

**School of Petroleum Technology
Pandit Deendayal Petroleum University
Gandhinagar-382007, Gujarat**

**Ph. D. RULES
(Effective from July, 2010)**

1. GENERAL

- 1.1 Pandit Deendayal Petroleum University (PDPU), Gandhinagar, awards the degree of Doctor of Philosophy (Ph.D.) to a candidate who has successfully completed the stipulated Programme of Research at School of Petroleum Technology (SPT).
- 1.2 The Programme of Research with the governing rules and regulations are formulated by the Board of Governors of the University. The Board can modify or change the structure, the governing rules and regulations from time to time.
- 1.3 A candidate to be awarded the Ph.D. degree has to submit a thesis embodying the findings of his research carried out in this programme. The thesis should make an original contribution of high quality to the advancement of knowledge as judged by experts in the relevant area.
- 1.4 A candidate becomes eligible for the award of the Ph.D. degree after fulfilling all the academic requirements prescribed by the Academic Council (AC) of the University.
- 1.5 The award shall be made upon the recommendation of the Academic Council (AC) of the University and after approval by the Standing Committee of the Board of Governors of the University.

2 CATEGORIES OF Ph.D. STUDENTS:

SPT admits Ph.D. students under the following categories:

I) REGULAR (FULL-TIME)

These are students who work full time for their Ph.D. and may receive fellowship/ assistantship from PDPU or fellowship from CSIR/UGC or any other recognized funding agency or may be self financed.

I) SPONSORED STUDENTS (FULL-TIME)

A candidate in the category is sponsored by a recognized R&D organization, national institute, govt. organization or industry for doing research in SPT on a full time basis. He should have at least two years of working experience in the respective field. He will not receive any financial support from the School. Sponsorship letter (Form-I) should be attached with the application.

II) PROJECT STAFF (PART-TIME)

This category refers to the candidates who are working on sponsored projects in SPT and admitted to the Ph.D. programme. The duration of the project at the time of admission should be at least 2 years.

III) LOCALLY & PROFESSIONALLY EMPLOYED PERSONNEL (PART-TIME)

This category refers to the candidates who are locally and professionally employed personnel. These candidates should be able to meet supervisor(s) regularly in SPT for the guidance on their research work.

The applicant must be a regular employee of a recognized R&D organization, national institute, government organization or industry at the time of admission and be engaged in professional work in the discipline in which admission is sought. No financial assistance will be provided by the School to such students.

A No Objection Certificate from the Head of the Institute/Organization in which he is employed (Form-II) must be enclosed at the time of application.

II) SPONSORED STUDENTS (EXTERNAL REGISTRATION) (PART-TIME)

This category refers to candidates employed in R&D organizations having adequate research facilities. The research work leading to the Ph.D. degree may be carried out largely in the parent organization of the candidate under a Local Supervisor from the organization but with the overall guidance and advice provided by a faculty member of SPT (School Supervisor) in which he is registered. The appointment of the Local Supervisor is to be reported to the Chairman, Academic Council through Director-SPT for final approval. Sponsorship certificate from the Head of the organization where the candidate is employed (Form III) must be enclosed at the time of application. No financial assistance from SPT will be provided to such students.

VI) SCHOOL EMPLOYEES (PART-TIME)

Full time employees (Regular/Contractual) of SPT may be sponsored as part-time students by the Director, on recommendation of Dean, Faculty of Engineering & Technology.

3. MINIMUM QUALIFICATIONS

3.1 Students for admission to Ph.D. Programme in SPT must satisfy one of the following criteria:

- (i) Masters Degree in Engineering/Technology or equivalent in an appropriate area with a minimum CPI of 6.5 or equivalent (60% of marks).
- (ii) Bachelors Degree in Engineering/Technology or equivalent in an appropriate area with an excellent academic record all throughout his academic career and with a CPI of at least 8 or equivalent (70% of marks)

- (iii) Master degree in Science or equivalent in an appropriate area with first class or a minimum of 60% of marks, where class is not awarded.

