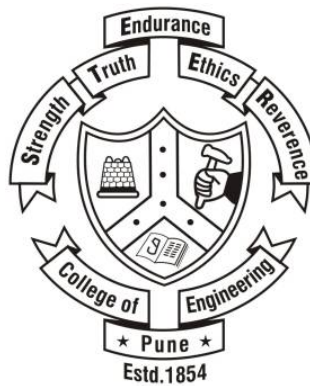**RULES AND REGULATIONS**

(Effective from Academic Year 2021-2022)

Doctoral Degree (Ph.D) Programme

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. Visversvaraya, 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 Programmes 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 Programmes being offered and enrollment of research candidates for Ph.D Programmes 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 Programmes at COEP

Institute offers Ph.D Programmes, 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 Programme 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 Programme 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 Programme. 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 Programmes: 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 Programmes. 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 Programmes"* in various domains Science, Engineering, Technology and Humanities. The Institute envisages establishing the liberalized research Programmes, 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 Programmes, 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 Synopsis Submission Seminar)

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

Rules and Regulations

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

Following candidates aspiring to seek admissions to Autonomous Ph.D Programme 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 Programme 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 Programme 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 Programme, 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 Programme 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 Programme. 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 Programme 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 Programme through the Ph.D admission process. Such candidates while engaging a reduced academic load can pursue the research Programme 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 Programme 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. Programme 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/child care leave once in the entire duration of Ph.D for up to 240 days.

3.12 Every admitted 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 Programme. However, the break of study period shall not be counted for the MINIMUM DURATION of the

Programme. 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 Programme 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 Programme 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 Programme 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 Programmes will be through a two-stage process: Research Programme 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 registered for the Ph.D Programme 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 registration 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 Programme shall be as under:

8.1   The course work shall be treated as pre-requisite for Ph.D Programme. 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   The RAC for the candidate shall be confirmed by DRC and it shall get approved from IRRC **(Appendix E and Appendix Y).**

8.3   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.

8.4   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.

8.5   The domain Specific courses to be considered for course work shall be recommended by RAC.

8.6   The domain-specific course work shall be exempted for the candidates admitted to Integrated Ph.D Programme (M.Tech + Ph.D).

8.7   As per provisions of Ordinance 116 of SPPU, registered candidates shall not be allowed to register simultaneously for any other degree course.

8.8   All Ph.D candidates shall complete the Ph.D course work with a minimum grade of 'CC' 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 submit course work report in the prescribed format **(Appendix F).**

8.10 A candidate shall make an application in a prescribed format for Topic registration to Ph.D Programme, as given in (**Appendix G**) along with six copies of Topic registration report (**Appendix H**) and evaluation report by RAC (**Appendix I**) and attendance report (**Appendix J**). RAC will make appropriate commendations to the IRRC through Dean Academics and DRC, regarding the course work prescribed for the candidate and the Topic registration report. IRRC shall communicate the decision (**Appendix K).**

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:

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

9.1   **AICTE Doctoral Fellowship (ADF) Scheme**: Full time candidates admitted under AICTE ADF fellowship scheme shall be receiving monthly fellowship as per the declared norms by the AICTE.

9.2   **AICTE Quality Improvement Programme (QIP) Scheme**: Full time regular/ permanent faculty members of AICTE approved institutes admitted under AICTE QIP scheme shall be receiving the monthly fellowship as per the declared norms by the AICTE.

9.3   **COEP-Institute Doctoral Fellowship (COEP-IDF) Scheme:** Full time candidates shall be given opportunity to receive COEP-Institute Doctoral Fellowship (COEP-IDF) as per the guidelines provided by the institute (Appendix Z). This is subject to revision from time to time as notified by COEP.

9.4   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.

9.5 The above assistantships require that the candidate must assist in teaching or research, as assigned by the Institute/Department/Supervisor, to the extent of 8 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.

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 presentation 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 Programme shall stand cancelled automatically.

