for Ph.D. degree are required to carry out their research work under the guidance of ONE/TWO supervisors, to be appointed by the Senate, or Dean(AA)/Director on its behalf, on recommendation of the Departmental Academic Committee (PG & R). Ordinarily the DAC will recommend one Supervisor. However in case of inter-disciplinary research (within the same department, across two departments or across two Institutes) a second supervisor may be appointed.
- 4.2 When there are two supervisors, one of them will be called the Principal Supervisor. Ordinarily the Principal Supervisor will be a faculty member of the registering department. However in deserving cases the DAC (PG & R) may recommend a faculty member of another department of the Institute as Principal Supervisor.
- 4.3 (a) The supervisor may be in the rank of Asst. Professor or above with or without Ph.D. degree or Lecturer with Ph.D. degree.
- (b) A sponsored student desiring to work in his/her place of employment should have a supervisor from his/her organisation. The joint supervisor so proposed must have a Ph.D. Degree or at least 10 years of relevant professional experience. In case of Academic Institutes a Ph.D. Degree is necessary to become a joint supervisor. In deserving cases, the Senate may accept a supervisor from the sponsoring College/ University without a Ph.D. degree.
- (c) In special cases, where persons of adequate academic standing are not available in the sponsoring organization, and adequate physical facilities are available to ensure frequent contact between the student and his/her supervisor at NIT, Rourkela, the Senate may accept only one supervisor, who is a faculty member of NIT. The student will then be enrolled under category 9. Such proposals should be specifically approved by the Senate.
- (d) In special cases, if it is felt to be beneficial to the project because of special expertise, the second supervisor may be from another Institute, Industry or other organization. Such cases shall be approved by the Senate on the recommendation of the DAC (PG & R) and RPEC.
- 4.4 Regular faculty members of the Institute enrolling in Ph.D. programme may be self- guided. Such cases should be examined by RPEC and put up to the Senate for approval.
- 4.5 A teacher with less than 2 years service left before superannuation may not be recommended as sole supervisor or principal supervisor. After superannuation a teacher will continue to be the sole supervisor if the thesis is submitted within 6 months; if it takes more than 6 months a substitute supervisor has to be appointed by DAC(PG&R). If no faculty member is willing to take up the assignment, the Director, as Chairman, Senate, will appoint the supervisor in consultation with the HOD. This selection will be binding on the student and the supervisor.
- 4.6 After superannuation from service if a person joins the Institute on re-employment or as Emeritus Scientist or on some scheme of UGC/AICTE, he will continue to be the sole supervisor or as Joint supervisor as he was before superannuation.
- 4.7 Persons from outside the Institute joining as Chair Professors/Emeritus Scientists can be appointed as supervisors for new scholars only jointly with a regular teacher, but not as sole supervisors.
- 4.8 A substitute supervisor can be appointed by DAC(PG & R) if a sole supervisor leaves the Institute. If the sole supervisor proceeds on long leave for a period exceeding one year, the DAC (PG & R) shall appoint a second supervisor, who will serve as co-supervisor when the original supervisor returns.
- 4.9 During the course of a Ph.D. programme, if the supervisor, the DSC, the HOD or the Departmental Academic Committee feels the necessity of a second supervisor, an appropriate proposal must be prepared and placed

with full justification before the DSC. The recommendation of DSC will be further considered by the Departmental Academic Committee. If agreed by the DAC, the proposal may be placed to the Senate through the RPEC.

- 4.10 A student's preference of subject and supervisor must be taken into consideration by the HOD and DAC while assigning a supervisor to him. There should not be any undue restriction on faculty or students in choice of students or supervisors, particularly under categories not involving institute fellowship. The DAC should record the reasons for not honouring the request of a student. The DAC may, however restrict the number of Institute fellowships (including those from QIP and special projects) allocated to a supervisor or research group.
- 4.11 There shall be no limit on maximum number of research scholars a faculty member can guide. The department may, however, regulate the number of students with Institute fellowship (including QIP and other fellowships allotted to the Institute) that will be assigned to each faculty. For example, a faculty member can get a second student with Institute fellowship only when there is no other eligible and willing faculty member to accept a student in the same major area (specialization) within the department. Students with individual fellowship, project fellowship, without fellowship and those current Institute scholars who have completed three years after admission will not be counted for the purpose.

5. Doctoral Scrutiny Committee (DSC):

- 5.1 A Doctoral Scrutiny Committee shall be constituted by the Senate for each candidate admitted to the Research Programme leading to Ph.D. degree on recommendation of the DAC(PG&R) of the Department.

It shall consist of the following members:

- | | | |
|----|--|------------|
| 1. | Head of the Department (ex officio) | - Chairman |
| 2. | Principal Supervisor | - Convener |
| 3. | Second Supervisor (if applicable) | - Member |
| 4. | One faculty member from the department where the candidate is enrolled to be nominated by DAC (PG&R) | - Member |
| 5. | One faculty member from the same or a related department nominated by DAC (PG & R) | - Member |
| 6. | One faculty member from another department nominated by Dean(AA). | - Member |

If the Head of the Department is a supervisor, the Chairman of the DSC will be nominated by Dean(AA) from within or outside the department, who will serve as Chairman of DSC as long as the supervisor is HOD. When a supervisor assumes the charge of a HOD, he will request Dean (AA) to nominate the Chairman of DSC in his place.