4. ADMISSION PROCEDURE

- 4.1 Admission to the Ph.D. Programme of SPT normally takes place in the month of July every year. Admissions may be effected two times in a year depending upon the availability of seats. For the admission an advertisement notification is issued in the month of April/May.
- 4.2 Admission to all categories of students is granted on the basis of an interview/admission test, held usually during the month of June/July every year, and performance in M.Tech/M.E./B.Tech./B.E./ M.Sc. Candidates whose selection is approved by the Chairman, Academic Council will be admitted to the Ph.D. programme of the SPT after payment of the prescribed fees.
- 4.3 In the case of Sponsored students (external registration), the following additional conditions are to be satisfied:
 - 4.3.1 The candidates will be required to be in residence at PDPU for at least one semester during his Ph.D. Programme. The candidate will have to produce a certificate from his employer that he will be fully relieved from all the duties of the organization to complete his residential requirements at PDPU.
 - 4.3.2. The candidate must submit full details of the facilities relevant to the research programme available in the organization where he is employed, duly certified by the sponsoring authority.
 - 4.3.3. The candidate will have to submit a certificate from the sponsoring authority that required facilities will be made available by the organization.
 - 4.3.4. In such cases, Biodata of the Local Supervisor should be submitted for consideration of Dean, Faculty of Engineering & Technology and for approval of the Chairman, Academic council on recommendation of Director, SPT.
- 4.4 When in residence, a student has to reside on campus in the designated hostel / house. Exemptions will be granted only in rare cases on proper justifications being provided.
- 4.5 The prevalent fee structure will be made available at the time of admission.

5. LEAVE RULES

- 5.1 A Ph.D. student is eligible for 30 days of leave in an Academic Year.
- 5.2 A female Ph.D. student is eligible for 3 months of maternity leave once during the entire period of her Ph.D. programme.

6. ACADEMIC REQUIREMENTS

6.1 Supervisor(s)

- (a) Every student admitted to the Ph.D. programme of SPT must carry out his research work under the guidance of faculty member of SPT holding a Ph.D. degree. This faculty member will be called the School Supervisor of the student. If a part of the research work is carried out in

industry, reputed institute or R&D laboratory, a Co-Supervisor, holding a Ph.D. degree, may be nominated by Dean, Faculty of Engineering & Technology from that industry, institute or R&D laboratory in consultation with the head of the organization. In the case of external registration there will also be a Local Supervisor in the parent organization.

- (b) The student may have a second supervisor from SPT in case of interdisciplinary nature of research work. In this case each of the supervisors will be called as a Co-Supervisor. One of the Co-Supervisors will be nominated by Dean, Faculty of Engineering & Technology for the administrative responsibilities connected with the Ph.D. Programme.
- (c) The following categories of persons are permitted to be associated with the Ph.D. Programme of a student only as a Joint Supervisor but not as a Supervisor or Co-Supervisor.
 - (i) Faculty members of SPT with Ph.D. degree nearing superannuation with not less than 3 years of service left at the Institute.
 - (ii) Faculty members of SPT with Ph.D. degree on contract for more than 3 years.
 - (iii) Visiting faculty members and Chair Professors of SPT with Ph.D. degree.

6.2 Appointment of Supervisor(s)

- 6.2.1 Dean, Faculty of Engineering & Technology in consultation with the Chairman of the concerned BoS will appoint Supervisor(s) of Ph.D. students.
- 6.2.2 The Supervisor(s) should be identified and appointed at the earliest and within six months from the date of admission.
- 6.2.3 Sponsored students (external registration) shall have one Supervisor from SPT (School Supervisor) and one from the parent organization (Local Supervisor).

6.3 Change of Supervisor(s)

The Chairman, Academic Council may permit a student to change his Supervisor(s) for valid reasons on recommendation of Dean, Faculty of Engineering & Technology.

6.4 Doctoral Committee (DC)

- 6.4.1 To monitor the progress of research of the students, there will be separate committee for each Ph.D student, called Doctoral Committee (DC) consisting of:
 - (i) One faculty member other than the Supervisor(s) Chairman
to be nominated by Dean, Faculty of Engg. & Technology
 - (ii) The Supervisor(s) Member
 - (iii) Two other faculty members of SPT Member
(not below the rank of Associate Professor)
to be nominated by Director-SPT
- 6.4.2 The DC will be constituted by Dean, Faculty of Engineering and Technology in consultation with Director, SPT.

- 6.4.3 The Chairman may convene the DC meetings for a Ph.D. student as and when necessary.
- 6.4.4 Until the DC is constituted, the concerned Board of Studies will perform the duties of the DC.

6.5 Course Work

- 6.5.1 The DC will normally meet within 7 days of the last date of admission to the Ph.D. Programme. The DC will interview the student and prescribe the course of study for each student.
- 6.5.2 Full-Time Students with Masters Degree in Engineering/Technology will have to register and pass a minimum of 4 PG level courses (the candidates having qualification at UG and PG in Petroleum Engineering will have to register and pass a minimum of 2 PG level courses and obtain a minimum CPI of 6.0) and obtain a CPI of at least 6.0. Students with only a Bachelor degree in Engineering/Technology or Masters Degree in Science will have to register and pass a minimum of 6 PG level courses and obtain a minimum CPI of 6.0.
- 6.5.3 Course work should be completed within two semesters by all Full-Time students.
- 6.5.4 For all categories of part time students, there is no requirement of attendance in theory classes, practical and sessional evaluation tests of the courses. However, they need to take final semester examinations and obtain a minimum CPI of 6.0 based on only final semester examinations. Further, staying at the PDPU campus will not be required for part time students.