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

- o The Candidate has not paid the semester/annual fees within the stipulated time with the necessary fine.
- o The three consecutive six monthly progress reports are not submitted or not satisfactory.
- o RAC is not satisfied with the performance and accordingly recommended for cancellation.
- o The candidate wishes to withdraw the Programme and wishes to cancel his / her registration.
- o The candidate has not acquired appropriate credits of course works within the stipulated time.
- o On the moral turpitude/ disciplinary grounds of the candidate.
- o 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-Submission 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-Submission seminar along with RAC (including the external expert). 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 candidates have 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 SPPU, 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 Programme duration, IRRC shall examine such cases approve/disapprove submission of thesis accordingly.

16. Thesis Evaluation

16.1 After IRRC approving the panel of examiners for a Ph.D candidate for thesis evaluation, the Chairperson of IRRC shall select the three examiners out of this panel. The Controller of Examinations (CoE) shall invite these three examiners 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, Head of the Department and the Dean Academics shall appoint a senior Supervisor to act as an external examiner for the defense of the thesis. In case the Internal 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 and the 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

Programme 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 Programme 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 Programme 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 Programme 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 Programme

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 Programme 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 Programme 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 form the Institute.

Signature of External Supervisor

8. If Mr./Mrs./Ms._____is admitted to the Ph.D Programme, we shall allow him/ her to undergo the Programme of studies and also to fulfill the residential requirement of the Institute, as per rules.

During the period of Doctoral Programme, 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

Appendix 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 (Optional)		
Dept Domain Expert 1		
Dept Domain Expert 2 (Optional)		
Expert from allied Department		
Expert outside Institute		

Sr. No.	Name of members present for DRC Meeting	Sign with Date
1	H.O.D	
2	Dept. Ph.D. Coordinator	
3	Member1	
4	Member2	
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 Provisional Date of Admission	
3	Research Area	

	Name of the course	MOOC* or Institute offered course	Number of weeks / credits	Semester-Odd/Even
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 (Optional)	
3	Dept Domain Expert 1	
4	Dept Domain Expert 2 (Optional)	
5	Expert from allied Department	
6	Expert outside Institute	

Remarks:

Approved/ Not Approved
Name and Signature of IRRC Members

Appendix F

Course Work Evaluation

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 G

Application for Topic Registration

To,

The Chairman, IRRC

College of Engineering Pune, Pune - 411005

Dear Sir,

I hereby apply for registration to the Ph.D Degree. I state that I have not been admitted as a Candidate for this or any other Degree in this or any other Institute/University. The required details about me 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 Grade	Percentage 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:_____

_____

14. Name of the Research Supervisor:_____

(under whom I propose to work for my Ph.D)

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 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

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 provisional admission.

Ref. No. of Recognition letter:...

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

Date: Research Supervisor

Appendix H

Topic Registration Report

Along with the application form for Registration, the researcher has to submit a copy 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 I

Topic Registration Seminar Evaluation Report

(This should be on letterhead of the Department)

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:	
Average 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
Supervisor		
Co-Supervisor (Optional)		
Dept Domain Expert 1		
Expert from allied Department		
Expert outside the Institute		

Head of Department   **Dept. Ph.D Coordinator**

Research and Recognition Committee (IRRC) EVALUATION REPORT:

IRRC comments:

Approved/ Not Approved

Name and Signature of IRRC Members

Appendix J

Topic Registration Seminar Attendance Report

(This should be on letterhead of the Department)

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, Organization	Signature
Supervisor		
Co-Supervisor (Optional)		
Dept Domain Expert 1		
Expert from allied Department		
Expert outside the Institute		

Head of Department   **Dept. Ph.D Coordinator**

Appendix K

No.COEP/SS/Ph.D/
Date:

Confirmation of Topic Registration

To,

Name of Ph.D student:

MIS number:

Research Center:

With reference to the relevant documents submitted by the Ph.D student:

On verifying the relevant documents by **Research and Recognition Committee (IRRC)**, your Ph.D topic registration is evaluated as

Faculty: Engineering

Research Supervisor:

Research Co-Supervisor:

Ph.D Topic:

Ph.D Topic Registration: Confirmed

Date of Registration:

Period of Registration:

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

Dean Academics,
College of Engineering Pune.

