

RULES AND REGULATIONS FOR AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY (2015)



**UTTARAKHAND TECHNICAL UNIVERSITY
DEHRADUN**

Revised Oct 2015

1. DESIGNATION OF THE COURSE

The Ph.D degree awarded by the Uttarakhand Technical University, (UTU) shall be designated as Doctor of Philosophy.

The certificate shall also indicate the main area of specialization i.e. Civil Engineering / Mechanical Engineering / Management / Pharmacy etc.

2. ELIGIBILITY FOR ADMISSION

A candidate seeking admission to the course of study leading to the award of a degree of Doctor of Philosophy (Ph.D.) must possess at least one of the following qualifications:

- 2.1 Master's degree with first division.
- 2.2 Any other eligibility criteria as recommended by the Academic council (AC) of UTU and AICTE / UGC.

3 CLASSIFICATION OF CANDIDATE

- 3.1 Based on the nature of the programme:
 - 3.1.1. Full-Time candidate is one who is pursuing the research studies on Full-Time basis. A student admitted to full-time Ph.D programme may be permitted to change to a Part-Time Ph.D programme on request from him / her on valid reasons alongwith a detailed plan about his / her completion of the research work. However, this permission will be granted only after he / she has completed his / her minimum residential requirement.
 - 3.1.2. Part time for teachers and scientist candidates, doing Ph.D along with their normal work.
 - 3.1.3. Full-Time Integrated Ph.D consisting of M.Tech & Ph.D degrees which shall consist of course work of M.Tech followed by research for Ph.D alongwith any courses, if recommended by RDC (Research Degree Committee). Minimum estimated time 4 years.
- 3.2 Based on the location of candidate:
 - 3.2.1 Internal candidate working at UTU institution.
 - 3.2.2 External candidate
Working in institutions affiliated to UTU or other institutions or organizations

with adequate research facilities.

3.2.3 Research Scholars – who have a research grant from AICTE/UGC/CSIR based on GATE / NET /GPAT if the qualified candidate is interested on pursuing the PhD Program in UTU.

3.2.4 Other: Non- resident Indian / Foreign student.

4 DURATION OF THE PROGRAM

4.1 The duration of the program will be counted from the date of registration to submission of Dissertation.

4.2 The minimum duration for the postgraduate qualified full time Ph.D candidates will be 3 years from the date of registration. The maximum duration shall not exceed 6 years for a full time Ph.D candidate. Vice Chancellor on the recommendation of RDC, under exceptional circumstances, can relax one more year for completion of PhD work.

4.3 The residential requirement on the campus of the duly recognized by UTU institute/ organization will be a minimum of one semester.

4.4 During this period, the Candidate will undergo classes for the courses registered for and shall appear in the University examinations for the same

4.5 The assigned Institute/Organization will have to provide certificate that the candidate has completed the minimum attendance requirement countersigned by the Supervisor.

5 ADMISSION TO THE DOCTORAL PROGRAMME

Admission to Ph.D programme will be undertaken on the following basis:

5.1 Application for Ph.D registration will be invited by the University at start of every academic session.

5.2 Whenever faculty members have research grants with provision of selecting the research scholar, the faculty member holding the grant will select the candidate based on the guidelines of funding agency and of UTU. The registration will be done on recommendation of RDC.

5.3 The UTU employee who seeks admission to Ph.D program must submit his / her application through In-charge of the section/department.