- 5.2 No teacher who is enrolled for any M. Tech. or Ph. D. degree in the Institute or outside shall be a member of DSC till completion of his/her degree.
- 5.3 The composition of the DSC shall be proposed by the DAC (except for the member from outside the department) when a student joins the Department and the recommendation shall be sent to the academic section. The academic section shall obtain approval of Dean (AA) and bring out an office order on Form AC/306 stating the constitution of the DSC. The Committee will hold its first meeting immediately on formation to process the formalities of "Provisional Registration". This process will be completed within a month of a student joining.
- 5.4 The Principal Supervisor, acting as the convener of the DSC, will normally organize the meetings of the DSC after obtaining suitable dates from the Chairman and the members. Ordinarily, DSCs should meet within two working days of initiating the process. In case of difficulties in finding time convenient to all, or when a DSC is unable to reach a consensus, the Dean (AA) may be approached by either the Chairman or the Convener to organize the meeting for making appropriate recommendations to the Senate. The Dean (AA) may, at his discretion, nominate additional members with relevant expertise from the same or other departments to assist in the specific task
- 5.5 The DSC shall always record its recommendations with appropriate reasoning and enclosures, and formal minutes should be drawn and signed during the meeting. There shall be no provision for delayed preparation of minutes nor for confirmation of minutes.

- 5.6 Decisions of MSC shall normally be arrived at by consensus among members. In case of serious disagreement among members, the Chairman of MSC shall record the different viewpoints and put up to Chairman Senate through Dean (AA) for a decision. The Chairman's decision shall be binding on all concerned.

6 Enrolment and Provisional Registration

- 6.1 On receiving a letter of admission, every student joining the Ph. D. programme shall meet the Head of the Department and submit an application for enrolment in Form AC/305. The HOD will call the DAC (PG & R) and assign the student to one or two supervisor(s), and will recommend the structure of the DSC. The student will present the recommendation of the Department to the Academic Section who will permit him to pay the fees and assign a roll number. During this period, (not to exceed one week) the student will get free accommodation in the student hostel, but will pay for the meals.
- 6.2 All the candidates admitted to the Ph.D. programme are required to enroll in the programme on payment of the prescribed fees as given in Appendix - V and to carry out research work under a supervisor (or two supervisors) as mentioned in Clause 4. The enrolment will be with effect from the date on which a student is assigned a roll number [Form AC/306].
- 6.3 Within two weeks of enrolment, the student shall submit an application [Form AC/307] for provisional registration, in consultation with the supervisor. The application shall contain details of a student's career and his broad area of research.
- 6.4 The Doctoral Scrutiny Committee will examine the application and recommend "Provisional Registration". The provisional registration will record [Form AC/308] the area of research and the course work assigned. The process should normally be completed within one month of the student's joining the department.
- 6.5 The effective date of provisional registration shall normally be the date of admission. The DSC may extend the date if a student does not initiate his course or research work immediately on enrolment.
- 6.6 The DSC shall also record any previous research work (relevant to proposed topic) done and express it as equivalent research credits, not to exceed 48 credits of research. The evaluation will cover all written documents (e.g. published papers, original research records, unpublished in-house documents etc.), submitted by the student. Merely holding a position of research will not qualify for these credits. The DSC will record and present all documents to RPEC / Senate. These credits will be used in calculation of months of early submission if so requested by the student.

7 Residential Requirement

- 7.1. Normally all candidates admitted to the Ph.D. programme will be required to stay in the Institute till they complete all assigned work and submit thesis. However, for sponsored candidates who do not have to complete any course work, the DSC may recommend to reduce the minimum residential requirement to either six months at a stretch in the beginning or to at least six months in combination (of which at least 2 months should be at the beginning), with each segment not less than two months, spread over a period of two years. The facility for splitting the residence requirement to 2 or 3 segments is available only to employees of national R & D organizations, R&D houses of major industries and Government officials who need to work in a team and whose absence seriously affects their projects at the place of employment. It is not available to candidates from educational institutions. Candidates who need to attend courses must stay on campus for the time required to complete the courses, but not less than 6 months. Students desirous of attending course work in other institutes (See Section 10.9) need to spend at least 6 months on campus of NITR.
- 7.2. If the candidate intends to carry out a major part of his research work in his place of employment, he must convince the Departmental Academic Committee (PG&R) at the time of selection that adequate research facilities and research tradition exist in his institution. While taking the decision DAC (PG&R) will examine all the documents presented to it regarding adequacy of the R & D facilities available in the sponsoring organisation. These documents have to be furnished by the candidate during the time of interview. In general major Central Govt. (CSIR, DRDO, DAE, ISRO, CDAC etc.) labs, research organisations, industries (public or private) with established R&D facilities are taken as organisations with adequate facilities. Regarding recognition of other organisations the DAC (PG&R) has to make a recommendation on the basis of the material available to it, to the Director/Dean (AA) for approval. In every case, the Senate will decide the residential requirement and whether it can be split into segments.
- 7.3. Candidates employed in teaching or R&D Institutions within or in the vicinity the city of Rourkela and permitted

by the employer to spend sufficient time on research at NIT may be exempted wholly or partially from the compulsory residential requirement. In special cases, the Senate may extend the same facilities to employees of industry engaged in R&D or related (e.g. management) activities. In such cases the minimum duration of research shall be 3 years for students with M.Tech. degree and 4 years for others.

