

RULES AND REGULATIONS

(Effective from Academic Year 2021-2022)

Doctoral Degree (Ph.D) Program

in

Engineering/Technology/Science



COLLEGE OF ENGINEERING PUNE (COEP)

[An Autonomous Institute of Govt. of Maharashtra, Permanently Affiliated to Savitribai Phule
Pune University]

Shivajinagar, Pune- 411 005 Maharashtra State, India

Preamble

Established in 1854, College of Engineering Pune (COEP) is the THIRD Oldest Engineering Institute in the country. The campus which stands for history of Technical Education in the country, has produced towering alumni, including none other than Bharatratna Sir. M. Visvesvaraya, contributing to the mankind from across all corners of the Globe. Being forerunner in Technical Education, persistently in pursuit of excellence and with its profound footprint on national and international map, COEP was granted FULL AUTONOMY by the UGC, Savitribai Phule Pune University (SPPU) and the State Government of Maharashtra in the year 2003-04. The status is reviewed every six years by these concerned regulatory authorities, and the autonomous status has been continued till year 2022. All eligible UG and PG Programs at COEP have been accredited with laurels by the National Board of Accreditation, multiple times. COEP is consistently ranked among top 50 Institutes in the country by various reputed surveys including the NIRF.

Post Autonomy, COEP emphatically decided to focus on PG and Research Education, thereby expanding on the number of PG Programs being offered and enrollment of research candidates for Ph.D Programs across various Engineering disciplines and domains. As a result of sound research base and outcome-oriented research activities, in particular, in last decade, extensive infrastructural facilities in the research laboratories and Centers have been developed.

Ph.D Programs at COEP

Institute offers Ph.D Programs, affiliated to Savitribai Phule Pune University (SPPU), in a wide range of areas in Engineering, Technology and Environmental Sciences. The broad objective of the Ph.D Program is to keep pace with the ever-expanding frontiers of knowledge in Sciences and Technology culminating into the contemporary social and economic objectives of the country.

The academic Program leading to Ph.D degree is broad based and involves a minimum course credit requirement and research thesis. The Institute also encourages research in interdisciplinary areas through a system of joint supervision and interdepartmental group

activities. The presence of a strong research-oriented faculty provides excellent opportunities for such Program. The Institute undertakes sponsored research and development projects from Govt. funding agencies, Research organizations and laboratories, Public/Private sector industries and Corporate.

Facilities for research work leading to Ph.D degree are currently available in the Departments of Civil Engineering, Computer Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, Instrumentation and Control Engineering, Mechanical Engineering, Metallurgical Engineering, Manufacturing Engineering and Industrial Management, Chemistry and Environmental Sciences.

Autonomous Ph.D Programs: A New Beginning

Latest UGC Regulations for Autonomous Institutes, released in February 2018, have empowered the Autonomous campuses to conceive and establish their own independent Ph.D Programs. Government of Maharashtra has subsequently released the relevant addendum for Autonomous Colleges as statutes in the Maharashtra Universities Act-2016, in January 2019, endorsing such empowerment towards true and complete Academic Autonomy. Leveraging on such statutory permission by the regulatory authorities, COEP has decided to start its own **"Autonomous Ph.D Programs"** in various domains Science, Engineering, Technology and Humanities. The Institute envisages establishing the liberalized research Programs, leading to Ph.D degree, in all areas of Engineering and Technology in its existing Engineering departments, Mathematics, Physics, Chemistry and Social Sciences & Humanities.

Terms and Definitions

UGC: University Grants Commission

AICTE: All India Council of Technical Education

SPPU: Savitribai Phule Pune University

COEP: College of Engineering Pune

Institute: COEP as Autonomous Institute of Govt. of Maharashtra.

AC: Academic Council: the apex Academic Body/platform of COEP as an Autonomous

Institute

CoE: Controller of Examinations of COEP

IRRC: Institute level Research and Recognition Committee; the Apex Authoritative Body for Autonomous Ph.D Programs, accountable and reporting to the Academic Council. The constitution of the IRRC is as hereunder:

- 1) Chairman-Academic Council or his nominee
- 2) Dean Academics Member
- 3) Institute Ph.D Coordinator Convener
- 4) 3 Senior faculty nominated by the Academic Council
- 5) 1 representative from Industry /Academics
- 6) Dean QA Member
- 7) Dean R&D Member
- 8) Member: A person well versed with anti-plagiarism tools nominated by Head of Institute
- 9) Respective Department level Research Committee (DRC) Chairperson who will be invited for deliberations/issues related to his/her department/domain and thus would ensure that the committee has representation from each discipline / allied discipline.

(Tenure of committee members including Chairman is for three years or as announced by the Director of the Institute, from time to time.)

DRC: Department level Research Committee (Intra-department) constituted as per regulations of the Institute from time to time. The constitution of the DRC is as hereunder:

- 1) HoD as Chairman
- 2) Convener: Senior Faculty nominated by HoD
- 3) Academic Integrity Member: A person well versed with anti-plagiarism tools nominated by HOD
- 4) Six additional members consisting of two Professors, two Associate Professors and two other Supervisors (Assistant Professor with Ph.D).

(Tenure of the members from 2 to 4 will be for three years or as announced by the Director of the Institute, from time to time)

RAC: Research Advisory Committee of the Candidate. The constitution of the RAC is as hereunder:

- 1) Supervisor of the Candidate as Convener
- 2) Co-Supervisor (if any) as Member
- 3) Expert 1 from the Department as a domain expert
- 4) Expert 2 from the Department as a domain expert [Optional]
- 5) Expert 3 from another allied Department
- 6) Expert 4 from outside Institute (mandatory presence for Topic Registration Seminar and Pre-synopsis Submission Seminar)

(Tenure of the members is coterminous with the candidate's open defence)

Rules and Regulations

1. Eligibility criteria for admission to the Ph.D Program

Following candidates aspiring to seek admissions to Autonomous Ph.D Program are eligible to apply:

a) Engineering and Technology

- 1.1 (a) A candidate possessing Master's degree in Engineering/Technology or equivalent professional degree with First class (60 % Marks /CGPA of 6.5 on a 10 point scale for General category candidates and 55% marks/CGPS of 6.0 on scale of 10 for Reserved category candidates) or a candidate with an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational Institutions.

b) Mathematics, Physics, Applied Science, Social Sciences and Humanities

- 1.1 A candidate possessing a Master's degree or a professional degree declared equivalent to the Master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade 'B' in the UGC 7-point scale (or an equivalent

grade in a point scale wherever grading system is followed) or an equivalent degree from a foreign educational institution accredited by an Assessment and Accreditation Agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country for the purpose of assessing, accrediting or assuring quality and standards of educational institutions.

- 1.2 A relaxation of 5% in marks or 0.5 in CGPA (where equivalence between percentage and CGPS is not declared) for candidates belonging to constitutionally declared reserved categories, differently-abled persons and other categories of candidates as per policies of the Government of Maharashtra prescribed from time to time.
- 1.3 Candidates with Junior/Senior research fellowships from CSIR/ UGC/ DST/ ISRO/ BARC/ DRDO/ any recognized/authorized Government organization entitled to offer such award can be considered for admission to the Ph.D Program if he/she has a minimum of 2 years of professional work experience and fulfils 1.1.
- 1.4 Candidates working in National Laboratories/Institutes of National Importance/Government sector/Industry/ Corporate who are nominated/sponsored by the respective employer and fulfill 1.1.
- 1.5 Candidates, having marks/ score/CGPA/CPI less than the prescribed one, at the qualifying exam but possessing enriched professional experience and outstanding contributions to the field of Engineering/Technology/Science, may be referred to IRRC for admission.
- 1.6 A graduate in Engineering/Technology (B.E./B.Tech) with an outstanding academic record (more than 80% marks / CGPA of 8.5 on a 10-point scale) may be permitted by the IRRC on the recommendations of respective DRC to submit his or her proposal for admission to Ph.D Program in that discipline. A relaxation of 5% in marks or 0.5 in CGPA for candidates (where equivalence between percentage and CGPS is not declared) belonging to constitutionally declared reserved categories, differently-abled persons and other categories of candidates as per policies of the Government of Maharashtra prescribed from time to time.
- 1.7 Above-mentioned rules will be applicable to foreign candidates who have obtained Master's degree from the statutory Indian Universities.
- 1.8 Application for inter-disciplinary areas and from applicants belonging to a faculty/subject

other than the faculty/subject in which it is proposed and from the international students (those who have not obtained the degree from Indian Universities) shall be considered on the basis of the proven ability and aptitude test. Such proposal shall be examined by the DRC and the IRRC for giving provisional admission. The admission will be confirmed after the IRRC approves the broad domain area and outline of the proposed research.