- 5.4 Research Scholar sponsored by any agency must submit application through proper channel.
- 5.5 Candidate applying under University approved scholarship / fellowship / programs must submit separate application for scholarship / fellowship approval along with application.
- 5.6 Candidate intending to carry research in UTU affiliated educational institutions must submit a no objection letter from the appropriate authority of such institute. The applications must be forwarded by the institute. The RDC will approve the admissions on case-to-case basis only after it is satisfied that the institute has suitable research facilities and suitable supervisor(s) from the same institute or another institute are available for proper guidance. Such candidates will be allowed to register on a part-time basis.
- 5.7 Candidate from other institutions / organizations (which are not affiliated to UTU) should submit a list of research facilities available at their institution / organization duly signed by the Head of the institution / organization. UTU will inspect the same before registering a candidate. The approval of the candidate will be decided on case-to-case basis.
- 5.8 The UGC regulations of 2009 will be applicable for the admission and conduct of of Ph.D programme.
- 5.9 UTU shall admit students through an entrance exam conducted by it or conducted by an affiliated institution(s) as approved by the University. In the Ph.D entrance exams., the qualifying cut-off percentage shall be fixed appropriately by the University from time-to-time. The Ph.D entrance will be conducted once a year as notified. The syllabus will be similar to GATE / NET and other such examinations. The entrance examination shall be followed by an interview by a suitably constituted committee who shall finally select the candidates for admission under Ph.D programme. The candidate is expected to present his / her research interest / area during this interview.
- 5.10 Reservation policy shall be applied as per government rules.

6. PROCEDURE OF REGISTRATION

- 6.1.1 The candidate has to communicate directly to the University.
- 6.1.2 The UTU shall be the competent authority to approve the names of Supervisor(s) of a candidate. In addition to the allotment of a Supervisor, wherever required, additional co-Supervisor(s) may also be allotted to a

candidate.

- 6.1.3 The application in the prescribed format should be submitted through Supervisor along with the synopsis on the research topic. The synopsis should highlight the objectives and methodology to be utilized. The protocol should also contain a brief account of the relevant published literature and the existing lacunas in knowledge.
- 6.1.4 The University will announce RDC meeting date for each discipline.
- 6.1.5 The candidate will present the research proposal before RDC experts.
- 6.1.6 Final registration will be permitted after approval by the RDC for deposition of fees as decided by the University.
- 6.1.7 The date of presentation before first RDC will be the date of the registration, if research proposal is accepted.

7. ALLOTMENT OF SUPERVISOR(S)

- 7.1 Only regular faculty of affiliated colleges Uttarakhand Technical University shall be the Supervisor of the Candidate.
- 7.2 Among the Supervisor(s) of a research scholar, one Supervisor / co-Supervisor shall be mandatory from UTU affiliated institutions. If required, a Supervisor from IIT/NIT or any other reputed institution may be inducted.
- 7.3 A faculty member of the institute who possesses Ph.D Degree with minimum of 4 years of teaching experience and have at least two publications in SCI journals are eligible to be a Supervisor for a Ph.D scholar. The individual Ph.D scholar will have to submit the application of the suggested Supervisors for appointment of Research Supervisor(s) to the University, along with a detailed bio-data/ CV/ self-attested copies of degree certificates and academic/professional achievements.
- 7.4 The Supervisor shall not have, at any given point of time, more than eight Ph.D. scholars to Supervisor. However, a Supervisor shall not be allotted more than three research scholars in one academic year.
- 7.5 The Supervisor(s) of the candidate shall be finally approved by the University.
- 7.6 In case a change of Supervisor is required, the Research Scholar may submit a written request to the UTU citing valid reasons. The change shall be subjected to the approval from the University. Similarly, additional co-

Supervisor(s) may be allotted to the candidate at his / her request. Supervisor will not be changed after completion of 4 years from registration.

- 7.7 The Supervisor and the co-Supervisor should not be closely related to the candidate.
- 7.8 In case of absence of a Supervisor for a prolonged period of time, the Vice – Chancellor may appoint another Supervisor on recommendation of the RDC.
- 7.9 If otherwise suitable, a retired faculty will be eligible to Supervisor Ph.D candidate.

8. FEE STRUCTURE

- 8.1 The candidate will pay the prescribed fees through DD in favor of Finance controller, UTU payable at Dehradun.
- 8.2 Even if the candidate is registered through some other institute / organization, he / she will have to pay registration fee and other fees, like Dissertation evaluation, examination fee etc., as fixed by UTU from time to time which will have to be deposited before making presentation in front of RDC.
- 8.3 The candidate will deposit the fee within the prescribed time. If fee is not deposited every year, the registration will stand cancelled.
- 8.4 It is the responsibility of the candidate to ensure that registration fee has been paid each academic year. The registration in any case will not be continued, if in an academic year fee has not paid to the University.