7.4. Form AC/312 should be used to report residence record of a student to the academic section for records.

8. Attendance and Leave

8.1 A research student, except when granted withdrawal by the Institute must attend to his work on a whole time basis. The department will maintain attendance record of the student, irrespective of whether the student is getting a scholarship or not. The DSC will examine the attendance record of students, and if it is found unsatisfactory, will recommend extension of minimum duration for submission of thesis, deregistration or termination of studentship as it thinks fit.

8.2 A teacher of a course may debar a student from appearing in examination on ground of unsatisfactory attendance.

8.3 The working hours of Ph.D. and M.Tech(R) students is generally permitted to be flexible, but not lower than that of a full time employee. It is the supervisor's legal and moral responsibility to ensure that proper work environment is made available to the student. The students are encouraged to discuss such issues with their supervisors, with HOD and higher authorities.

8.4 A research scholar other than Institute staff is eligible for following leave per academic year to be permitted by the Head of the Dept. on recommendation of the supervisor (s).

i) For incidental purposes, CASUAL LEAVE – 15 working days.

ii) For treatment on illness, MEDICAL LEAVE – 15 days (including intervening holidays).

Dean (AA) may sanction casual leave and medical leave upto 15 additional days each in deserving cases. Leave beyond 15 days CL and 15 days ML will be without fellowship. Director may approve leave beyond this period, the excess leave being without fellowship and the minimum period of stay being extended accordingly. Leave for coursework will be governed by relevant M.Tech regulations.

If a student falls ill outside the Institute (only if he is out on approved leave or deputation), the Medical Certificates must be seconded by an Institute Medical Officer. The student must prove the genuineness of the illness by submitting medical attendance slips, referrals, diagnostic reports, medicine purchase receipts and all other medical papers in original before the Institute medical officer and/or Dean(AA) / Director.

There is no summer or winter vacation for research students.

In matter of course work, leave rules applicable to M. Tech. courses will also be applicable to Ph. D. and M. Tech. (R) students.

A student may be granted mess rebate for authorized absence (on leave or travel on duty) of 5 days or more, provided the hall office/caterer is informed in advance.

Forms NITR/AC/208 and AC/111 may be used by students while applying for leave of absence from course or research work on leave, academic or student activity.

9. Semester Registration

9.1 A student enrolled in the Ph.D. programme will be required to register [Form AC/311] every semester by paying Institute dues and other fees. [The semester registration is to be distinguished from Academic Registration, discussed in Section 11]. A full time student must be registered for 26 credits of academic load including courses and research credits. Part time students, including those who have taken withdrawal from the Institute and students of Category-9 can be registered for no more than 18 credits.

9.2 Students who have been sanctioned withdrawal also need to do semester registration. They may, however, be permitted, in alternative semesters, to send registration form by post to their supervisors, who will present them to the Academic Section through the HOD. Thus a student taking withdrawal must register in person at least once

every academic year.

- 9.3 Failure to do semester registration for two consecutive semesters will result in termination of studentship, which can be restored by the Senate on consideration of all circumstances, payment of arrear fees and extension of thesis submission date.
- 9.4 It shall be the responsibility of the student to bring any deviation in his status in matters of course of work, registration, withdrawal etc. to the attention of Dean (AA) at the time of semester registration, if he has not done so earlier.
- 9.5 A student may be exempted from semester registration by Dean (AA)/Director if he submits thesis within 30 days of scheduled semester registration. If he fails to submit thesis within 30 days, he must do semester registration before the thesis is accepted for evaluation.

10. Course Work and Academic Credits

- 10.1 Every full time student of Ph.D. programme must be registered for 26 credits of academic load per semester. The credit load will contain some regular courses and a two-credit course on "Seminar and Technical Writing", the balance being research credits. A student must acquire at least 104 credits after M.Tech. and 156 credits after other degrees (B.Tech., M.Sc., MCA etc) including research credits registered for during the semester of thesis submission before being awarded a Ph.D. degree.

A part time student may register for less credits depending on his involvement in other activities. While students engaged in full time research in R&D institutions whose job assignments match exactly with his thesis work may register for 24 credits of research per semester, others including college teachers and industry personnel may take maximum 16 credits of research load. The 2 credit course on "Seminar and Technical Writing" in addition to research credits is compulsory for all students in every semester.

The grades in Research course shall be awarded by the Principal Supervisor in consultation with the co-supervisor, if any.

The grades in the Seminar & Technical writing will be awarded to a student by the course teacher on the basis of participation in seminars presented by the fellow students and invited speakers, as well as on the quality of his own presentation in seminars and poster presentation.

- 10.2 Course work is compulsory for all students enrolled for Ph.D. except for those with M.Tech. degree in the same discipline obtained within 8 years prior to the date of enrollment.

The table below summarizes the minimum course requirement for different categories of students. Only postgraduate (600 or higher level) courses will count towards Ph.D. course requirement. The DSC, at its discretion, may recommend additional courses.

