GENERAL INFORMATION

The National Institute of Technology Goa (NIT Goa) is one of the National Institutes of Technology in the country set up with the objectives of high quality undergraduate and research in various fields of Science and Technology. NIT Goa was established in 2010. It currently has four Departments: Humanities and Sciences (HS), Computer Science and Engineering (CSE), Electronics and Communication Engineering (ECE) and Electrical and Electronics Engineering (EEE). The Institute offers Ph.D. programme in a wide range of areas in Engineering, Humanities & Science.

ORDINANCES

1. A candidate who has been qualified in the Degree of Master of Technology or Master of Science (Technology/Engineering) [M.Tech /M.S/M.Sc.(Engg.)] or Master of Arts from a recognized Institute or University in the discipline as prescribed in the rules and regulations is eligible to apply for Ph.D. programme of National Institute of Technology Goa. Exceptional candidates (with CGPA>=9.0) with B.Tech/B.E from a reputed institute is also eligible to apply for the Ph.D. programme.
2. The award of the Ph.D. Degree shall be in accordance with the respective regulations of the Senate of the Institute.
3. The award of the Ph.D. degree shall be made by the Institute on the recommendation of the Senate and with the approval of the Board of Governors (BOG) of the Institute.
4. The Senate/BOG of the Institute has the power to modify any regulations stated from time to time.

RULES AND REGULATIONS

a. ADMISSION PROCEDURES AND REQUIREMENTS

Ph.D. Programmes
The award of the Ph.D. degree is in recognition of high achievements, independent research and application of knowledge to the solution of engineering and scientific problems. The details of research programmes and faculty research interests may be found on the department websites. NIT Goa currently offers Ph.D. degree in: Humanities and Sciences (HS), Computer Science and Engineering (CSE), Electronics and Communication Engineering (ECE) and Electrical and Electronics Engineering (EEE).

Categories of Ph.D. Candidates
The Assistantship/Fellowships will be payable for duration fixed by the Ministry of Human Resources and Development (MHRD) (or the granting agency) or until the date of submission of thesis, whichever is earlier. The Institute admits Ph.D. candidates under the following categories:
- Full time research scholar on Institute fellowship (FT)
- Teaching Assistant (TA)
- Teaching Assistant through Project (TAP)
• Industry Fellowships (IF)
• Govt. / Semi Govt. Fellowship Awardees (FA) (CSIR, UGC, DOE, DST, DBT, NBHM, ISEAP etc.):
• Sponsored candidates (SP)
• Self-Financed (Indian / Foreign) / Study Leave (SF)
• Indian Council for Cultural Relations Award (ICCR) (Foreign Nationals)

(The candidate should possess a valid GATE score for MHRD scholarship)

b. Admission schedule
Normally, advertisement for Ph.D. programmes is issued in the month of March (for July session) and October (for December-January session) each year in the employment news, department website as well as in leading newspapers. Admissions are carried out in the months of July and December. Candidates seeking admission under this clause must fulfill the required academic qualification/experience at the time of interview. They must join within two weeks after the issue of admission offer unless specifically permitted to do so. Admission is subject to vacancy being available in the relevant specializations.

c. Eligibility criterion for admission to Full-time Ph.D. Programmes
   c.1 Table 1 defines the minimum qualifications required for admission and provisional Registration to full-time Ph.D. programmes at NIT Goa for General/OBC (Non-creamy Layer)/SC/ST/PH category students.
   c.2 Table 1 defines Institute minimum requirements and any department operating through their Department Research Committee (DRC) can in addition specify a higher shortlisting criteria.
   c.3 Qualifying degree performance is computed by aggregating performance over all the semesters/years of the qualifying degree.
<table>
<thead>
<tr>
<th>Qualifying Degree</th>
<th>General/OBC (Non-Creamy Layer)</th>
<th>SC/ST/PH</th>
<th>Qualification through National level examination requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.Tech./M.E./M.Phil./MBA/ or equivalent</td>
<td>60% marks or 6.50 CGPA (on a 10 point scale)</td>
<td>55% marks or 6.00 CGPA (on a 10 point scale)</td>
<td>A valid GATE Score and/or qualifying score in the relevant discipline*.</td>
</tr>
<tr>
<td>M.Sc.(Science)/M.A or equivalent</td>
<td>60% marks or 6.50 CGPA (on a 10 point scale)</td>
<td>55% marks or 6.00 CGPA (on a 10 point scale)</td>
<td>CSIR/UGC/NET/ICAR/ICMR/DST INSPIRE fellowship</td>
</tr>
<tr>
<td>B.Tech/ M.Sc.(Engg.)</td>
<td>9.0 or above CGPA (on a 10 point scale)</td>
<td>9.0 or above CGPA (on a 10 point scale)</td>
<td>Nil</td>
</tr>
</tbody>
</table>

(*cut-off criteria for eligibility & shortlisting may vary with the departments)