9 RESEARCH DEGREE COMMITTEE (RDC)

- 9.1 The RDC will be constituted separately for each discipline and will consist of suitable number of persons depending upon the number of research scholars in that particular discipline. Supervisor will be essentially a member of the RDC, apart from one subject expert and the Vice-Chancellor / or his nominee (for autonomous Institute Principal/Director /or his nominee The RDC will be chaired by V.C./Nominee However, for monitoring the progress of the research work or for approval of the proposal(s) submitted, sub-groups of RDC consisting of suitable number of persons in each group may be made to finish the processing in a suitable span of time.
- 9.2 For admission to Ph.D programme the candidate should present the research

proposal before the RDC.

- 9.3 The RDC may recommend / recommend with modification / reject the proposal.
- 9.4 If recommended, the candidate's application along with supporting documents and 2 copies of synopsis will be kept in University office for record.
- 9.5 After the approval of synopsis by RDC, the RDC will meet twice a year to monitor the progress of the research work of the candidate. The candidate has to present the progress to the RDC once in 6 months. Quarterly progress report signed by the Supervisor is to be sent to the University.
- 9.6 Any minor change in the originally approved title of PhD work will be approved by the RDC on the request of candidate and endorsed by the Supervisor(s).
- 9.7 If a major change (or complete change) in the topic of PhD work is to be done, a request will be submitted by the candidate duly forwarded by the supervisor, which will be considered by RDC for its approval. However, no topic will be changed (major or complete) after completion of 4 years from registration.
- 9.8 At the completion of research work, the candidate has to present the complete work before RDC, which will be called Pre- submission presentation.
- 9.9 The copies of the RDC minutes will be sent to the candidate, supervisor and record keeper.
- 9.10 The RDC meeting will be held twice a year regularly, if possible only during pre-specified months of Feb. & Aug. or as notified, so that a candidate regularly gets a feedback on his/her progress.
- 9.11 The information about the date & timings of the RDC of research scholars will be posted on the website of the University. However, this information will also be communicated directly to all the candidates through e-mail or phone to avoid missing the information. Further the candidate will be notified about this meeting preferably 10-15 days prior to the RDC meeting so that the candidate comes well prepared for the presentation / interaction.
- 9.12 Candidate will be required to make a power point presentation before the RDC about his/her research work progress. In addition, three copies of progress report in brief will be submitted by the candidate, before the RDC, for evaluation and record. Failing these, RDC will not be held.

9.13 The RDC panel of the candidate, to as much extent as possible, may not be changed for the sake of continuity in feedback and given directions throughout. Changing of review panel every time will result that the work of the candidate prepared as per the directions given by one panel will be rendered inadequate by the newly constituted panel because the new panel may not approve the directions given by the earlier panel and may propose altogether fresh changes.

9.14 If the candidate is absent in any two successive RDCs, he/she would be allowed to appear at the next RDC as a special case with due approval of the Vice-Chancellor, failing which his/her candidature will automatically be cancelled. In such case, he/she will submit in writing the reasons and justification to the University for not attending two consecutive RDCs, and request for allowing him/her in next RDC, which will be endorsed by the supervisor(s).

10 COURSE WORK

10.1 The research scholars have to undergo course work required for the research as a part of the UGC 2009 regulations. The research scholars should complete 3 courses of 4 credits of 100 marks each for which the course structure is given below:

Structure for course work of Ph.D. Students

S. No	Course Title	Credits
		Marks
1	Research Methodology	4/100
2	Course related to research work	4/100
3	State of art Seminar related to the field of research	4/100
Total Credits		12/300

10.2 Course at S. No. 1 Research Methodology shall be conducted either by the University or by a UTU recognised Institute, with the permission of the University.