Progress Work Evaluation

(This should be on letterhead of the Department)

No/COEP/Ph.D/   Date:

PROGRESS SEMINAR EVALUATION REPORT

PLACE OF RESEARCH		College of Engineering Pune	
DEPARTMENT			
Name of the Student			
MIS No			
Ph.D Topic			
Date of Topic of Registration			
Date of Progress Seminar Presentation			
Number of Publications		National Conference	
		National Conference	
		International Conference	
		Scopus Index Conference	
		National Journal	
		International Journal	
		SCI Journal	

EVALUATION REPORT:

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

Evaluation Committee Members	Name, Dept, Organization	Signature
Supervisor		
Co-Supervisor (Optional)		
Dept Domain Expert 1		
Expert from allied Department		

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

Head of Department   **Dept. Ph.D Co-coordinator**

Progress Seminar Attendance

(This should be on letterhead of the Department)

No/COEP/Ph.D/   Date:

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, Organization	Signature
Convener		
Expert Examiner 1		
Expert Examiner 2		
Expert outside Dept./Institute		

Head of Department   **Dept. Ph.D Coordinator**

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 in1.5 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 color. 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

PH.D THESIS

WRITE HERE NAME OF THE CANDIDATE

MONTH & YEAR

"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."

**A THESIS SUBMITTED TO
SAVITRIBAI PHULE PUNE UNIVERSITY**

**FOR AWARD OF DEGREE OF
DOCTOR OF PHILOSOPHY (PH.D.)
IN THE FACULTY OF ………**

SUBMITTED BY
……………………………….

UNDER THE GUIDANCE OF
………………………..
…………………………….

RESEARCH CENTRE
………………………
……………………………
………………………

WRITE HERE MONTH & YEAR OF SUBMISSION

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   Date:

The Director,

College of Engineering Pune, Pune – 411 005.

Sub: List of referees

Dear Sir,

   A candidate named ....has worked under my supervision. The thesis title is

………………………………………………………………………………………………………

…………………………………………………………………………………………….. I

here by 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 defiance 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 Viva ………………………Time ………………Venue………..……………….

List of the persons attending the Open Defense.

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 Programme 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 PhD 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 PhD 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 PhD Candidate matches with my expertise and I am willing to guide the PhD 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

No.COEP/SS/Ph.D/
Date:

Decision of IRRC on RAC and Research Area Specific Courses Approval

To,

    (Name of the Research Supervisor)
    (Dept)

The 1st meeting of the Institute Research and Recognition Committee (IRRC) was convened on _____ (date) and the relevant documents submitted for the below mentioned Ph.D candidate under your supervision were presented before the IRRC towards the approval of the candidate's RAC and Research Area Specific Courses;

  Name of Ph.D candidate:
  MIS number:

On verifying the relevant documents, the IRRC has conveyed the following decision:

Approval status of the candidate's RAC and Research Area Specific Courses	*Approved / Not approved*
Remarks given by IRRC	

  You are required to comply with the decisions of IRRC and communicate to the Students Section of COEP through the candidate's RAC and DRC at the earliest.

                                        Dean Academics,
                                        College of Engineering Pune.

Appendix Z

COEP-INSTITUTE DOCTORAL FELLOWSHIP (COEP-IDF) SCHEME

GUIDELINES

1.0 Objectives

1.1   To promote the research culture at College of Engineering Pune

1.2   To promote collaborative research between Institute and Industries leading to technology transfer.

1.3   To nurture talents for technical research, leading to startups, publications, and patents.

2.0 Eligibility Criteria for Award of Fellowship

2.1   The Fellowship will be granted to the full-time research scholars admitted to the Ph.D. Programme.

2.2   The candidate must have secured a minimum cumulative grade point average (CGPA) of 7.0 on the scale of 10 (or minimum 65% marks) or equivalent at both Bachelors and Masters.

2.3   The candidate should be less than 45 years of age as on the date of application for the Doctoral Fellowship Programme.