Present qualification of Candidate	Enrolled for Ph.D. in branch	Minimum number of course credits required
M.Tech.(Not earlier than 8 years ago)	Same discipline	None
M.Tech.(Earlier than 8 years ago)	Same discipline	08
M.Tech./M.Pharm	Another discipline	12
B.Tech./B.Pharm/M.Tech(R)*/ M.S.*	Same or Different discipline of Engineering, Science or Humanities	20**
M.Sc./MCA/MA/MBBS/MBA/B.Pharm/ M.Phil*	Any discipline of Science/ Humanities	12
M.Sc./MCA/MBBS/MBA/B.Pharm	Any discipline of Engineering	20**

* After assigning the course work, the DSC will examine the courses taken by the student as a part of his M. S., M.Phil or M.Tech.(Res) programme and grant exemption to the student for those courses which he has already studied.

** A student with B.Tech. degree registering in another discipline of engineering or a student with M.Sc./MBBS/ MBA/MCA/B.Pharm degree registering any discipline of engineering has to successfully complete additional B.Tech. course credits of at least 06 covering the fundamental papers of his new discipline. Depending on the subject area, additional course work may be recommended by the DSC.

- 10.3 The coursework may be chosen from the existing PG (M.Tech.) programmes of the registering Dept. or from those of other departments. If a student joins the Ph.D. programme in the middle of a semester, he must take courses in the following semester. Delay of maximum 10 working days can be condoned in joining a course. If a student needing course work does not get two full semesters to complete the courses, he may take one or more semesters to complete the courses.
- 10.4 The specific subjects of study will be decided by the DSC on recommendation of the supervisor(s). When a student joins at the beginning of a semester, he may be advised by his supervisor (s) to attend classes of recommended courses even before the provisional registration process is officially complete. In case the courses approved by the Senate are different from the courses being taken by the student, the student may at his choice discontinue or complete the courses recommended by the supervisor(s).
- 10.5 If recommended courses are not offered by the departments, the DSC can amend the list at the request of the supervisor(s) at least 2 weeks prior to the starting of a semester. Any such change needs approval of Chairman Senate after recommendation by Dean (AA). The change will be reported to Senate in its next meeting.
- 10.6 The candidate has to obtain an average grade point of not less than 8.00 (in research and course credits) and individual grade not less than C in each subject in the seven scale grading system. A course can be repeated to improve the grade if necessary. If the average course CGPA exceeds 8.50, the DSC may accept one course with grade lower than C.

Research credits lower than C will be ignored in calculation of credits completed.

- 10.7 In addition to courses of the M.Tech programme, a Department may offer special courses for Ph.D. and M.Tech (R) students during the semesters or during summer vacation. If a course is offered in summer vacation, the total number of contact hours and the pattern of examination shall be the same as other courses taught during the normal semesters.
- 10.8 In special circumstances if no appropriate course is offered under formal instruction, existing courses may be taken in "guided self study" mode, where a student studies the course from approved text and reference books under the guidance of a faculty member, works on assignments and/or examinations. Formal classes will not be required in such courses. The system of evaluation and grade calculation will be same as that existing in M.Tech. programmes. Ordinarily, a student should not be registered in more than two courses in self-study mode. It should be appreciated that the objective of course work is to enhance the breadth of knowledge. They should be relevant to the research area, but need not be repetition of the research subject. Courses under "guided self study" mode will not be taught by a student's supervisors.
- 10.9 It will be possible for a student to enroll in a course not offered by NIT, Rourkela, in another Institute(NIT/IIT/IISc) or University of repute (not an affiliated college) for a course and transfer the credits to NIT Rourkela to satisfy the requirements of Ph.D. degree. A proposal for such transfer must be submitted by the supervisor to the DSC along with all details (syllabus, duration of instruction, name and details of instructor). The DSC's recommendation will be placed before the Senate through RPEC. In case of urgency, the Chairman, Senate may approve enrollment in the course in consultation with Dean(AA).

On completion of the course, the student shall submit to the academic section the grade certificate from the instructor countersigned by the Director/Vice Chancellor Registrar/Deputy Registrar (Academic) of the Institute or University. A photocopy may be submitted to the HOD for departmental record.

- 10.10 All doctoral students must register for the two-credit course named "Seminar and Technical Writing" in every semester. Resident students will satisfy the course requirement by attending Institute and Departmental Seminars, presenting seminars and poster presentations to departmental audience and submitting technical writings on assigned topics. Non-resident students will submit equivalent amount of technical writing and reports on seminars attended at their own places of work. If a student does not accumulate the required credits with at least C grade, he will not be permitted to submit his thesis. In special cases, if a student is ready with his thesis but has not

cleared the required credits, the Director may, at his discretion, give him special assignments and appoint an examiner to evaluate the output.

- 10.11 Institute employees including persons employed in sponsored projects may enroll in courses of their choice before enrolment in M.Tech(R) or Ph.D. programme under intimation to the Academic Section. When they join a Ph.D. or M.Tech(R) programme, the course and the credit earned may be counted towards course requirement at the discretion of the M.S.C. or D.S.C.
- 10.12 Ph.D. and M.Tech(R) students enrolled in PG and UG courses are subject to the same regulations as applicable to other students in the courses with regard to attendance, discipline, assessment and grading.