- 1.9 A candidate has to work with a Supervisor in normal Program, but as a very special case, the IRRC may allow a candidate to register for Ph. D. independently, i.e., without having to work under the supervision of a Supervisor, provided that the candidate is eligible and has demonstrated ability to undertake the proposed research independently.
- 1.10 Ongoing Masters Candidates of the Institute with outstanding performance in their first year are eligible for admission to integrated Ph.D Program in the concerned discipline on recommendation from the Supervisor, DRC and approval from IRRC.

2. Categories of Ph.D candidates

The Institute will admit Ph.D candidates under the following categories:

2.1 Full-time Candidates: to be termed as 'Research Scholars'

2.1.1 Institute Candidates (Research/Teaching Assistants–RA/TA)

These candidates are considered for Institute Teaching Assistantship. (Please refer Item No. 9 for financial support).

2.1.2 Govt./Public Sector Fellowship Awardees(NDF/CSIR/UGC/DAE/DST/BARC etc.)

These candidates are financially supported under various Govt./BARTI/SAARTHI/JYOTI/Semi Govt. schemes. The admission procedure and other requirements are the same as applicable to Institute Candidates.

2.1.3 Sponsored Candidates(SC)

These candidates are sponsored by recognized Govt. Institute/R&D organization/ Industry /Corporate for pursuing research work on a Full-Time basis at COEP. Candidates are expected to be released for Full-Time research work at the Institute for a minimum period of three years (**Appendix B**). They will not receive any financial support from the Institute.

Sponsorship letter (**Appendix A**) should be attached to the application form.

2.1.4 **Self-Financed (Indian/Foreign)/Study Leave(SF)**

Indian: This category refers to persons with experience, employed and with a good track record to join the Ph.D Program. They are admitted along with the regular research students through the usual admission procedure, *No Objection Certificate* from the organization (Appendix D) must be attached at the time of application. but they would not get any financial support from the Institute.

Foreign: These students are admitted through Embassy of the respective Govt. after getting approval from the Ministry of External Affairs and no objection certificate from Ministry of Human Resources Development, Department of Education, Govt. of India.

Indian Council for Cultural Relations (ICCR) Awardees (Foreign Students): Foreign nationals sponsored by Government of India on any exchange Program and who satisfy the eligibility conditions as per the regulations, are eligible for Full-Time study.

Full-Time Candidates shall pursue research work in the Institute and shall be available during the working hours of curricular, co-curricular and related activities.

2.1.5 **AICTE Doctoral Fellowship (ADF) Awardees:** Full time candidates admitted under AICTE ADF fellowship scheme.

2.1.6 **AICTE Quality Improvement Programme (QIP) Sponsored Candidates:** Full time regular/ permanent faculty members of AICTE approved institutes and receiving fellowship under AICTE QIP scheme.

2.2 **Determinate Candidates: to be termed as 'Research Students'**

2.2.1 **Institute Faculty/Staff (IS):** This category refers to candidates who are regular and permanent employees of the Institute with more than 2 years of their service at the

institute and more than 3 years of their service left to their retirement and are admitted to the Ph.D Program through the Ph.D admission process. Such candidates while engaging a reduced academic load can pursue the research Program leading to a Ph.D Degree.

2.2.2 Candidates from Colleges/Educational Institutes/External Candidates (Sponsored):

After fulfilling credit requirements of the Coursework at COEP, these candidates will be allowed to register for Ph.D with one Supervisor from the Institute (Internal) and the Co-Supervisor from the Institute other than their parent organization (External). Sponsorship certificate from the organization (**Appendix C**) must be attached, at the time of application.

3 Duration of the Program

- 3.1 The candidate after securing provisional admission to Ph.D shall be required to complete the Course Work within a period of 2 semesters from the date of provisional admission to the Ph.D programme.
- 3.2 Failure to complete the Course Work within 2 semesters from the date of provisional admission to the Ph.D programme will result in cancellation of provisional admission to the Ph.D programme.
- 3.3 The candidate shall be permitted to present his/her research topic in a Topic Registration Seminar before RAC towards his/her Ph.D registration within 2 months after successfully completing the Ph.D Course Work. Failing to present the Topic Registration Seminar within the stipulated time will result in cancellation of provisional admission to the Ph.D programme.
- 3.4 The Topic Registration Seminar and report based on the same shall broadly entail the technical domain/area of the research, that has enough gap and potential to carry out the research, based on the profound literature review and state-of-art. DRC and IRRC will approve the broad domain area and outline of the proposed research.
- 3.5 The date of confirmation of Ph.D Registration will be the date on which the candidate presents his/her Ph.D Topic Registration Seminar to the RAC.
- 3.6 The TITLE of the research may progressively evolve, through the six-monthly progress seminars that candidate presents to the RAC and will be frozen at the time of Pre-

synopsis Seminar presentation. The same title shall be, by default, associated with the THESIS, being submitted, after the Pre-synopsis. No 'Change of Title' of the thesis shall be allowed after the Pre-synopsis.

- 3.7 Ph.D Program shall be for a minimum duration of THREE years from the date of confirmation of Ph.D Registration and a maximum of SIX years.
- 3.8 Extension up to a maximum period of two years for Ph.D shall be given by the IRRC on the recommendation of the RAC, through DRC (Appendix W). The candidate concerned shall submit the application in the prescribed format for extension through his Research Supervisor and Head of the Department, three months before the expiry of the registration period.
- 3.9 The candidate is eligible to apply for an extension of the period only if his/her registration is already confirmed.
- 3.10 RE-REGISTRATION: The candidate may request the IRRC to get permission for re-registration of Ph. D. Program by paying necessary administrative charges as decided by the institute from time to time after the lapse of maximum period, including extension. i.e. after EIGHT years period, the maximum time limit under Re-registration would be additional 2 years from the date of re-registration.
- 3.11 The women candidates and persons with disability (more than 40% disability) may be allowed an additional relaxation of two years for Ph.D in the maximum duration. In addition, the women candidates may be provided Maternity Leave once in the entire duration of Ph.D for up to 180 days.
- 3.12 Every approved Candidate shall register by paying the initial prescribed fees and then continue to pay the prescribed fees per year, before 30th June each year, in order to keep the Ph.D registration alive until the pre-synopsis seminar presentation, provided it happens before 30th June of the year. If the pre-synopsis seminar is held after 30th June, the candidate is required to pay the full fees of that Academic year.
- 3.13 The Dean Academics shall permit, if deemed fit for reasons, break of study for the candidate under extraordinary circumstances such as medical grounds and other compelling reasons which warrant his/her absence to the Program. However, the break of study period shall not be counted for the MINIMUM DURATION of the Program. Break of study to candidates shall be granted up to a maximum period of one year not exceeding six months at a time. Such request with the recommendation of the research Supervisor

should reach the Dean Academics through RAC/DRC prior to the availing break of study. Break of study shall be accounted for the counting of the maximum duration of the Programme. The candidate should remit the semester fees during the break of study period also.

4 Place of Research

- 4.1 The place of research in respect to Full-Time and Determinate Ph.D Program will be College of Engineering Pune. However, in case of sponsored candidates, in particular, their respective workplace i.e. industry/corporate/R & D organization may be permitted, for limited time, case-on-case basis, as the extended place of research, by the IRRC. However, the course work must be completed at COEP in a 'Full-Time candidature mode'.