10.3 Course at S. No. 2 will be decided by the Supervisor(s) related with the research topic of the student, and its approval will be sought by the University in writing. The course will be conducted either by the University or its recognised Centres/Institutes or by exclusively and independently by the Supervisor(s) with the permission of the University. If Supervisor conducts the course, he/she will design the course contents, do paper setting, evaluate

and submit the marks/grades to the University.

- 10.4 Course at S. No. 3 will be evaluated by the University where a topic related to his/her research work will be taken in consultation with the Supervisor(s) and duly informed to UTU. Candidate will make a presentation before the RDC for its evaluation. This presentation can also be held along with the regular RDCs.
- 10.5 In case, there is no possibility to conduct the regular course at Sl. 2 at the Institution, online course related to his/her research work may be taken in consultation with the Supervisor(s) and duly informed to UTU, Dehradun. The duration of the online course should be minimum of one month. If one online course is not available for one month duration, a combination of online courses of one month duration would be acceptable, provided these are related to PhD work and are taken in consultation with the Supervisor(s) as well as duly informed & approved by the UTU. The online course can be taken from reputed recognized sites (such as www.edx.org, www.coursera.org, www.nptel.ac.in, www.aima.in, www.britishcouncil.org). The certificate of online course(s) shall be submitted to UTU for consideration and approval of RDC. It is mandatory to score a minimum of 40% as passing marks in the online course or regular course wherever marks are awarded.
- 10.6 Research scholars admitted to the programme shall obtain minimum 40% marks in any individual course for the successful completion of the course works prescribed.
- 10.7 If a research scholar obtains less than 40% marks in any of the courses, at the maximum two more chance may be given to clear the same course.
- 10.8 If the research scholar still fails to obtain 40% marks or above in any one of the courses registered and she/he is not in position to earn the minimum credit requirement, she/he will be disqualified to continue the PhD programme and the registration for the Ph.D programme for such scholars will be cancelled.
- 10.9 It is mandatory to complete the course work requirements in a maximum of 2 years duration, failing which admission will be cancelled.

11 PROGRESS REPORT

- 11.1 The candidate has to present the progress report before RDC every six month on prescribed date.
- 11.2 The RDC will forward its recommendations / suggestions to the candidate to implement before coming to next RDC for presentation.

12 CANCELLATION OF REGISTRATION

- 12.1 Registration may be cancelled if progress report is found unsatisfactory in two consecutive RDCs recommendations after the registration.
- 12.2 Registration may be cancelled if the candidate fails to submit the Dissertation before stipulated period of six years. Vice Chancellor may however extend the period for another one year on request made by the candidate and forwarded by the Supervisor(s).
- 12.3 Registration of a candidate may also be cancelled as per clauses (8.3 & 8.4), (9.14) (10.8 and 10.9) and (15.4).

13. PUBLICATION OF THE DISSERTATION

- 13.1 The Dissertation shall not be published without the approval of the University.
- 13.2 It will be published as per the guidelines/format of the University. No other format will be accepted. It is the responsibility of the candidate to enquire about the appropriate format, in case of any doubt.

14. DISSERTATION SUBMISSION GUIDELINES

- 14.1 The candidate has to give a pre-submission presentation to the RDC. On satisfactory completion of the prescribed courses and research work of adequate quality and quantity, it is mandatory that the scholar shall make a presentation of his/her research work in front of a RDC or a committee constituted by the University to obtain comments and criticism which may be incorporated in his/her Dissertation. A Dissertation can be submitted only after the satisfactory fulfillment of this requirement. The candidate shall be entitled to submit the Dissertation if it is so recommended by RDC.
- 14.2 The RDC may approve submission if the presentation and publications are

sufficient as proposed by University. At the time of oral examination (defence), the research scholar should have a minimum of two publications in SCI journals or patents registered based on his/her work and produce evidence there of either in the form of acceptance or the reprints of the research paper(s).