11. Comprehensive Examination And Registration

- 11.1 Each candidate enrolled for the Ph.D. degree is given provisional registration on applying in prescribed form(See Section 6.1). This application shall be considered by the DSC in its first meeting, which will be held within one month of a student's date of admission. The DSC, on suggestions of the supervisor(s), recommends:

- a) the broad area of research,
- b) the course work to be carried out by the student.

- 11.2 A doctoral student, provisionally registered, will be formally registered for the degree of Ph.D. on completion of certain steps. The registration can be done only after (a) the candidate has successfully completed all assigned course work (See Section 10), (b) worked out a road map of his doctoral programme (c) successfully cleared the comprehensive viva-voce and (d) delivered an open seminar. On completion of the course work (if any) a student will appear in a comprehensive oral examination to assess his depth and breadth of knowledge in the intended field of specialisation. The Doctoral Scrutiny Committee will become the examination board. One additional member will be inducted by the H.O.D. from the department or outside with specialization close to the area of research.

After satisfactory clearance of this examination, the student has to present his progress and plan of work to all members of the DSC in the form of a written document [Approximately 5 pages]. Within a week of handing over the report, the Department shall arrange a seminar by the student in the presence of the DSC. It should be an open seminar in the department, with invitation extended to students and faculty of all departments.

The written document and the seminar should outline the planned research work and identify the milestones. Both excessive vagueness, as well as exact description of the work to be done are discouraged at this stage to facilitate focused research work without being constrained. The broad objective stated in provisional registration order may be further focused at the time of registration.

Normally this should be done after elapse of 6 - 9 months from date of admission, but not later than 15 months. When a student fails to clear the course work within 15 months, or his seminar performance is unsatisfactory, he may be re-evaluated after a lapse of 3 months or more. If he cannot clear the course work, comprehensive viva voce and seminar within 2 years from the date of admission, he will be required to leave the Ph.D. programme. In special cases with mitigating circumstances, the Senate can grant extra time with or without scholarship.

The DSC will recommend the effective date of registration depending on the progress of the student, but not prior to the effective date of provisional registration. If found unsatisfactory, the presentation can be given after 3 months, in which case the effective date of registration also shifts. The effective date of registration cannot be earlier to the date of seminar by more than 15 months except when the course work has taken 3 or more semesters. In such cases one additional semester may be granted by the DSC.

A student may request early submission of thesis at the time of registration. The DSC, at its discretion, may recommend early submission up to one year, but not more than $n/4$ months, n being equal to the number of research credits the student has earned prior to joining the research programme, as recorded in pre-registration order.

- 11.3 The Head of the Department will send the application for registration [Form AC/309] to Dean(AA) along with a copy of the student's written report and recommendation of the DSC. The matter will be placed before the Senate through RPEC for approval.
- 11.4 The Academic Section shall bring out an office order [FormAC/310] confirming the registration after it is passed

by the Senate.

- 11.5 At the end of every semester, the Academic section will issue an unsigned "grade card" on Form AC/325 listing all the courses and the grades obtained including research credits and Seminar and Technical Writing courses. At the end of the academic programme, a signed grade sheet will be issued on a student's request and payment of prescribed fees after completion of four semesters.

12. Fellowship

- 12.1 A doctoral student may be self-financed or can get a scholarship. In case of students awarded a scholarship by an external agency or from a research project operating in the Institute, the rules shall be governed by the provisions specified by the sponsor. Institute doctoral fellowships shall be governed by the rules of MHRD.

When the number of Institute fellowships is limited, they will be distributed among different departments by the Director on recommendation of Dean (AA). Generally, the number of fellowships will be proportional to the faculty strength, but changes can be made to ensure that the positions are filled to the extent possible.

- 12.2 Students who join with fellowships from sponsored projects or with external fellowships, and become self financed on termination of the project, will get preference in award of institute fellowship, if their academic performance is satisfactory and they have drawn fellowship from the project for at least 18 months. The total duration of scholarship, however, shall not exceed the limit set by MHRD.
- 12.3 Institute fellowships may not be awarded to candidates above 32 years of age [35 years for SC/ST and women candidates] on the date of selection. The restriction shall not apply to scholarships awarded by external agencies or sponsored projects.

13. Withdrawal

A student, pursuing Ph.D. by staying on campus, can become non-resident by taking withdrawal from the programme. Such programme can be granted on one of the following grounds :

- (a) When a sponsored student wishes to return to his place of work on completion of at least two months of residence requirement, provided that such a scenario was mentioned in his application for admission. He needs to re-visit the Institute and complete residence requirement. The minimum period of work will be extended by one year, except when the student is employed in a superior R&D organization.
- (b) When, on the certification by the supervisors, the DSC is satisfied that most of the experimental/computational work has been completed, and that the student can finish the rest of the project from outside. In this case the student shall submit a long report for scrutiny by the DSC.
- (c) When a regular student returns to his original place of employment or secures new employment, and the D.S.C. is satisfied that adequate facility exists in his place of work to carry out the project. The employer's sponsorship and a second supervisor must be ensured before such requests are considered by the DSC.
- (d) When a student, for personal or financial reasons, intends to take a temporary break and return to the Institute for completion of the work, [The minimum period of work before submission of thesis is extended by the period of absence], or
- (e) Any other circumstances, which in the opinion of the Senate, justifies withdrawal.

For withdrawal under clause (b) or (c) above, a student should have completed 2 years of study after M.Tech or 3 years of study after B.Tech/M.Sc degrees.