5 Selection Process

- 5.1 Candidates desirous of registering for Ph.D Degree Program should apply in the prescribed application form through proper channel wherever applicable before the due date as indicated in the notification issued from time to time. The details regarding the commencement of the selection process and number of vacancies in each faculty/subject, Supervisor-wise, shall be notified by the institute twice in a year in the month of May and November. An entrance test for admission, Research Program Eligibility Test (RPET) shall be conducted by the institute preferably, twice in academic year on any Saturday/Sunday in the month of June and December. Admission to both the Programs will be through a two-stage process: Research Program Entrance Test (RPET) and a Personal Interview (PI).
- 5.2 Institute will notify well in advance on the institutional website and through advertisement in at least two (2) national newspapers, of which at least one (1) shall be in the regional language, the number of seats for admission, subject/discipline-wise distribution of available seats, criteria for admission, procedure for admission.
- 5.3 The admission shall be based on the criteria notified by the Institution, keeping in view the guidelines/norms in this regard issued by the UGC and other statutory bodies concerned and taking into account the reservation policy of the Central/State Government from time

to time.

- 5.4 The applications of the candidates shall be processed by an Admission Committee along with members of DRC for the purpose of selection. The composition of such committees shall be decided to take into account the number and nature of the applications received. Such committees shall screen the applications as per the eligibility norms and be responsible for the conducting test (RPET) and interview. The committee shall conduct interviews of eligible candidates who qualify the test. Candidates who have valid UGC, UGC-NET (including JRF) /valid UGC-CSIR NET (including JRF)/valid SLET/valid GATE/valid teacher fellowships are exempted from the written test. They will, however, be required to appear for the personal interview. The weightage for written examination and interview shall be decided by the respective DRC. The IRRC shall review the above-mentioned procedure, from time to time and may announce the refined modifications accordingly.
- 5.5 The candidate shall also submit a research proposal, proposed research area, plan of action along with the application. Candidates will be interviewed by duly constituted Departmental Research Committee (DRC). The interview shall also consider the aspects, viz. whether the candidate possesses the competence for the proposed research, the proposed area of research as per his/her proposal, an assessment whether can contribute to new/additional knowledge. Based on the performance in the interview, the successful candidates shall be shortlisted by the above respective department committees.
- 5.6 For such short-listed candidates, the committees shall nominate the Supervisors, with mutual consent of the candidate and taking into consideration the resonance of research area of the candidate & the field of specialization of the Supervisors and forward this list to the Dean Academics through respective HoD for placing before the IRRC for approval.
- 5.7 The Institute shall maintain and display an updated list of all the Ph.D registered students on its website on year-wise basis. The list shall include the name of the registered candidate, the topic of his/her research, name of his/her Supervisor/Co-Supervisor, date of enrolment/registration.
- 5.8 The selection of candidates to qualify under the ADF and QIP schemes of AICTE shall follow the procedures laid down by the AICTE at the time of the admission, as also prescribed in this rules and regulations bulletin.

6 Admissions

- 6.1 The DRC shall determine the suitability of candidates after the interview and recommend admission in the appropriate field, after giving due consideration to the inter-disciplinary fields of research if any and the discipline/branch of engineering in which the candidate shall be registered.
- 6.2 Such candidates shall be provisionally admitted for the Ph.D Program with the concurrence of the Chairman-Academic Council and with due intimation to the concerned Supervisor, the candidate and the sponsoring agency if any.
- 6.3 The date of provisional admission shall normally be 15th of August/ 15th of January of the year in which the candidate is admitted.

7 Recognition as Research Supervisor and Allocation of Supervisors

- 7.1 All teachers of the Institute, who are recognized Ph.D Supervisors of SPPU as on date, in their domain/subject, shall continue to be the incumbent Ph.D Supervisors with COEP's Autonomous Research Centers. Any eligible faculty member of the institute desirous of receiving Ph.D Supervisor new recognition (for the first time) shall apply to the SPPU as per the prevailing rules and regulations of SPPU. Only after receiving approval from SPPU, can the faculty member become eligible to supervise the candidates.
- 7.2 Research Supervisor can supervise candidates up to attaining the age of 60 as per prevailing norms or till he/she is in the service of the Institute, which ever happens earlier.
- 7.3 A Co-Supervisor, who is also a recognized Research Supervisor by SPPU, has to be associated for the ongoing candidates if the Supervisor's remaining service as a regular faculty is less than 2 years.
- 7.4 Interested experienced Experts from Industry/Corporate/R & D Organizations/Public Sector Companies/Institutes of National Importance, (which lie in geographical vicinity of the Institute), with Ph.D degree, at least 10 years of illustrious experience in the R & D department at senior level and outstanding equivalent contribution such as 'Granted patents/Copyrights/Intellectual property in any visible form/Transferred Technology/Commercialized Product etc., may be invited as Co-Supervisor by the IRRC.
- 7.5 A faculty from other institutes/university, in the geographical vicinity of the Institute, can

become Supervisor at COEP, strictly as per the prevailing rules and regulations of SPPU and with prior permission from Head of their institute. The IRRC shall approve such cases after the scrutiny of the application, case-on-case basis. However, all such external teachers shall need to offer their services as Adjunct faculty to COEP, with the total number of candidates being supervised, will be 50% of the permissible maximum limit as specified by UGC from time to time. In exceptional cases, COEP may consider a few institutes in the geographical vicinity for granting a special status where in the eligible faculty can be associated with COEP research center as recognized Supervisor.

- 7.6 In case of topics which are of inter-disciplinary nature where the concerned Department feels that the expertise in the Department has to be supplemented from outside, the Department may identify and associate, with approval of IRRC, a Co-Supervisor from outside the Department/ Faculty/ College/ Institution/Industry/Corporate/R & D organization, on such terms and conditions as may be specified and agreed upon by the consenting Institutions/Colleges.
- 7.7 However, in case a Co-Supervisor, who is approved by IRRC for his/her association with a Ph.D Scholar/Candidate, but who is not a recognized Ph.D Supervisor by SPPU, the Institute shall inform the SPPU about his/her association with the Ph.D Scholar/Candidate as a Co-Supervisor.
- 7.8 A Research Supervisor who is a designated Professor, at any given point of time, cannot guide more than Eight (8) Ph.D candidates. An Associate Professor as Research Supervisor can guide up to a maximum of six (6) Ph.D candidates and an Assistant Professor as Research Supervisor can guide up to a maximum of four (4) Ph.D candidates. This is in accordance with UGC guideline and subject to change as notified by UGC from time to time.
- 7.9 The allocation of Research Supervisor for a selected research candidate shall be decided by the concerned DRC depending on the number of candidates per Research Supervisor, the available specialization/domain expertise among the Supervisors and research interests of the candidates as indicated by them at the time of interview with due regard to the reservation policy.
- 7.10 No fresh candidates shall be allocated to a research supervisor of his/her remaining service as a regular faculty is less than two years.
- 7.11 In case of relocation of an Ph.D woman candidate due to marriage or otherwise, the

research data shall be allowed to be transferred to the University/Institute to which the candidate intends to relocate provided all the other conditions in these regulations are followed in letter and spirit and the research work does not pertain to the project secured by the parent institution/ Supervisor from any funding agency. The candidate will however give due credit to the parent Supervisor and the institution for the part of research already done.