- 14.3 The candidate has to submit Five hard copies and one soft copy (on CD) in latest format as recommended by UTU to Controller of Examinations, UTU Dehradun.
- 14.4 The Dissertation on topic as registered by candidate for Ph.D degree is to be submitted within the permitted duration. Change in topic/Supervisor(s) will need permission from the RDC/ University.
- 14.5 Candidate on his/her own cannot change the topic of the Dissertation. It has to be approved by the RDC. Change in topic of PhD Dissertation or Supervisor without the approval of the RDC/University is not permitted.
- 14.6 Before the submission of the Dissertation the Supervisor(s) shall send a signed report to the University that they have obtained plagiarism report through a standard software assuring that the report certifies that a minimum 75% of Dissertation is original (Research content chapters only). This may further be checked by the University through its own software.
- 14.7 University will check the plagiarism of Dissertation after getting a certificate from Supervisor regarding originality of the work and Supervisor is also required to certify that the plagiarism has already been checked at his/her own level. After two successive plagiarism (25% limit) checks, University will examine the Dissertation for next plagiarism check only after another six months, and after paying 50% amount of the registration fee by the candidate. Thereafter for every additional plagiarism check, it will be done after another six months by paying 50% amount of the registration fee by the candidate.
- 14.8 The Supervisor(s) shall submit a panel of external examiners, along with their brief CV and list of publications, at least six months before the expected date of submission of the Dissertation. The panel shall include 7 examiners who, on the basis of their published work, are considered acknowledged experts in the field of research discipline undertaken by the candidate. The external examiners preferably shall be taken from IITs/ NITs/ IIMs/ National level laboratories / Institute of national importance / Equivalent etc. or an individual of high repute, not below the rank of Associate Professor or equivalent.

15. DISSERTATION EVALUATION

- 15.1 The University shall ascertain from the external examiners their willingness to act as an examiner for a particular Dissertation. A copy of a brief synopsis of the Dissertation shall be sent to the external examiners with this communication.
- 15.2 Dissertation shall be evaluated by two external examiners, which shall preferably be taken from IITs/ NITs/ IIMs/ National level laboratories/ Institute of national importance/ Equivalent etc. or an individual of high repute, not below the rank of Associate Professor or equivalent.
- 15.3 Dissertation shall also be evaluated by internal examiner(s), who will also send the recommendations and query raised/comments.
- 15.4 If the Dissertation is rejected by both the external examiners, it will stand rejected and shall not be referred to any other examiner.
- 15.5 The examiners shall give a clear recommendation about the Dissertation whether it should be approved or be resubmitted with suggested alterations or be rejected by an examiner. In case if the Dissertation is recommended for rejection, detailed explanation needs be given about its basis of rejection.
- 15.6 If one or more examiners recommend re-submission of the Dissertation after modifications, it shall be done within a maximum period of six months from the date on which the candidate is so informed by the University.
- 15.7 The external examiners will be requested to send some questions to be asked to the candidate at the time of viva voce examination to seek clarifications on the points raised by him / her. These comments shall be made available to the external and internal examiners appointed for conducting the viva-voce examination before the commencement of the viva-voce examination. These examiners will ensure that the candidate has replied the questions satisfactorily.
- 15.8 After the Dissertation has been approved by the external and internal examiners, a public defense of the Dissertation that is the viva voce examination to be held to adjudge the general proficiency of the candidate and clarity on raised questions by examiners.
- 15.9 If the report from any one of the external examiners is not received within a maximum period of three months, copy of the Dissertation will be sent to

another examiner from the approved panel.