The following rules shall govern the withdrawal process:

- (a) The student shall do semester registration regularly, personally visiting the Institute at least once a year.
- (b) He shall pay all applicable fees every semester.
- (c) He completes the programme within the stipulated period (8 years) including the withdrawal period.
- (d) He will be entitled to a room in the hostel with all related facilities during his visits to the Institute, at approved rates of seat rent for short stay.

- (e) After withdrawal, a student may register for a maximum 16 credits of Research per semester plus two credits of Seminar and Technical Writing. When his job assignment matches exactly with his thesis work, the Director or Dean(AA) may permit him to register for 24 + 2 credits.

A student must apply to Dean (AA) through his supervisor(s) and HOD for withdrawal in prescribed form [Form AC/204] along with a report on the work done so far and plan of activities in future. The Supervisor will state the status of the project and the D.S.C. will examine the proposal. Withdrawal can be granted provisionally by Director if satisfied, and be presented to Senate for final approval. The Assistant / Deputy Registrar (Acad) will issue an withdrawal order on Form AC/205.

14. Submission of Thesis

- 14.1 A candidate with M.Tech. degree registering in the same discipline can submit the Ph.D. thesis after elapse of at least 2 years from the effective date of registration. The minimum period should be 3 years in all other cases. [It should be noted that this minimum period is applicable to students with exceptionally brilliant career or cases where a student has achieved an unusual success. In most cases the duration of work should be 3 years or higher after M.Tech., and 4 years or higher after B.Tech. or M.Sc.] The maximum period for submission of thesis is 8 years from the effective date of registration for all candidates. In all cases, the Doctoral Scrutiny Committee must be satisfied that adequate work has been done by the candidate.

In exceptional cases, if a student completes his Ph. D. work in a period less than that suggested above, the date of thesis submission of this student can be advanced if such a proposal originating from the supervisor of the student is forwarded by DSC and recommended by RPEC (Appendix VIII) and finally approved by the Senate. While recommending a student for early submission, the DSC must clearly state the circumstances leading to early completion of the work. The reasons for early completion may be (i) work done by the candidate in the topic of interest prior to registration which have not been submitted to any other Institute or University for award of another degree or diploma, (ii) an exceptionally brilliant idea or experimental success, or (iii) any other reason not ordinarily expected from a full time research student. In case reason (i), it is mandatory that this work is recorded by the DSC at the time of provisional registration.

Prior to submission, the candidate will submit [Form AC/315] the synopsis of the thesis [typically 10 pages including tables, graphs and references] and present a seminar to an open audience, which will include members of DSC. Copies of the synopsis should be handed over to the members of the DSC well before the date of the seminar. If the DSC is satisfied with the extent of work done, the candidate will be allowed to submit the thesis. The DSC should confirm that the student has earned the required number of course and research credits including the courses registered for in current semester and has cleared two credits of Seminar and Technical Writing per semester. If the DSC is not satisfied with the progress of work, the candidate has to appear again after the lapse of 3 months or more.

If the DSC feels appropriate, it may, at its discretion examine the full draft thesis before a student is permitted to submit it for evaluation. The thesis must be submitted within 2 months after the DSC approves the synopsis unless extra time is granted by Dean(AA). Extension of the period beyond 8 years from the date of registration is not permitted. A student will be required to apply for fresh registration.

In extreme cases, if the DSC feels that the candidate cannot complete the thesis leading to Ph.D.degree, it can recommend to the Senate for award of M.Tech (Res) degree subject to satisfying all requirements of the latter programme.

- 14.2 A candidate shall submit [Forms AC/317 and AC/318] four copies of the thesis in case of single supervisor and five copies in case of two supervisors, neatly typed or printed and bound in a manner notified separately. The thesis must contain, besides the text and common matters like bibliography/references and summary/conclusions:
- A certificate from the supervisor(s) that (a) the work has been carried out under his/their supervision, (b) the candidate has fulfilled all prescribed requirements and (c) the thesis which is based on candidate's own work has not been submitted elsewhere for a degree or diploma.
 - An abstract of the thesis (about 500 words) with key words (Maximum 20).
 - A preface/introduction in which the candidates shall state whether the thesis is based on discovery of new facts or new interpretation of established facts, or based on exhaustive study and critical analysis of published work of others, or design, or development work undertaken or applied research work.

- (d) Bio-data of the candidate within one page (i.e. name, date of birth, educational qualification, research experience, professional experience, if any, and permanent home address).

The candidate will also submit two copies of the thesis in electronic form and permit the Institute to use it in any manner that the Institute thinks fit. For the present, the electronic text should be submitted as two folders: one containing MS-WORD files and another PDF files. On completion of oral examination, a fresh CD may be submitted if any changes are made. One printed copy and one electronic copy shall be archived in Institute's Central Library, while another set shall be kept in the Department.

- 14.3 Format of the thesis should be uniform across all departments. Students are expected to use only S.I. units in reporting of all experimental and computational data, and to maintain appropriate number of significant figures.

15 Evaluation of Thesis

- 15.1 The DSC will suggest [Form AC/316] a list of 10 examiners (five from the country and five foreign). After successful completion of the synopsis seminar by the candidate the examiners' list along with a copy of the synopsis will be placed to the Chairman, Senate to select the External Examiners under both categories (Indian and Foreign) in order of preference. The Chairman, Senate may add any name to or delete any name from the list suggested by DSC. The supervisor(s) will also serve as examiner(s) in addition to the two external examiners.