8 Topic Registration and Course Work for the Ph.D Degree:

Credit Requirements, number of courses, duration, syllabus, minimum standards for completion, etc. for Ph.D Program shall be as under:

- 8.1 The course work shall be treated as pre-requisite for Ph.D Program. Ph.D course work shall be of minimum 19 credits as on date. The minimum number of credits for the Course work is subject to the change as mandated by the UGC, from time to time.
- 8.2 As per provisions of Ordinance 116 of SPPU, the admitted candidates shall not be allowed to register simultaneously for any other degree course.
- 8.3 The RAC for the candidate shall be proposed by DRC and it shall get approved from IRRC (**Appendix E**).
- 8.4 The Course work for Ph.D shall consist of minimum 19 credits (as on date) as: Course 1: Research Methodology of 4 credits; Course 2: Research and Publication Ethics of 2 credits; Course 3: Writing Research Proposal-1 credit; Course 3: Writing review- 1 credit; Course 4: Seminar- 2 credits; Domain Specific Courses of 9 credits. The revision of coursework, along with its credits, shall be aligned with UGC directives/guidelines, announced from time to time.
- 8.5 All courses prescribed for Ph.D Course work shall be in conformity with the credit hour instructional requirement and shall specify contents, instructional and assessment methods. They shall be duly approved by the IRRC.
- 8.6 The domain-specific courses to be considered for course work shall be recommended by RAC and approved by IRRC.
- 8.7 The domain-specific courses shall be exempted for the candidates admitted to Integrated

Ph.D Program (M.Tech + Ph.D).

- 8.8 All Ph.D candidates shall complete the Ph.D course work with a minimum grade of 'CC' (the lowest grade that indicates passing the course, as per Institute norms) in each of the course in the institute's 10 point grading scale for a successful course completion.
- 8.9 Candidate should complete course work within stipulated deadline. He/she shall receive the course work grade sheet in the prescribed format (**Appendix K**).
- 8.10 A candidate shall make an application in a prescribed format for Topic Registration to Ph.D Program, as given in (**Appendix F**) along with six copies of Topic registration report (**Appendix G**) and evaluation report by RAC (**Appendix H**) and attendance report (**Appendix I**). RAC will make appropriate commendations to the IRRC through DRC, regarding the course work prescribed for the candidate and the Topic registration report. IRRC shall communicate the decision (**Appendix J**).
- 8.11 The date of Ph.D Topic Registration Seminar presentation would be taken as the confirmed date of Ph.D registration subject to the satisfactory completion of course works credits and Topic registration approval by IRRC. The period of validity of Ph.D registration for all candidates is six years from the date of confirmation of registration.

9 Financial Support:

Students joining Ph.D Program will be considered for Teaching/Research Assistantship, with financial support, based on the following norms:

- 9.1 **Institute Teaching Assistantship:** Candidates with M.Tech./ M.E./ M.Sc.(Engg)/ M.Sc.(Tech) or equivalent qualification in Engineering/Technology shall be considered for monthly assistantship and contingency grant at par with MHRD/AICTE (currently it is Rs. 25000/- for first 3 years and at an enhanced rate of Rs. 28,000/- for remaining one year). The assistantship will be awarded to the candidates with M.E./M.Tech./M.Sc.(Engg) as qualifying degree for a maximum period of 4 years or date of submission of the thesis, whichever is earlier. This is subject to revision from time to time as notified by COEP.
- 9.2 The Supervisor having R&D Project and having funding for Research Assistantship can pay from the project grant. Such candidates will be eligible for Research Assistantship till the end of the project tenure, subject to the candidate under Research Assistantship is

satisfying the institute norms. Scholarship/funding will be governed by the funding agency norms.

- 9.3 The above assistantships require that the candidate must assist in teaching or research, as assigned by the Institute/Department/Supervisor, to the extent of 10 hours of work per week (theory/tutorial/lab assignments or any other duty as assigned by the research supervisor and/or Head of the Department, towards needs of the department.
- 9.4 **Leave for Full-Time Research Scholars:** Full-Time research candidates can avail leave of 30 days in a calendar year, with prior permission and approval of Supervisor and the concerned Head of the Department.

10 Change of Supervisor, Change of Title etc.

- 10.1 Normally a candidate shall be required to complete his/her Ph.D work under the supervision of the Supervisor who recommends his/her case for admission. However, the IRRC may allow change of Supervisor on the production of a 'no objection' certificate from the first Supervisor and an acceptance letter from the new Supervisor per the format given in Appendix X. In case of such a change, the candidate shall work for a minimum period of one calendar year under the new Supervisor before he/she submits the thesis. A 'no objection' certificate will not be required if the student justifies the non-availability of his Supervisor. The justification will have to be endorsed by the concerned DRC. In case of problem/dispute, non-availability of the Supervisor will be approved by the Dean Academics in consultation with the concerned Head of the Department.
- 10.2 In case of a dispute between a candidate and his Supervisor, the committee consisting of the following shall examine the matter and report to the Chairman, Academic Council whose decision shall be final:
- i] Nominee from the concerned discipline appointed by the Chairman Academic Council.
 - ii] Dean Academics [Convener]
 - iii] The Head of concerned Department (If the complaint is against the Head, he shall not participate in the proceedings of the meeting).

The report shall include, among other things, specific recommendations. The report shall be submitted to the Chairman Academic Council.

10.3 When a Supervisor retires from service on superannuation or leaves service or unable to supervise on any account for a valid reason, he/she shall make arrangements for alternative Supervisor for his/her candidate. However, the Supervisor, who retires from the service shall continue to supervise a candidate upto 70 years of his/her age. However, a Joint Supervisor/Co-Supervisor shall be nominated by Dean Academics in consultation with Head of the Department, and approved by the IRRC, to take care of the administration and to some extent the research responsibilities of the candidate.

12 Research Advisory Committee (RAC)

12.1 The RAC will be constituted by DRC and approved by IRRC. In case of an independent candidate, IRRC will nominate RAC

12.2 Responsibilities of RAC are as below:

12.1.1 To review research proposal of a given candidate.

12.1.2 To guide a research candidate to develop the study and methodology of research and identify the Domain Specific courses he/she may have to do.

12.1.3 To review and assist for progress periodically, generally every six months, closely monitor, advise and ratify the research outcomes qualitatively/quantitatively and eventually help the candidate in finalizing the title of the thesis.

12.3 Research candidate has to appear before RAC to present progress seminar every six months i.e in December and July of every year, for evaluation and further guidance. The candidate shall submit a progress report in the prescribed format (**Appendix M**) to the Supervisor who shall forward it along with progress evaluation report (**Appendix L**) and attendance report (**Appendix N**) to the Dean Academics for information and documentation through HOD.

12.4 The Supervisor shall arrange for a progress seminar by the candidate on his / her work twice in a year before RAC is also open to any stakeholder of the institute.

12.5 If a candidate fails to submit three consecutive reports of progress, his/her registration shall be treated as cancelled.

12.6 In case the progress of the research candidate is unsatisfactory, the RAC shall record the

reasons for the same and suggest corrective measures. If the research candidate fails to implement these corrective measures, the Research Advisory Committee may recommend through Dean Academics to the IRRC with specific reasons for cancellation of the registration of the research candidate.

13 Cancellation of Registration:

13.1 The registration of a candidate who has exceeded the maximum period stipulated for the Ph.D Program shall stand cancelled automatically.

13.2 The Registration is liable for cancellation administratively by the Dean Academics if:

- The Candidate has not paid the semester/annual fees within the stipulated time with the necessary fine.
- The three consecutive six monthly progress seminar reports are not submitted or not satisfactory.
- RAC is not satisfied with the performance and accordingly recommended for cancellation.
- The candidate wishes to withdraw the Program and wishes to cancel his / her registration.
- The candidate has not acquired appropriate credits of course works within the stipulated time.
- The candidate has not completed the Topic registration seminar within the stipulated time.
- On the moral turpitude/ disciplinary grounds of the candidate.
- In all the above cancellation cases the fees paid by the candidate shall not be refunded.

14 Synopsis of Thesis

14.1 At least three months prior to the submission of the thesis, a Ph.D candidate shall make a presentation before the Research Advisory Committee. The Pre-Synopsis seminar shall be open to all faculty members and research candidates. The feedback and comments obtained from them may be suitably incorporated into the draft Thesis in

consultation with the Research Advisory Committee. In light of the discussion during the seminar, the candidate shall prepare a Synopsis of his/her thesis (**Appendix O**). At least one member of IRRC should be present at the Pre- Synopsis seminar along with RAC. The title of the thesis will be endorsed and recommended by the RAC to IRRC through DRC.