2.4   A research supervisor will be allocated only one full-time research scholar with Institute Doctoral Fellowship for three years provided he/she does not have a full-time Ph.D. scholar under ADF or QIP scheme. Moreover, faculty can have more than one full-time Ph. D fellow under his/her R and D project from any funding agency, both public and private. However, no two full-time candidates will be given to a research supervisor from COEP's fellowship grant, i.e., COEP-IDF. Moreover, no more than four full-time fellowships per department per year will be awarded, not exceeding ten such Fellowships per department at any given point in time.

2.5   Merit will be decided based on interview marks at the time of admission. If there is a tie between two candidates on marks, preference will be given to CGPA or marks at the Postgraduate level.

2.6   Department level Research Committee (DRC) shall recommend the name of the research scholar and will be approved by Institute level Research and Recognition Committee (IRRC).

3.0 Duration of the Scheme:

3.1 The duration of the scheme shall be for a period of 3 Years based on the six-monthly performance of the Scholar in the research work.

4.0 Amount of Fellowship under COEP-IDF

4.1 The Fellowship will be Rs. 25,000/- per month for the first year, Rs.27500/- per month in 2nd year, and Rs.30000/- per month in the 3rd year. Such research scholars will not be entitled to HRA and contingency grants. However, research scholars pursuing their research may be provided with hostel accommodation in the Institute, if available.

5.0 Terms and conditions

5.1 Disbursement of Fellowship will start from the date of provisional admission to the Ph.D. programme. Course work completion and topic registration for a research topic for a Ph.D. within two semesters from the date of provisional admission is mandatory as a research scholar. If a candidate has not completed these requirements, Fellowship will be discontinued.

5.2 In the cases where the Fellowship has been discontinued as per clause (a) above, the Fellowship may be resumed after confirmation of the registration of Ph.D. However, the maximum tenure of Fellowship in such cases will be limited to three years only from the date of provisional admission as a full-time research scholar. However, in exceptional cases, the Dean (Academics) may recommend to the Academic Council for the continuation of Fellowship for one more year upto the fourth year only.

5.3 The fellowship awardees shall submit a six-monthly progress report through the Research Supervisor to Departmental Research Committee (DRC) or Institution Research and Recognition Committee (IRRC).

5.4 The synopsis report should be submitted by the awardees through the Research Supervisor, DRC, to IRRC.

5.5 The awardees shall devote full time to research during the tenure of Fellowship and will not be permitted to take any part-time/full-time assignment. While drawing COEP-IDF fellowship, he/ she will not accept any salary, Fellowship, or any type of financial assistance from outside the Institute during the tenure of Fellowship at COEP, if it is known that drawing income from external sources then the entire amount of

Fellowship drawn so far by the candidate, since his/her provisional admission, will have to be refunded to the Institute. The nature of the candidature will not be changed during the programme. The research scholar shall not undertake any paid assignment during the tenure of the Fellowship (except in case of leave without Fellowship up to one academic year during the entire tenure). Incase the industry/external source decides to support the same Fellowship, COEP-IDF will be withdrawn from the remaining period from the research scholar. In case any research scholar receives any financial assistance from any other organization during the tenure of course, with due permission of the Institute, the Scholar will not be entitled to the Fellowship for the duration in which he/ she is availing such financial assistance, and it shall be resumed on discontinuance of such external financial assistance. Further, the period for which the Scholar has received external financial assistance shall be deducted from the maximum duration of the Fellowship.

5.6   The awardees shall give a declaration that if the results of the research are such that he/she can be utilized commercially by taking a patent or otherwise, commercial utilization and patent rights should be with the Institute, candidate, and supervisor as inventors. However, the rules of the Institute in this regard will be applicable.

5.7   The research scholar will submit a six-monthly attendance/ progress report through the research guide, Head of the Department to the student section of the Institute. It is to be further approved by the Dean Academics/ Director for the purpose of releasing Fellowship. The amount will be directly deposited in the bank account of the beneficiary through the Accounts section of the Institute.