- 15.2 The Dean (AA) will send a formal letter to the examiners along with a copy of the synopsis requesting for acceptance of Examinership. After receiving the consent, the thesis will be mailed along with proforma of Examiner's report. In case of refusal, the second examiner in order as ticked by the Chairman Senate will be contacted and so on. If in this process, the list is exhausted, the Dean (AA) may ask the DSC to submit another list. The internal examiners (supervisors) will also be sent copies of the thesis along with the proforma of examiner's report.

- 15.3 The reports of the examiners shall be summarised by Dean (AA) and placed before the Director. After obtaining Director's approval, the reports are forwarded to the DSC. There may be four possible situations arising out of the nature of the reports. The steps to be taken, appropriate to the circumstances, are laid down below:

- (i) The examiners are unanimous in recommending the award of the degree without any modification of the thesis. This is a clear case for going for the final requirement of viva- voce.
- (ii) The external examiners are unanimous in recommending the award of the degree but at least one of the examiners has suggested modification and/or has asked for clarifications. The candidate in that case shall make modifications and provide the clarifications as suggested within a time to be fixed by the DSC. These may be sent to the examiners, if so desired by them.
- (iii) One of the external examiners does not recommend the award of the degree and rejects the thesis whereas the other external examiner recommends the award. The DSC in such a case may either ask the candidate to modify the thesis as suggested within a given time not exceeding six months and send the modified thesis to the same examiner again, or, recommend to the Chairman, Senate the appointment of another external examiner and send the thesis to him in its original form. The third examiner will be provided with copies of the evaluation reports of all examiners, external and internal, with the names of the examiners deleted. The recommendation of this 'third' examiner, at this stage, shall be taken as final.
- (iv) Both the external examiners reject the thesis, and then the student is declared, "failed".

- 15.4 In the event of a thesis being rejected by both the external examiners the Senate may, on the recommendation of the D.S.C., permit submission of a revised thesis on an additional payment of the prescribed fee, after a suitable time to be fixed by the Senate (Not less than one year from the date of the intimation to the student and within 8 years from the date of enrolment). The observations and comments of the examiners, if any, may be copied and given to the candidate on request. In no case should a resubmission of the thesis without modification along the lines of criticism made by the earlier examiners be allowed. The revised thesis shall be referred for assessment to two external examiners selected from a new panel of ten experts recommended by the D.S.C. (one foreign and one Indian). The new examiners will be provided with copies of earlier thesis, examiners' reports and details of changes made, in addition to the revised thesis.

The examiners need to respond specifically to the observations of the earlier examiners and the changes made by the student before re-submission.

- 15.5 After the recommendations of the D.S.C.(either for acceptance of the thesis for the Ph.D. degree or for its rejection/ modification) have been accepted by the Senate (or its Chairman on its behalf) a copy of the reports of the examiners may be issued to the candidate at his request. However, the names of the examiners are not to be disclosed.
- 15.6 Once the reports of the examiners have been accepted as satisfactory, the candidate will have to defend the thesis before a viva voce board consisting of all D.S.C. members and an 'external' examiner. The defense will be open where faculty members and students of the parent as well as other departments will be invited. The evaluation, however, will be done by the DSC along with the external examiner. The 'external' examiner may either be one of the experts who have already adjudicated the thesis or be another expert appointed for the purpose. The viva voce board may recommend changes in the thesis.
- If the viva voce board is not satisfied, the candidate has to appear again before the board after elapse of three months. The D.S.C. shall recommend to the Senate the award of the Ph.D. degree if the viva voce is satisfactory and all other requirements have been fulfilled.
- 15.7 On completion of the viva voce, the student will submit two copies of the revised thesis and two copies in electronic media, which, will be archived in Institute and Departmental Libraries. All available copies of the original version will be returned to the student. The copies available with the student and his supervisor(s) must also be corrected.
- 15.8 Forms AC/318 – 320 and AC/322 - 325 shall be used by the departments for recording various recommendations of the committees and decisions of academic authorities.

16. Award of Degree

- 16.1 On the recommendation of the Doctoral Scrutiny Committee, the Senate or the Chairman, Senate (when the Senate is not sitting early) shall decide whether the candidate should be awarded the degree of Doctor of Philosophy. If the Chairman, Senate has approved the award of degree the award must be confirmed by the Senate.
- 16.2 Normally a student will be awarded Ph.D. degree in the branch of study in which he is enrolled. But in exceptional cases, the DSC may recommend to the Senate to award the degree in another branch depending on the contents of the thesis. This can be done at the time of provisional-registration (preferred), Registration or even after the thesis is submitted.
- 16.3 A provisional certificate may be issued to the student on approval of the Director. The final degree certificate will be issued in the convocation or by any other mode approved by the Senate.

17. QUALITY IMPROVEMENT PROGRAMME (QIP)

The QIP is a programme of the Government of India administered through the All India Council for Technical Education. The programme covers education of engineering college teachers for M. Tech and Ph.D degrees.