- 14.2 The Candidate shall be permitted to submit the Synopsis to RAC subject to the confirmation of registration. The synopsis shall be accepted only when the Ph.D candidate has one research paper either published or accepted for publication in peer reviewed refereed International journal of highest indexing as indexed on Web of Science or having Science Citation Index-SCI at the juncture of time and two publications in peer reviewed indexed conferences, or peer reviewed refereed International journal of highest indexing as indexed on Web of Science or having Science Citation Index-SCI in lieu of 2 publications in peer reviewed indexed conferences or publication of patent. All publications arising out of Research at COEP must acknowledge COEP while submitting a paper of publication in the Journal or Conference. Otherwise, such publications shall not be considered for submitting the Thesis. Lists of Refereed International Journals will be prepared by each DRC. (The DRC will, however, revise the list from time to time).The guidelines for research publications shall be issued by the IRRC, from time to time and will be displayed on the official website of COEP. The RAC shall be authoritative in accepting/approving the alternate non-conventional research outcome such as 'Transferable prototyped technology-(hardware or software)', 'Creation of novel and unique product/service-(hardware or software) with a bright potential of commercialization', 'a Patented innovation that has reached higher levels of scrutiny by IPR authorities', 'an Academic product/service with recognition and acceptance at national/global level. The Synopsis submission shall be permitted only after the evidential and tangible research outcome. IRRC at this stage will approve the title of the Ph.D research work of the candidate.
- 14.3 The procedure for the appointment of examiners shall be undertaken soon after the candidate submits his/her synopsis. If the RAC approves the research work reported in the Ph.D synopsis, it shall forward seven hard copies and a soft copy of the approved synopsis to the IRRC along with a panel of examiners (referees). A panel of 9 examiners (Three from outside India, three from outside Maharashtra and three from within

Maharashtra) will be prepared by Supervisor from the pool of examiners prepared by DRC from time to time in the prescribed format (Appendix S). The IRRC shall appoint three examiners as mentioned above from the panel and will communicate it to the CoE for the further evaluation process of the Ph.D Thesis. A copy of the thesis will also be made available to CoE for concerned work.

15. Submission of Thesis

- 15.1 Before submission of Ph. D. thesis, every candidate shall fulfill the requirements prescribed by the Academic Council of the COEP with respect to detection of plagiarism and any other forms of academic dishonesty. While submitting for evaluation, the thesis shall be accompanied with original report of the anti-plagiarism software approved by the COEP, an undertaking from the research candidate about originality of the work, vouching that there is no plagiarism and any other academic dishonesty and that the work has not been submitted for the award of any other degree/diploma of the same Institution where the work was carried out, or to any other institution. The certificate issued by Academic Integrity Member of DRC shall be submitted while submitting thesis for evaluation.
- 15.2 The candidate shall be allowed to submit his/her thesis within three months after the date of submission of the synopsis, failing which the candidate will have to pay the prescribed fine for a late submission. Late submission of the thesis shall be allowed up to the completion of one year from the date of submission of the synopsis or till the expiry of the registration period, whichever is earlier. The candidate will have to submit synopsis again if the submission is extended further, moreover the college fees in full (except tuition fees), will be payable beyond the academic year period i.e. after 30th June, if the thesis is submitted after 30th June.
- 15.3 In an organized fashion, the thesis shall report an account of original work of the candidate leading to the discovery of new facts or techniques or correlation of facts already known (analytical, experimental, hardware oriented etc) and demonstrating a quality as to make a definite contribution to the advancement of knowledge and the candidate's ability to undertake sustained research and present the findings in an appropriate manner, with actual accomplishments of the work, plainly stated and

honestly appraised.

- 15.4 The thesis shall be submitted in compact soft bound form as well as soft copy form enabling the candidate to incorporate changes if suggested by the referees. (Appendix P)
- 15.5 The candidate shall submit to the CoE, four copies [five in case of an independent candidate] of his/her thesis and produce an acknowledgement of the receipt including a copy in digital format.
- 15.6 The thesis shall include a Certificate by the Supervisor / Co-Supervisor (Appendix Q) and a Declaration by the candidate (Appendix R) that the work reported in the thesis been carried out by the candidate himself and that the material from other sources, if any, is duly acknowledged.
- 15.7 The thesis shall be written in English with the following specifications:
- a) The paper used shall be of A4
 - b) Printing should be on both sides and 1.5 line spacing.
 - c) A margin on left side 1.5 inch; Font: Arial
 - d) The title should include the title of the thesis, Name of Candidate, degree, Name of Supervisor,
 - e) Place of research, month and year of submission (the format is given in **Appendix P**)
- 15.8 If a candidate fails to submit the thesis within prescribed Program duration, IRRC shall examine such cases approve/disapprove submission of thesis accordingly.

16. Thesis Evaluation

- 16.1 After IRRC appointing the panel of examiners for Ph.D, the Chairperson of IRRC shall select the three examiners out of this panel. The Controller of Examinations (CoE) shall invite these three examiners from the approved panel to examine the synopsis. When the examiners accept the invitation and the candidate has submitted the thesis, the CoE shall forward the thesis to the examiners within a week from the date of the receipt of the acceptance letter or the submission of the thesis, whichever is later. If an examiner does not accept the invitation within thirty days from the date of dispatch of the invitation letter, the invitation shall be sent to the next examiner on the panel as selected by the Chairperson of IRRC.

- 16.2 The external examiners shall independently send their reports to the CoE within sixty days from the date of receipt of the thesis [The reports sent by fax or e-mail by using the 'postscript' package will be accepted]. The referee's comments are invited in the prescribed format (Appendix T). If an examiner fails to do so, the COE shall send him/her reminder immediately after the expiry of the said period and request him/her to submit the report within thirty days. If the examiner concerned fails to comply even within the extended period the COE shall cancel his appointment forthwith and invite the next examiner from the approved panel to evaluate the thesis. In the event of a request for the late submission of a report, receipt of the report after the appointment has been cancelled or the loss of report, postal delay, etc. the Dean Academics concerned shall take an appropriate decision in the interest of the candidate concerned.
- 16.3 The two positive reports with specific recommendation of conduction for viva-voce examination received from the external examiner shall be immediately forwarded to the Head of the Department, with intimation to the Supervisor who, after ascertaining that the reports are favorable, shall arrange the viva and the defense of the thesis on the earliest date suitable to the internal examiner, the nearest external examiner and the Chairperson. The Head of the Department shall make the reports available to the candidate, the Supervisor and the Chairperson at least a day before the date of the viva. In case of any problem, the Dean Academics will take the decision in the interest of the candidate.
- 16.4 In the case where two out of three examiners give unfavorable reports, the COE shall get the thesis examined by an additional examiner from the panel of examiners approved by the Chairman Academic Council. If the additional examiner also gives an unfavorable report the candidate will not be awarded Ph.D degree, and the admission of candidate shall be cancelled.

17. Viva Voce and Defense of the Thesis

- 17.1 The day, date, time and the place for the viva voce and the defense of thesis shall be notified by the Head of the Department under intimation to IRRC at least eight days in advance. Normally the viva voce and the defense of the thesis shall be arranged in the concerned Department. In exceptional cases, the Chairman Academic Council may allow

the viva to be conducted at a place outside the Institute. In such a case the procedure and norms for the conduct of viva, payments, etc. shall be as laid down by the Institute.

- 17.2 The defense of the thesis shall take place in the presence of the Research Supervisor (internal examiner), one external examiner and the Chairperson, who shall jointly evaluate the performance of the candidate. In case of dispute, Dean Academics shall take an appropriate decision.
- 17.3 If neither of the external referees is able to be present at the time of the defense, the Chairman of the Academic Council, on the recommendation of the Supervisor and the Dean Academics shall appoint a senior Supervisor to act as an examiner for the defense of the thesis. In case the external examiner is not available, the Chairman Academic Council shall appoint one of the relevant senior Supervisor, preferably from the RAC, on the recommendation of the Dean Academics of the concerned faculty and Head of the Department.
- 17.4 The examiners present for the viva-voce and the defense of the thesis shall submit to the CoE their final consolidated signed report along with the reply given to the queries raised by the external examiners in the written form, signed and accepted by the members of the Viva-Voce Panel. (Appendix U), and list of persons (Appendix V) attending the open defense in respect of the award of the Ph.D degree immediately after the defense is over.
- 17.5 In case the defense is not satisfactory, the examiners can unanimously recommend with reasons that a fresh viva-voce and defense of the thesis be organized within a period of not less than one month. If the defense is still not satisfactory, the panel would record the reasons for the same. The committee may suggest resubmission of the thesis to the same committee with suggested changes or recommend the rejection of the thesis.
- 17.6 The entire process of evaluation of Ph.D thesis shall be completed within a period of six months from the date of submission of the thesis.