**Table 1: Eligibility criterion for Admission to full-time Ph.D. Programmes**

d. Selection to the Ph.D. Programmes
d.1 Provisional selection of the candidates will be conducted by a Department Selection Committee (DSC), which is constituted by the Director. DSC will consist of Head of Department (HoD) /a Professor within the Institute as Chairman (to be decided and nominated by the Director), Department Ph.D. coordinator (Internal Expert), All probable supervisors from the Department, and Academic Affairs Coordinator.
d.2 The mode of selection for admission and provisional registration to the Ph.D. program is decided by the DSC. Normally the selection is made on the basis of written test and/or interview.
d.3 Eligible and shortlisted candidates will be called by the department for written test and/or interview.
d.4 Allotment of research scholars to supervisor(s) will be made by the chairman (DSC), taking into consideration the preferences of the research scholars and supervisors. Consent of the Supervisor(s) and student is essential for the allotment. Normally, there shall not be more than two supervisors (one is the supervisor and other is the co-supervisor) for a research scholar. In the case of change of supervisor, the research scholar may submit a written request to the Department Research Committee (DRC) citing valid reasons. The DRC may recommend for change of supervisor if satisfied with the request. The change shall be subject to the approval from the Academic Affairs Committee (AAC).
e. Duration of the programmes
Minimum period of registration required for Ph.D students with M.Tech. or an equivalent qualification is 3 years. All candidates are allowed a maximum of 7 years for submission of their thesis. After completing 5 years of registration (counting from the time of admission to department), a candidate registered for Ph.D. will be examined by the DRC for re-registration in order to seek extension of his/her programme and should be approved by the DRC recommended by the DSC. Based on the recommendations of his/her DRC the candidate may be allowed to register for not more than 2 years.

f. Academic requirements
In order to overcome any deficiency in the breadth of fundamental training or proper foundation for advanced work; special make up or pre-doctoral courses are to be pursued by admitted candidates in each department. The candidate should approach the supervisor for the courses that he/she needs to pursue. These courses should be approved by the DRC. The course work may be completed on the basis of lectures/ self-study, as suggested by the supervisor and approved by the DRC.

g. Constitution of DRC and progress during Ph.D.
   g.1 Candidate will enroll for coursework, as self-study/lectures and complete 12 credits achieving a letter grade of at least 7.0 grade points in each course. The choice of coursework is based on decision of the candidate's supervisor and DRC and as such is recommended to help the candidate with preparatory work for research.
   g.2 Candidate's DRC will comprise of a Chairman - usually of the rank of Professor and preferably from the same department, Internal Expert - Area expert from the Department, External Expert - Area expert from another department, and the Supervisor(s).
   g.3 Candidate will write a comprehensive examination, within two years of registration of Ph.D., based on the courses approved by DRC. Candidate will have to demonstrate satisfactory progress /performance on written examination or course viva -voce and fulfillment of departmental norms in force for evaluation of course work from time to time.
   g.4 Candidate will present a research seminar as a part of the comprehensive examination to the DRC. In this presentation, he/she should identify his/her problem statement, thesis title and methodologies in the chosen problem area (s). He/she should have preferably published at least one paper in a reputed conference. The DRC may then approve and recommend him/her for a "Confirmation of Registration" of Ph.D. Along with confirming the area/title of his/her proposed work by a written communication to AAC.
   g.5 Candidate will give progress seminar in each subsequent semester before the DRC, his/her progress will be monitored with recommendations that must be effectively
incorporated by him/her. The DRC has to maintain adequate record of the candidate progress and communicate the same to AAC at the end of every year.

g.6 Candidate will receive evaluation of his/her progress in each semester after registering under the supervisor: “P” as satisfactory and “F” as not satisfactory. The DRC with report/ comments from the members to the AAC at the end of every semester. If a candidate gets “F” for the first time, the DRC warns the candidate and allows him/her to proceed with the research work. In case the candidate gets “F” grade second time, his/her case may be recommended by the DRC for termination of Ph.D. registration. The recommendation should be forwarded in the form of report to the AAC.

g.7 Candidate may be allowed to present a pre-synopsis seminar and submit synopsis based on the recommendations of the DRC. A pre-synopsis seminar can be allowed if he/she has received reviews on at least one paper developed and communicated to a reputed peer reviewed journal (preferably, SCI journal). At least one journal paper should be accepted/published in peer reviewed journal (preferably, SCI journal) prior to synopsis seminar. A candidate may be allowed to repeat a pre-synopsis seminar based on the recommendations of the DRC. In case if recommended for synopsis then, he/she must submit the thesis within one year of successfully presenting the pre-synopsis seminar.

g.8 Based on the candidate’s performance in comprehensive and his/her research contributions, the DRC in consultations with AAC can recommend a candidate to submit his/her synopsis within three years from the date of registration of Ph.D.

g.9 DRC will identify panel of minimum four examiners for the purpose of thesis evaluation and communicate the same to AAC. This panel will comprise of names of examiners from within and outside the country (four in each category). In each category, it is strongly recommended that the Examiners/Reviewers be chosen from reputed national and international Institutions. Assignment of thesis examiners and the communication of reviews will be handled by the AAC.

g.10 The thesis defense will be decided based on the review reports received from the examiners. The review recommendations may fall into the following categories:

- If both the reports are positive, then the viva-voce examination can be conducted.
- If one is positive and another suggests minor revision, the candidate may be asked to revise and send to the same reviewer provided the reviewer has asked to send to him/her. If the reviewer has asked to revise and present in the viva voce then the revisions should be incorporated and presented during the viva voce. If one reviewer reports recommendation for strongly acceptance and any other reviewer rejects, then Director’s decision is final in recommending for viva-voce.
- If one of the reviewers gives acceptance and other reviewer/s suggest major revisions with the suggestion to send back to him/her, the candidate should incorporate the comments and the revised thesis should be communicated. In case, the revised thesis also receives negative comments then the thesis can be
sent to the third reviewer. If the revised thesis receives further negative comments then Director’s decision is final in recommending for viva-voce.

- If all the reviews are negative, the candidate should work and modify the thesis and re-submit the revised thesis.

**g.11** Thesis defense and viva-voce examination of the Candidate will be open to all. The defense will be headed by Chairman DRC, DRC, Supervisor (s) and at least one external Examiner (preferably, one of the Reviewers).

**h. Reservation of Seats:** As per Government norms.

**i. Fees and Payments (Semester wise):** As per Institute policy.

**j. Financial Assistance and other support:** As per Government of India norms.