6.6 Comprehensive Examination

- 6.6.1 To test the overall competence and academic preparation of the student in the relevant field and specific area of the research programme, a Comprehensive Examination will be held before the completion of 18 months from the date of admission for the students with Master's Degree in Engineering/Technology and 24 months for students with Bachelor's Degree in Engineering/Technology and Master's Degree in Science. All the course work must be completed before the Comprehensive Examination.
- 6.6.2 The mode of Comprehensive Examination (oral or written or both) as well as the modus operandi (common to all students) will be decided by the concerned Doctoral Committee (DC) and will be intimated to the students.
- 6.6.3 A student failing in the Comprehensive Examination in the first attempt will be given a second Comprehensive Examination after 1 month but before 6 months from the date of the first Comprehensive Examination. If a student fails in the second attempt he will be asked to leave the Ph.D. programme.

6.7 Registration for Ph.D. Programme

After the successful completion of the Course Work and Comprehensive Examination, the candidate has to submit a plan of work defining the research problem identified and course of investigation proposed to be pursued. An assessment of the current status of problem area and a justification for the work has to be projected at this time. The student will make an oral presentation of the above proposal at a meeting of the Doctoral Committee (DC) for approval.

6.8 Progress Review

The DC will meet to review the progress of the Research Programme of the student every six months. The DC will report the progress of the student to the Chairman of the concerned Board of Studies (BoS) after every such meeting.

6.9 Enrolment

- 6.9.1 Students of all categories in the Research Programme will have to enroll in person each semester on the stipulated date till the submission of their thesis.
- 6.9.2 They are required to pay the prescribed fees till the submission of their thesis within stipulated dates.

6.10 Cancellation of Registration

The Ph.D. registration of a student is liable to be cancelled for any of the following reasons:

- (a) Consistent lack of progress in research.
- (b) Violation of Discipline and Conduct Rules of the School and PDPU.
- (c) Non-submission of the thesis within the stipulated period.
- (d) Non-conformity with the regulations of the programme.
- (e) Giving false information at the time of application/admission.

6.11 Minimum Duration of the Ph.D. Programme

The minimum duration of the Ph.D. Programme will be as follows:

- (a) Full time Ph.D. students with M.Tech or equivalent degree must be enrolled for a minimum of two years from the date of registration.
- (b) Full time Ph.D. students with B.Tech or equivalent and M.Sc. or equivalent must be enrolled for a minimum of three years from the date of registration.
- (c) All other category of students must be enrolled for a minimum of three years from the date of registration irrespective of their qualifications.
- (d) Students from any category must re-register after six years by full payment of fees.

6.12 Maximum Duration of the Ph.D. Programme

The maximum duration of the Ph.D. Programme will be 6 years from the date of admission for full time students. For part-time students this period will be 7 years.

6.13 Synopsis of thesis

- 6.13.1 At least 3 months prior to the submission of the thesis, the student shall submit 10 copies of the synopsis of his research to the DC. The synopsis will contain an outline of the research work done by the student.
- 6.13.2 The student will make presentation of his synopsis before the DC. The DC will, if it approves, permit the student to submit the thesis and forward the synopsis to the office of the Registrar (Examination Section).

6.14 Panel of Examiners

The DC will forward and recommend a panel of 5 examiners from other Institutes/Universities/R&D Organizations in India and 5 examiners from abroad to the office of the Registrar (Examination Section) for necessary action

and for approval of the Chairman, Academic Council for appointment of Examiners.

6.15 Submission of Thesis

Within three months of the acceptance of the synopsis by DC the student shall submit 5 copies of his thesis to office of the Registrar (Examination Section). The format of the thesis will be made available to students.

6.16 Examiners of the Thesis

The thesis shall be referred to two examiners (one from India and the other preferably from abroad) chosen by the Chairman, Academic Council from the panel of examiners recommended by the DC.