18. Award of Ph.D Degree

- 18.1 After satisfactory completion of Viva-voce/defense the provisional result shall be officially declared by the CoE within eight days from the date of the receipt of the favorable report on the defense of the thesis. A provisional "Passing Certificate" may be awarded to the

Ph.D Scholars in the annual Graduation ceremony of the Institute. Lists of all such SUCCESSFUL candidates will be recommended by the Academic Council to SPPU for the award of Ph.D degree in its Convocation ceremony.

- 18.2 After Satisfactory completion of the defense the candidate should submit a hardbound copy of the Thesis and soft copy in CD and notification of declaration of result of Ph.D Program to Institute Library. The Institute Library shall further prepare metadata of the thesis and shall submit an electronic copy of thesis to ONFLIBNET for hosting the same so as to make it accessible to all institutions/colleges.

19. Publication of Thesis

Thesis as a whole shall not be published by the candidate.

20. The Act of Plagiarism

- 20.1 In the case of candidates who have copied a thesis for **Ph.D** degree his / her thesis shall be forfeited and his / her research registration shall be terminated in this Institute and also, he/she shall be debarred to register for any other Program in this Institute. A maximum of 10% similarity, as adjudged and certified by an authenticated plagiarism software (such as Turnitin, Grammarly, Quetext etc.) shall be permitted, as complying with guidelines from UGC/SPPU, in this regard.
- 20.2 For the abetment of above such action, the recognition of his / her Supervisor shall be **withdrawn** for a period of 2 years and he/she shall be debarred from guiding the candidates for any research Program in this Institute till such period.

21. Power to Modify

Notwithstanding all that has been stated above, the Academic Council has the right to modify any of the above regulation from time to time.

22. Treatment of Ph.D / through Distance Mode/Part-time:

- 22.1 Part-time Ph. D. will be allowed to determinate candidates, provided all the conditions

mentioned in the University Grants Commission (Minimum Standards and Procedure for Award of Ph.D Degrees) Regulations, 2016 are complied with.

22.2 Ph.D Program through distance education mode shall not be allowed in any case.

Appendix A

Sponsorship Letter for Full-Time candidates:

(This should be typed on letterhead of the sponsoring organization)

To
The Director,
College of Engineering Pune, Pune – 411 005.

Sub: Sponsoring of an Employee for Ph.D Program

Dear Sir,

We hereby sponsor the candidature of Mr./Mrs./Ms. _____ who is an employee in our organization, for joining Ph.D Programme in _____ at _____ your Institute as a FULL-TIME candidate..

We shall bear the total expenses of his/her studies. We shall fully relieve him/her of his/her duties in the organization during the entire period of the Ph.D Program to enable him/her to devote Full-Time to the studies.

Signature and seal of the Sponsoring Authority

Appendix B
Employer's Letter in case of Candidates joining on Study Leave

(This should be typed on a letter head of the Institution)

To
The Director,
College of Engineering Pune, Pune – 411 005.

Sub: Relieving an employee on Study Leave

Dear Sir,

We hereby relieve Mr./Mrs./Ms. _____ an employee of this Institute on full/half/no pay leave for joining Ph.D Program at College of Engineering Pune for a period of _____ years (at least three years).

Signature of Head of the
Institute and seal of the Institution

Appendix C
Sponsorship Certificate for External Registration

(This should be typed on a letter head of the Sponsoring Organization)

1. Name of the sponsoring organization : _____ Address: _____

2. Present Designation of the applicant: _____

3. Present status of the applicant: _____

(Permanent/Quasi Permanent/Temporary)

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

5. Name of Supervisor from the sponsoring organization: _____

(Biodata of Supervisor to be enclosed giving details of designation, qualification, research experience etc.)

6. Details of facilities relevant to the research problem which will be made available to the candidate by the organization.

7. Statement of External Supervisor.

If Mr./Mrs./Ms. _____ is registered for the doctorate degree, I agree to act as his/ her research Supervisor jointly with the research Supervisor from the Institute.

Signature of External Supervisor

8. If Mr./Mrs./Ms. _____ is admitted to the Ph.D

Program, we shall allow him/ her to undergo the Program of studies and also to fulfill the residential requirement of the Institute, as per rules.

During the period of Doctoral Program, the candidate will be permitted to carry out his/ her research work at our laboratories/ organization and will be given the required facilities.

We also give our consent to _____ of our organization to supervise the Ph.D Project, jointly with Dr./Prof. _____ of College of Engineering Pune, who will work as internal Supervisor.

Signature and Seal of the Sponsoring Authority

Annexure D

(Letterhead of institute)

No Objection Certificate

_____ (Name of candidate) is working with
_____ (Name of Institute) as _____ (designation).

If _____ (Name of candidate) _____ is admitted in
_____ (Name of Branch/programme) at College of Engineering Pune, Shivajinagar,
Pune 411005, Maharashtra, India and as a part of Ph.D. programme, she/he will be relieved full
time to complete her/his Ph.D. course work.

_____ (Name of Institute) has No Objection in _____ (Name of candidate)
joining the Ph.D. programme at College of Engineering Pune, Shivajinagar, Pune 411005,
Maharashtra, India.

Name and Signature
Principal/Director

Date:

Place:

Appendix E

(This should be typed on a letter head of the Department)

No/COEP/Ph.D/

Date:

APPROVAL OF RESEARCH ADVISORY COMMITTEE

PLACE OF RESEARCH	College of Engineering Pune
DEPARTMENT	
1	Name of the Student
2	MIS No and Date Admission
3	Research Area

PANEL PROPOSED:

Evaluation Committee member	Name, Dept, Organization	Signature
Supervisor		
Co-Supervisor		
Domain Expert 1		
Domain Expert 2 (Optional)		
Expert outside Dept./Institute		

Sr. No.	Name of members present for DRC Meeting	Sign with Date
1	H.O.D	
2	Dept. Ph.D. Coordinator	
3		
4		
5		

(This should be typed on a letter head of the Department)

APPROVAL OF RESEARCH AREA SPECIFIC COURSES

PLACE OF RESEARCH	College of Engineering Pune
DEPARTMENT	
1	Name of the Student
2	MIS No and Date Admission
3	Research Area

	Name of the course	MOOC* or Institute offered course	Number of weeks / credits
Research Specific Course1			
Research Specific Course2			
Research Specific Course3			

*To ensure availability of Ph.D students on campus during the period of course work, maximum one MOOC will be permitted to students. In case more than one MOOC is to be offered, permission of Dean (Academics) is must.