- 17.1 The studentship programme under the QIP will be administered as per the rules set by the AICTE.
- 17.2 The students admitted under the QIP will be treated at par with the regular students of the Institute as far as their academic programme is concerned. It will be administered by the Academic Section of the Institute. The Academic section will also look after their admission, stipend and release.
- 17.3 The research expenses of QIP students will be met from departmental grants. 50 % of the contingency grant will be transferred to the Departmental Operating grant for maintenance of equipment and computing facilities provided to QIP students, and for research consumables. In addition, the students will use the contingency grant provided by AICTE towards travel for data collection and attending conferences, conference registration fees, procurement of books, stationery, printer cartridges, compute consumables, Xeroxing etc.
- 17.4 Contingency expenses incurred in one academic year must be claimed within the same year, unless approved by Dean (AA) in advance.
- 17.5 The travel and daily allowances of QIP students will be same as that of other sponsored students of the Institute.

- 17.6 All travel for data collection or presentation of papers must be approved by Dean(AA). The TA claims are to be approved by the respective Heads of the Departments/Centers and attached to contingency bills of the students.
- 17.7 QIP students will be entitled to casual and medical leave at par with regular students of the Institute. Casual leave will be sanctioned by the Heads of the Departments and the records will be maintained by the Departments. Medical leave will be sanctioned by Dean (AA) on the basis of recommendation of Head, Insitute Medical facility and records will be maintained by the Academic Section. Leave is not transferable to or from their parent institutions.
- 17.8 QIP students on the Ph.D. contact Programme will not be considered as regular students. They will, however, be permitted to use institute Library (without borrowing facilities) and departmental facilities. Academic Section will issue a temporary Identity card to these students.
- 17.9 If a QIP student cannot complete his academic programme before the end of his period of deputation (from his parent institution), he is required to seek withdrawal from the Institute to join his parent institution, prior to the expiry of his deputation. His request for withdrawal will be examined by his DAC and its recommendations will be forwarded to the Academic Section. The student should make arrangement for completion of his academic programme.
- 17.10 A QIP student will be given release order by the Asst/Deputy Registrar (AC) on completion of or taking withdrawal from the academic programme, surrendering accomodation, and clearing all dues to the Institute.
- 17.11 In addition to the forms used by other students, a QIP student shall use forms AC/351-360 for various activities related to QIP.

18. Conduct and Discipline

- 18.1 Students shall conduct themselves within and outside the campus of the Institute in a manner befitting the students of an Institution of National standing.
- 18.2 Detailed rules regarding conduct and discipline are given in Appendices–IV and VI.

19. Progress of Research Programme

The progress of the research programme of a student shall be continuously monitored by the Doctoral / Masters Scrutiny Committee. In practice, the committee will depend on inputs from the supervisors, HOD and the student. It will be the responsibility of the student to ensure that his papers remain up to date in matters of registration, course work, extension of fellowship, withdrawal and other formalities. In case of any deficiency, he should draw attention of his supervisor(s) and HOD, and if unsuccessful, that of the Dean (AA) and Director.

Although rare, sometimes there may be a breakdown of communication between a student and his supervisor due to physical distance or due to personal reasons. It shall be the responsibility of the student to bring such matters to the attention of HOD, Dean (AA) and Director. The Institute shall do the needful to establish communication or to make alternative arrangement.

20. Termination of Studentship

The studentship of a Ph.D. student may be terminated by the Senate on exceptional grounds. They are:

1. Recommendation of Institute's Disciplinary Committee.
2. Poor progress as noted by the Doctoral Scrutiny Committee and Departmental Academic Committee (PG&R). Such a decision may be implemented only after approval of the Senate.
3. Failure to do semester registration for two consecutive semesters.
4. Prolonged absence (exceeding three months) from the Institute without sanctioned leave or withdrawal.

21. Transition issues

These regulations shall come into effect from AY 2007-08 Autumn Semester. Students enrolled prior to this date shall also be covered under these regulations, except when the implementation of these regulations leads to

obvious anomalies and serious hardship to the students. The final decision on each specific issue will be taken by the Senate (or Chairman Senate on its behalf) on case-to-case basis.

22. Dissemination of information

- 22.1 A copy of this document shall ordinarily be given in print or electronic form to every M.Tech student on admission to NIT Rourkela. It will also be made available on the Institute's web site. Not possessing a copy, however, shall not exempt a student from complying with these regulations.
- 22.2 The Assistant/Deputy Registrar (Acad) is authorized by the Institute to issue formal certificates of studentship [Form AC/115] and Expenditure Certificate [Form AC/116]. Dean (AA) will sign all certificates of studentship on behalf of the Director when external agencies seek such certificates from Head of Institution.
- 22.3 On publication of final results a student will be issued a provisional certificate on Form AC/127 and a Institute leaving cum migration cum conduct certificate on Form AC/126. Form AC/127 will be signed by Dean (AA) on behalf of the Director, while Form AC/126 will be signed by Dean (SA). The final degree certificate will be signed by Registrar, Director and Chairman, Board of Governors.

23. Exceptions

Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature, because two situations appearing similar may not be identical.

In emergency situations, the Director in capacity of the Chairman Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

**REGULATIONS
FOR
DEGREE OF DOCTOR OF SCIENCE
(D.Sc.)
(EFFECTIVE FROM ACADEMIC SESSION 2007-08)**



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**