6.17 Thesis Reports

- (a) The examiners are expected to send the reports on the thesis within two months from the date of receipt of the thesis.
- (b) If an examiner does not send the report within 3 months, a reminder will be sent by the office of Registrar (Examination Section). If the report is not received within 6 months, the Chairman, Academic Council will refer the thesis to another examiner from the approved panel. The appointment of the examiner who has not sent the report within 6 months shall be deemed to have been cancelled.
- (c) If one of the two thesis examiners does not send his recommendations within 6 months, the Chairman, Academic Council will refer the thesis to a third examiner from the approved panel.
- (d) If an examiner suggests re-submission of the thesis with enlisted reasons, the student is allowed to resubmit the thesis after due revision within the time stipulated by the DC.
- (e) If two of the examiners do not recommend the thesis for the award, the matter may be referred to the Academic Council which will give decision to either reject or accept the thesis.
- (f) If two of the examiners recommend the award of Ph.D. degree, the DC will consider the reports and recommend the conduct of Oral Examination.
- (g) In all other cases, not covered by the above Regulations, the matter will be referred to the Academic Council for a decision.

6.18 Oral Examination

- (a) The following is the composition of the Oral Examination Board (OEB):
 - (I) Chairman of the DC Chairman
 - (ii) One examiner of the thesis within the country, or An expert from the same panel nominated by the Chairman, Academic Council from the panel of Examiners approved by the DC. Member
 - (iii) Supervisor(s) Member(s)
 - (iv) Two faculty members of the DC nominated by the Director-SPT Members

The thesis shall be defended by the candidate in open forum. However, the oral examination will be evaluated by the OEB.

- (b) The OEB conducts the defense of the thesis by the candidate ensuring that he answers all the written queries of the thesis examiners satisfactory.
- (c) If the OEB finds the performance of a student unsatisfactory, the student will be asked to reappear for another oral examination at a later date (not earlier than a month but before six months from the date of the first oral examination).
- (d) If the OEB evaluates performance of the Research Scholar as unsatisfactory on the second occasion also, then the matter will be referred to the Academic Council for a decision.
- (e) The OEB may also recommend revisions to be made in the final version of the thesis after taking into consideration the suggestion of the examiners who evaluated the thesis and the discussion at the oral examination. The Chairman of the OEB shall forward the report to the Director-SPT certifying that the recommended revisions by the OEB, if any, have been incorporated in all copies of the thesis.

6.19 Award of Ph.D. Degree

If the performance of the research student in the Oral Examination is satisfactory, he will be awarded Ph.D. degree on the recommendation of the Academic Council and with the approval of the Board of Governors of PDP.

Form I - SPONSORSHIP LETTER

(This should be typed on the letter head of the sponsoring organization)

Reference No.

Date:

To

The Director,
School of Petroleum Technology,
Pandit Deendayal Petroleum University
Gandhinagar-382007.

Sub: Sponsoring an Employee for Ph.D. Programme

Dear Sir,

We hereby sponsor the candidate
Mr./Ms.....

who is an employee in our organization, for joining Ph.D. Programme in
Petroleum Engineering at your School as a full-time student.

We shall relieve him/her of his/her duties in the organization during
the first three years of the Ph.D. Programme.

**Signature and Seal of the
Sponsoring Authority**

Form II - No Objection Certificate for Part-Time Students

(This should be typed on the letter head of the sponsoring organization)

Reference No.

Date:

To

The Director,
School of Petroleum Technology,
Pandit Deendayal Petroleum University
Gandhinagar-382007

Sub: No objection Certificate

Dear Sir,

We have no objection if Mr./Mrs/Ms.

.....,

an employee in our organization, is admitted to the Ph.D. Programme in Petroleum Engineering at your School as a part-time student.

We shall give him/her leave of absence to attend/research work at SPT, PDPU, Gandhinagar during the first two years of the Ph.D. programme.

**Signature and Seal of the
Sponsoring Authority**

Form III - Sponsorship Certificate of External Registration

(This should be typed on the letter head of the sponsoring organization)

Reference No.

Date :

1. Name of the sponsoring organization:

Address

2. Designation of the applicant:

3. Present status of the applicant:

4. Division/Section where research work is proposed to be done:

5. Name of the Local Supervisor:

(Bio-data of the Local Supervisor to be enclosed giving details of designation, qualification, research experience etc.)

6. Details of relevant facilities which will be made available to the candidate:

7. Statement of Local Supervisor:

If Mr./Mrs/Ms.
..... is admitted to the Ph.D.
programme at School of Petroleum Technology (SPT), Pandit Deendayal
Petroleum University (PDPU), Gandhinagar, I agree to supervise his/her
research programme jointly with the Supervisor from SPT.

Signature of Local Supervisor

If Mr. / Mrs. / Ms.
..... is admitted to the Ph.D. Programme, we agree to relieve
him/her to enable him/her to be in residence at PDPU during the first
semester of his/her Ph.D. Programme.

Mr./ Mrs. / Ms.....
..... will be permitted to carry out
research leading to the Ph.D. degree at our organization under the
guidance of Dr. The necessary
facilities will be provided for the purpose.

**Signature and Seal of the
Sponsoring Authority**