Sr. No.	Name of members present for RAC Meeting	Sign with Date
1	Supervisor	
2	Co-Supervisor	
3	Domain Expert 1	
4	Domain Expert 2 (Optional)	
5	Expert outside Dept./Institute	

Remarks:

Approved/ Not Approved

Name and Signature of IRRC Members

Appendix F
Application for Registration of Ph.D Programme

To,
The Chairman, IRRC
College of Engineering Pune, Pune - 411005

Dear Sir,

I hereby apply for registration to the Ph.D programme. I state that I have not been admitted as a student for this or any other Degree in this or any other Institute/University. The required details about myself are as follows:

1. Name in full (in Capital Letters):_____
2. Date of Birth (dd/mm/yyyy):
3. Gender
4. Nationality
5. Category
6. Permanent Address.....
.....
7. Local Address.....
.....
8. Present Occupation/Employment:_____

(Give Name and Address of employer)

9. Particulars of Degrees previously obtained (attach attested copies of the statement of marks and certificates)

Degree University	Year of Passing	Subjects Offered	Class or Grade	Percentage or Grade Points
Bachelor's Degree				
Master's Degree				
Any other Degree				

10. Particulars of Publications:

Title of the Paper/ Book	Name of the Journal/ Publisher	Year of Publication

11. Details of Teaching Experience:

Name of the College	Subject(s) Taught	Year(s)

12. Details of professional experience, if any (Attach necessary Certificates):

(i) Nature of Professional Experience: _____

(ii) The Institute where Professional experience was gained: _____

(iii) Period of Professional experience: _____

13. (i) Title of Research Topic: _____

(ii) Course Works completion date and CGPA (attach copy of Grade Sheet):

14. Name of the Research Supervisor: _____

15. Name of Co-Supervisor, if any: _____

All the particulars given above are true to the best of my knowledge. I have read the Rules and regulations for the Degree of Doctor of Philosophy (Ph.D) and I undertake to abide by them. I also undertake to regularly report at the Place of Research unless otherwise permitted by the Head, Place of Research on the recommendation of the Research Supervisor.

Thanking you Yours Sincerely, Name of applicant and signature

Date:

Place:

Recommendation of the Supervisor

I,am willing to supervise the research work of Mr./ Ms.and I recommend that he/she be given registration for Ph.D programme.

Ref. No. of Recognition letter:

Presently..... students are pursuing their research work under my supervision.

Date:

Research Supervisor

Recommendation of the Co-Supervisor (if any)

I,am willing to co-supervise the research work of Mr./ Ms.and I recommend that he/she be given registration for Ph.D programme.

Ref. No. of Recognition letter (SPPU/IRRC):.....

Date: Research Co-Supervisor



Registration EVALUATION REPORT by Research and Recognition Committee (IRRC)

IRRC comments:

Approved/ Not Approved

Name and Signature of IRRC Members:

Date:

Appendix G

Topic Registration Report

Along with the application form (for Registration) the researcher has to submit six copies of his/her research proposal. This is a brief description of the research plan which should include:

- a) Rationale and significance of the study,
- b) A survey of work done in the research area and the need for more research,
- c) A statement of aims and objectives,
- d) Methodologies and techniques to be used,
- e) The kinds of conclusions expected and their possible value,
- f) Plan of research and
- g) Bibliography.

- The expected length of the research proposal is six to ten double-spaced A-4 size pages, with Report should be of maximum 10 pages, written in LaTeX.
- Font size should be 11pt, Times New Roman, with 1.5 line spacing

The names of the researcher and the proposed Supervisor and the topic of research should be printed and both the Supervisor and the researcher should sign the proposal.

Appendix H

(This should be on letterhead of the Department)

Topic Registration Seminar Evaluation Report

No/COEP/Ph.D/

Date:

TOPIC REGISTRATION SEMINAR EVALUATION REPORT

PLACE OF RESEARCH	College of Engineering Pune
DEPARTMENT	
1 Name of the Student	
2 MIS No	
3 Date of Admission Confirmation	
4 Ph.D Topic	
5 Date of Topic Registration Seminar	

EVALUATION REPORT:

Evaluation Committee/ Expert's comments:	
Evaluation	The research topic is approved/ not approved. The candidate is advised to go ahead with the topic and consolidate the title as early as possible.

Evaluation Committee member	Name, Dept, Organization	Signature
Convener		
Expert Examiner		
Expert Examiner		
Expert Outside Dept./Institute		

Head of Department

Dept. Ph.D Co-ordinator

Appendix I

(This should be on letterhead of the Department)

Topic Registration Seminar Attendance Report

No/COEP/Ph.D/

Date:

TOPIC REGISTRATION SEMINAR ATTENDANCE REPORT

PLACE OF RESEARCH	College of Engineering Pune
DEPARTMENT	
1 Name of the Student	
2 MIS No	
3 Date of Admission Confirmation	
4 Ph.D Topic	
5 Date of Topic Registration Seminar	

Evaluation Committee member	Name, Dept, Organisation	Signature
Convener		
Expert Examiner		
Expert Examiner		
Expert outside Dept./Institute		

Head of Department

Dept. Ph.D Co-ordinator

Appendix J

No.COEP/SS/Ph.D/

Date:

Ph.D Registration Confirmation/Decision

To,

The Topic registration documents were placed before the **Institute Research and Recognition Committee (IRRC)** held on date: _____. The decision(s) made by the IRRC is(are) as follows:

Candidate Details	Decision
Name of the Ph.D Candidate: MIS Number: Name of the Supervisor:	Topic: Topic is Approved/Not Approved: Remarks: Date of Registration: Period of Registration:

Please comply with the directions of IRRC.

Upon receiving a confirmation of Ph.D registration, the student is eligible to submit the thesis after the stipulated time period stated in the COEP's Ph.D Rules and Regulations towards awarding Ph. D. from the Research centre at College of Engineering Pune affiliated to Savitribai Phule Pune University.

**Dean Academics,
College of Engineering Pune.**

Appendix K

No/COEP/Ph.D/

Date:dd/mm/yyyy

COURSE WORK GRADE SHEET

PLACE OF RESEARCH	College of Engineering Pune
DEPARTMENT	
1	Name of the Student
2	MIS No
3	Date of Admission Confirmation

EVALUATION OF COURSES

Name of the course	Grade Allotted	Credits	CGPA
Research Methodology		04	
Research and Publication Ethics		02	
Writing Research Proposal		01	
Writing Review		01	
Specific advanced level course 1		03	
Specific advanced level course 2		03	
Specific advanced level course 3		03	
Seminar		02	

Controller of Examinations

Appendix L

Progress Work Evaluation

(This should be on letterhead of the Department)

No/COEP/Ph.D/

Date:dd/mm/yyyy

PROGRESS SEMINAR EVALUATION REPORT

PLACE OF RESEARCH	College of Engineering Pune		
DEPARTMENT			
1	Name of the Student		
2	MIS No		
3	Date of Provisional Admission		
4	Ph.D Topic		
5	Date of Confirmation of Registration		
6	Date of Progress Seminar		
7	Number of Publications	Conference: National:	International:
		Journal: National:	International:
8	Review Period		

EVALUATION REPORT:

Evaluation Committee/ Expert's comments:	
Consolidated Evaluation	Satisfactory/ Not Satisfactory
Expected period of Completion of	

Program	
---------	--

Evaluation Committee Members	Name, Dept, Organisation	Signature
Convener		
Expert Examiner 1		
Expert Examiner 2		
Expert outside Dept./Institute		

Explanations / Further remarks / suggestions: may be included on the reverse of this page.

Head of Department

Dept. Ph.D Co-ordinator

Appendix M

Progress Seminar Attendance

(This should be on letterhead of the Department)

No/COEP/Ph.D/

Date: dd/mm/yyyy

PROGRESS SEMINAR ATTENDANCE REPORT

PLACE OF RESEARCH	College of Engineering Pune
DEPARTMENT	
1 Name of the Student	
2 MIS No	
3 Date of Provisional Admission	
4 Ph.D Topic	
5 Date of Confirmation of Registration	
6 Date of Progress Seminar	

Evaluation Committee member	Name, Dept, Organisation	Signature
Convener		
Expert Examiner 1		
Expert Examiner 2		
Expert outside Dept./Institute		

Head of Department

Dept. Ph.D Co-ordinator

Appendix N

Progress Report

Every six-month researcher should submit the progress report

a) Introduction

b) Work done

c) Methodologies and Techniques to be used,

e) Findings

f) Work Proposed

g) Bibliography.

- The expected length of the report is 10-20 double-spaced A-4 size pages, with Report should be written in LaTeX or Word the style file is provided
- Font size should be 11pt, Times New Roman, with 1.5 line spacing

The names of the researcher and the Supervisor, Department etc should be printed on the cover page.