5.8   If the progress of the candidate is not satisfactory as reported by the supervisor/Head of the Department, the Fellowship of the candidature will be terminated with immediate effect. This will not be revoked under any circumstances. In such a case or if the candidate cancels his admission, the entire COEP-IDF Fellowship amount paid from the date of provisional admission will have to be refunded by the candidate to the Institute. As affidavit in regards to clauses, 5.5 and 5.6 will have to be submitted by the candidate if he/she is selected for COEP-IDF Fellowship.

5.9   The Ph.D. rules/regulations of the COEP will be applicable to all admitted candidates under this scheme.

6.0 Leave

6.1 Research scholars are entitled to a maximum period of (i) 10 days Casual Leave (CL) and (ii) 30 days Medical Leave (ML)in a year in addition to public holidays as declared by the Institute. They are not entitled to any other vacations.

6.2 Candidates are eligible for maternity leave as per Institute norms. However, the maximum duration of the Fellowship will not be extended beyond the fourth year under any circumstances.

6.3 All kinds of leave should be approved by the research supervisor and Head of the Department. It shall be further submitted to the Dean Academics for approval.

7.0 Institute Teaching Assistantship (ITA)

7.1 An Institution teaching assistantship (workload) of 8 hours/week shall be given to Full-time research scholars undergoing a full-time Ph.D. programme under the COEP-IDF Fellowship scheme. It will be decided by the research supervisor and approved by the Head of the Department. It may include assistance in lab classes, tutorial support, etc. In case a teaching load beyond 8 hours/week is allotted, a candidate will be remunerated for the same as per institute norms.

7.2 Following action needs to be taken if the candidate leaves the Ph.D. programme before completion. The awardees shall submit an affidavit/ an undertaking that in case of his/her vacating the seat within the duration for which he/ she has been offered Fellowship, he/she shall be liable to refund the entire amount of Fellowship received by him/her till the date of his/her leaving the scheme.

7.3 In case any research scholar avails the break during the fellowship period on the medical ground with due permission of the Institute, the Fellowship will be discontinued from the month of such break and shall be resumed on rejoining the programme for the remaining period of Fellowship. However, the maximum tenure of Fellowship in such cases will be limited to 3 years from the date of provisional admission as a full-time research scholar.

8.0 Cancellation of Fellowship

8.1 The Fellowship is liable to cancellation in case of:

8.1.1 Misconduct.

8.1.2 Unsatisfactory progress of research work/ Course work completion and topic registration for Ph.D. within two semesters is mandatory from the date of provisional admission as a research scholar. If a candidate has not completed these requirements, then Fellowship will be discontinued.

8.1.3 He/ she is found ineligible later.

8.1.4 If it found at any stage that any false information furnished by the applicant or any fraudulent activity by the Scholar. Awardees shall lead to penal action against him/her.

8.1.5 The Fellowship may be terminated at any time during the tenure, and the decision of the Institute will be final and binding.

Format to be submitted by the research scholar after the First and second year for the release of Fellowship

1. Name of the Research Scholar: Ms./ Mr./Mrs.
2. Permanent address:
3. Local address:
4. Contact Number:
5. Email ID:
6. MIS Number:
7. Date of Admission:
8. Research Department:
9. Course Work Details :
   (a) Course work completed: Yes/ No
   (b) If Yes, Date of completion of course work:
10. Research Topic:
    (a) Research Topic approved: Yes/No
    (b) If yes date on which research Topic approved:
    (c) Title of the Research Topic:
    (d) Name of the Research Supervisor:
    (e) Designation of the Research Supervisor:
    (f) Mobile Number:
    (g) Email id:

11. Teaching load:

12. Attendance:

13. Summary of Research work :

14. Number of Papers Published in indexed / peer reviewed Journals after the date of admission under the Doctoral Fellowship scheme with necessary proof:

    (a) Scopus indexed Conference

    (b) SCOPUS indexed journal

    (c) SCI indexed Journal

16. Patent:

17. Product Development:

18. Other:

In view of the above marked performance of the research scholar and also the fact that he/she has worked as per the University norms Ms/ Mr………………… ………………. is recommended for Fellowship for the next year.

Name and Signature   Name and Signature

Research Supervisor   Head of the Department

…………………………………….