- 15.10 The candidate alongwith the supervisor(s) will submit a certificate to the University that all the modifications/corrections as suggested by the external examiner have been incorporated in the Dissertation, before the viva voce examinations is planned.
- 15.11 The board of examiners for the viva-voce examination shall consist of one of the external examiners (as appointed by the University), internal examiners, and the Vice Chancellor or his nominee as Chairperson. The Supervisor and Co-Supervisor(s) of the Dissertation will be the internal examiners. However, the University may appoint any other person also as the external examiner incase of non-availability of the examiner who had reviewed the Dissertation.
- 15.12 The presence of the candidate's Supervisor(s) in viva voce final defense examinations is mandatory. In case of two Supervisor(s), the presence of at least one Supervisor is essential to conduct the viva-voce, failing which the Viva voce examination will not be held.
- 15.13 The viva-voce will be held only after the reports are received unless the Dissertation is rejected. Modification/ alternations, if suggested, will be done by the candidate and an intimation of the same duly signed by the Supervisors will be sent to the University after which the viva-voce will be arranged.
- 15.14 The topic, date and the time of the defence of Dissertation shall be announced by the University well in advance so that the faculty members and others interested in the defence of the Dissertation can participate.
- 15.15 Only the board of examiners will be allowed to ask questions from the candidate. The final result of the examination shall be decided solely by the members of the board of examiners and none else.

16. FORMAT

- 16.1 The Dissertation will be published as per the guidelines/format of the University. No other format will be accepted. It is the responsibility of the candidate to enquire about the appropriate format, in case of any doubt.
- 16.2 The proforma for Certificate (to be included in the PhD Dissertation)

and Final report of Viva-Voce examinations, as annexed are to be used.

- 16.3 Colour of the cover for hard bound PhD Dissertation would be Dark Blue with golden printing in standard format given by the University. Candidate and Supervisors will ensure that the PhD Dissertation has been printed in accordance with the guidelines given by the University (e.g. text font, style, size, spacing etc.). Dissertation would not be accepted if it is not as per guidelines of the University.

17. RESULTS

- 17.1 The candidate shall be declared eligible for the award of the degree of Doctor of Philosophy, only on the unanimous recommendations of the board of examiners after the viva voce examination is over.
- 17.2 In case, the examiners are not satisfied with the performance of the candidate in the above examinations, the candidate shall be required to reappear for another viva voce examination after a period of two months provided such specific recommendation is made by the board of examiners.
- 17.3 All the Dissertation in digital mode will be uploaded to "**Shodh Ganga**" website. Hence, corrected and certified soft copy of the Dissertation on CD (in pdf format) must be submitted to the University at the time of Viva-voce/final defense of Ph.D Dissertation. It will be full responsibility of the student and supervisor(s) to ensure that all the corrections suggested by the external examiners have been incorporated in digital copy also. If some corrections have been suggested during the viva-voce examinations, the candidate will incorporate the same and submit the hard copy afresh along with the updated copy on CD.

18. AWARD OF DEGREE

- 18.1 The candidate who qualifies for Ph.D degree on the recommendation of the board of the examiners shall be awarded degree by the University.
- 18.2 The degree shall be awarded under the seal of the University and shall be signed by the Registrar and the Vice-Chancellor.
- 18.3 In case the University decides that the degree will be awarded at the next convocation held for conferring degrees, then a provisional degree shall be awarded to the candidate immediately.

19. Ph.D. PROGRAMME AT AUTONOMOUS INSTITUTES

- 19.1 The autonomous institutes, like B.T. Kumaun Institute of Technology, Dwarahat (Almora) and G.B. Pant Engineering College, Ghurdauri (Pauri) and any other similar college shall follow the above rules except the following :
- 19.2 The admission examination and other procedure for admission shall be handled directly by the concerned college.
- 19.3 However, the number of admissions to be given shall be approved by the University before the admissions are taken and shall be based upon the facilities and Supervisors available at such an institute. The details of research facilities available as well as detailed Biodata and copies of the degrees of the proposed Supervisors shall be submitted to the University for its approval on the recommendation of RDC before the admissions are actually offered.
- 19.4 Any sub rule, if required for the Ph.D programme, may be framed by these institutes together and adopted after due approval of the University which will be given on the recommendation of RDC and Academic Council of UTU. However, as far as possible the above mentioned rules should be followed for the sake of similarity of procedures for awarding a Ph.D degree by UTU.