Appendix O

Submission of Synopsis

After the pre-submission seminar, the candidate has to submit ten hard copies and a softcopy of the Synopsis of his/her thesis through the Supervisor. A synopsis is viewed as a mini version of the thesis. It should provide a clear idea about what the thesis is. It should (a) state the objectives, nature and scope of the work done, (b) state the principle conclusions, and (c) state the contribution made to the body of knowledge on the subject. The expected length of the synopsis is ten double-spaced A-4 size pages. The synopsis will be put on the Institute website.

Appendix P

Thesis Format

The final Ph.D thesis shall be presented in accordance with the following specifications:

- (a) The paper used for printing shall be of A4size.
- (b) Printing shall be in a standardized form on both sides of the paper and in 1.5 line spacing.
- (c) A margin of 1.5 inches shall be on the left hand side.
- (d) The card for cover shall not be more than 330GSM.
- (e) The title of the thesis name of the candidate, degree, name of the Research Supervisor, place of research and the month and year of submission shall be printed on the title page and the front cover.
- (f) The hard-bound a cover of thesis shall be of black colour. The spine of the binding [side cover] should mention 'Ph.D thesis' on the top, name of the candidate and month and year.

Cover page for Ph. D. Thesis

**

<p>PH.D THESIS</p> <p>WRITE HERE NAME OF THE CANDIDATE</p> <p>MONTH & YEAR</p>	<p>“Write here title of the thesis in all upper-case (capital letters) with a ‘centre’ alignment. Place this title on the upper central part of the cover with sufficient margin from top and both sides. Use font size suitable to length of the title.”</p> <p>A THESIS SUBMITTED TO SAVITRIBAI PHULE PUNE UNIVERSITY</p> <p>FOR AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY (PH.D.) IN THE FACULTY OF</p> <p>SUBMITTED BY</p> <p>UNDER THE GUIDANCE OF</p> <p>RESEARCH CENTRE</p> <p>WRITE HERE MONTH & YEAR OF SUBMISSION</p>
--	--

Spine

Cover Page

Appendix Q
Certificate of the Research Supervisor

CERTIFIED that the work incorporated in the thesis

.....(Title)

Submitted by Mr./Mrs./Ms.

was carried out by the candidate under my supervision/ guidance. Such material as has been obtained from other sources has been duly acknowledged in the thesis.

(Research Supervisor)

Appendix R
Declaration by the Candidate

I declare that the thesis entitled
submitted by me for the degree of Doctor of Philosophy is the record of work carried out by me
during the period from..... to.....under the guidance of
..... and has not formed the basis for the award of any
degree, diploma, associateship, fellowship, titles in this or any other University or other
institution of higher learning.

I further declare that the material obtained from other sources has been duly acknowledged in
the thesis.

Signature of the Candidate

Date:

Appendix S
List of Referees

(This should be submitted on letterhead of the department)

To
The Director,
College of Engineering Pune, Pune – 411 005.

Date:dd/mm/yyyy

Sub: List of referees

Dear Sir,

A candidate namedhas worked under my supervision.

The thesis title is

.....
..... |

hereby submit the list of referees as below:

Sr. No.	Name, Organization	Address

Sign of Supervisor

Appendix T

Format of Referee's Comment

(to be communicated to referees on institute letter head)

To
The Director,
College of Engineering Pune, Pune – 411 005.

Sub: Review of Thesis

Dear

Sir, The review process of the thesis entitled
..... have
been completed. I recommend/do recommend the thesis for the award of Ph.D with the
following comment. The review questions to be asked at the time of viva-voce exam are
included on the separate page.

A	Accept the thesis as it is
B	Accept the thesis with the minor correction as mentioned in the review comments
C	Accept the thesis with the major correction as mentioned in the review comments
D	Reject the thesis

Sign of Referee

Appendix U

Consolidated Report of the Referees on the Viva Voce

The viva-voce of Mr./Mrs./Ms. was
Conducted on (day and date). The performance of the candidate was
satisfactory/ unsatisfactory.

We have conducted the open defence of the Ph.D thesis entitled:
.....
.....
..... in the College of Engineering Pune
..... on

The performance of the candidate was satisfactory/unsatisfactory. We recommend that he/she
be awarded the Ph.D Degree / should not be awarded the Ph.D Degree/ the viva voce be
arranged again on

(Supervisor)

(External Referee)

(Chairman)

Appendix V
(Viva Voce Attendance Sheet)

Ph. D. Viva Voce of Mr./Mrs./Ms.

.....

Subject.....

Date of VivaTimeVenue.....

List of the persons attending the Open Defence.

Name of the person

Signature

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.

Appendix W
Applying for Extension

To
The Director,
College of Engineering Pune, Pune – 411 005.

Sub: Request for extension of the registration period. Through Proper Channel

Dear Sir,

I have registered for Ph.D Program on dd/mm/yyyy, in the department of
..... under the supervision of

My topic of research is as below:

“ ” I have
submitted progress reports so far. For the sake of completion of work, I need an
extension of one year. You are requested for extension of my registration period.

Signature of Candidate

Sign of RAC Members with comment Sign of Dept. Ph.D Coordinator Sign of HOD

Appendix X

(This should be typed on a letter head of the Department)

No/COEP/Ph.D/

Date:

No Objection Certificate for Change of Supervisor/Addition of Co-Supervisor and Approval

PLACE OF RESEARCH	College of Engineering Pune
DEPARTMENT	
1	Name of the Ph.D Candidate
2	MIS No and Date of Provisional Admission
3	Research Area/Topic

Name of Present Supervisor:

Reason for Change of Supervisor/ Addition of Co-Supervisor: _____

Name of Proposed Supervisor:

Date: (Name and Signature of Ph.D Candidate)

I have no objection to Change of Supervisor/ Addition of Co-Supervisor of the above candidate.

Date: (Name and Signature of present Supervisor)

The area of the above Ph.D Candidate matches with my expertise and I am willing to guide the Ph.D Candidate.

Date: (Name and Signature of proposed Supervisor)

Recommended / not recommended

Date: (Chairman DRC)

Remarks:

Approved/ Not Approved

Date: (Name and Signature of IRRC Members)

Appendix Y

(This should be typed on a letter of the Institute)

No/COEP/Ph.D/

Date:

Ph.D Provisional Admission

To,

Based on the Ph.D admission round held in _____, I am happy to inform you that you have been provisionally admitted with effect from _____ to the Ph.D Programme in _____ at the Research Center namely, College of Engineering Pune, which is permanently affiliated to the Savitribai Phule Pune University, Pune.

Your MIS number:

Name of the Research Supervisor:

Your admission for Ph.D will be confirmed after the approval of Research Advisory Committee and approval of research area specific courses by the Institute level Research and Recognition Committee (IRRC).

(_____)
**Dean Academics,
College of Engineering Pune.**

Copy to :

1. Dr. _____ (Supervisor), _____ Department, COEP.
2. Dr. _____ (Co-Supervisor)
3. Institute Ph.D Coordinator, COEP
4. HoD, _____ Dept (Chairman, Department level Research Committee)
5. Student Section, COEP

Appendix Z

(This should be typed on a letter of the Institute)

No/COEP/Ph.D/

Date:

Ph.D Admission Confirmation

To,

Based on the Institute level Research and Recognition Committee (IRRC) meeting held _____, the following decision(s) is (are) made:

Candidate Details	Decision
Name of the Ph.D Candidate:	Research Advisory Committee (RAC): Approved/Not Approved
MIS Number:	Remarks: Topic Specific Course Works: Approved/Not Approved
Name of the Supervisor:	Remarks:

Please comply with the directions of IRRC.

Your registration for Ph.D will be confirmed after the successful completion of Course Work and Topic Registration Seminar and approval of the same by the Institute level Research and Recognition Committee (IRRC).

(_____)
**Dean Academics,
College of Engineering Pune.**

Copy to :

1. Dr. _____ (Supervisor), _____ Department, COEP.
2. Dr. _____ (Co-Supervisor)

3. Institute Ph.D Coordinator, COEP
4. HoD, _____ Dept (Chairman, Department level Research Committee)
5. Student Section, COEP

.....