

**SCHOOL OF ENGINEERING & TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM**

(Women's University)

TIRUPATI – 517 502, ANDHRA PRADESH

**Department
of
Computer Science and Engineering**



Ph.D. (CSE) DEGREE

REGULATIONS & SYLLABUS

Effective from 2019-20 under CBCS

Website: www.spmvv.ac.in

SRI PADMAVATI MAHILA VISVAVIDYALAYAM, TIRUPATI
(Women's University)

RESEARCH REGULATIONS AND RULES FOR M.Phil./Ph.D. FOR THE ACADEMIC YEAR
2019-20

Research programmes leading to award of M.Phil. and Ph.D. degrees are offered in the teaching departments/centres of the University colleges, its affiliated colleges and research organizations recognized by the University as the research centres. These regulations will come into force from the 2018-19 research admissions.

1. Departmental Research Committee (DRC)

1.1 Formation of DRC

Every academic department must have a Departmental Research Committee (DRC). The term of the Departmental Research Committee is for a period of three years or is coterminous with Chairperson, Board of Studies whichever is earlier.

The composition of the Committee is as follows: 3 Professors, 2 Associate Professors, 2 Assistant Professors, Head of the Department and Chairman, Board of Studies. One extra person may be included from any National/International R&D organizations. All members must have doctoral degrees.

The Head of the Department is the Convener of the Committee. The Chairman, Board of Studies is the Chairman of the Committee. If there are no adequate number of Faculty in any cadre in the Department, those places may be filled in by the Faculty of other cadres.

1.2 Functions of DRC

The functions of the Departmental Research Committee are :

1. To fix up the number of seats in M.Phil./Ph.D. to be filled up every year for research admissions (the strength of the candidates with a guide at any time shall not exceed the number given in Research Regulations).
2. To approve the Academic Calendar for M.Phil./Ph.D. programmes for the academic year.
3. To decide areas or topics of research to be pursued by the M.Phil./Ph.D. students for that academic year at the time of admission.
4. To recommend syllabi for M.Phil./Pre-Ph.D. course work for approval by BoS.
5. To suggest panel of examiners and paper setters for M.Phil./Pre-Ph.D. examinations to the BoS.
6. To prepare Database of experts for each specialized area which can be used for the preparation of panel of examiners for adjudicating the M.Phil./Ph.D./ D.Litt./D.Sc. dissertations / thesis. The database may be periodically updated and made available to BoS.
7. To evaluate the progress in the research work of the scholars.
8. To participate in all the Viva-Voce examinations and seminars of the M.Phil./ Pre.Ph.D./Ph.D. programmes.
9. Any other functions referred to by the Convener, Board of Research Studies or the Vice-Chancellor.
10. Departmental Research Committee of the concerned department in the University campus shall process the submission of dissertation, etc for the scholars working in all the Research Centers both in the University Colleges and affiliated colleges, and departments without BOS. For all the admitted candidates into

M.Phil./Ph.D. (Full-Time/Part-Time), the DRC shall assign a guide as per the UGC/ University norms. The DRC shall follow the guidelines prescribed by the University from time to time.

11. All special cases which do not fall under the above categories shall be discussed at the Academic Senate for final recommendations.

2. Eligibility criteria to be a Research Supervisor and Co- Supervisor

- a) Any regular Professor/Associate Professor of the University with at least five research publications in refereed journals having science citation index/journals having impact factor given by Thomson Reuters/UGC listed journals and any regular Assistant Professor of the university with a Ph.D. degree and at least two research publications in refereed journals having science citation index/journals having impact factor given by Thomson Reuters/UGC listed journals and one year regular service in the University may be recognized as Research Supervisor.
- b) Only a full time regular teacher of the concerned University can act as a supervisor. The external supervisors are not allowed. However, Co-Supervisor can be allowed in inter-disciplinary areas from other departments of the same institute or from other related institutions with the approval of the Research Advisory Committee.
- c) Any permanent teacher, having put in two years of service after obtaining Ph.D. and possessing two publications as mentioned above, working in a P.G. Department of an affiliated college and recruited through a duly constituted selection committee is eligible to be recognized as a Research Guide on application.
- d) Any scientist or researcher working as a regular employee in an Institute / Research Centre recognized by University as a Research Centre having put up two years of service after obtaining Ph. D degree is eligible to be considered as research guide in given Department if he/she has publications as mentioned in (a) above.
- e) The DRC of the relevant Department processes the application for recognition as research guide and forward it to the Principal of the concerned University College. The Principal shall give necessary orders for recognition based on the recommendation of DRC and approval of Vice-Chancellor.
- f) Faculty on lien/deputation shall include an eligible teacher from their departments as co-guide for every research student working under their guidance. Further, in case the teacher extends his lien period beyond one year, the co-guide shall be nominated as the Principal guide and in case the teacher on-lien wishes to continue to guide the candidate he can do so as co-guide for a maximum of two/three years from the date of sanction of initial lien.
- g) The Faculty and Scientists from Institutions recognized as Research Institutions, interested to guide the research scholars registered for Ph.D. in University under part-time category may be permitted to be included as co-guide(s), while a teacher from the University will act as the guide.
- h) A retired teacher may act as Research Guide for full-time, if he/she is appointed as Emeritus Professor and or if he/she has a Major Research Project with Junior Research Fellowship/Senior Research Fellowship. Those faculty having Emeritus position or a Research Project beyond their retirement can act as guides for two years.
- i) Any retired teacher will continue to guide his/her already registered Ph.D. candidates for two years and should include a co-guide for each of his/her research scholar soon after his/her retirement.

- j) Faculty who resigned/retired voluntarily from service shall include an eligible teacher from their departments as co-guide for every research student working under their guidance. However, their guide ship will be terminated in two years from the date of resignation/voluntary retirement, while the co-guide will become the Principal Guide.
- k) Under the condition when a co-guide was not appointed in time, Rs.10,000/- penalty fee should be paid by the candidate at the time of submission of his/her thesis, if there is no eligible Professor to act as co-guide from the concerned department.
- l) Notwithstanding anything stated above, recognition may be bestowed on persons with exceptional merit by the Vice Chancellor.

3. Research Centres

3.1 Research Laboratories as Research Centres

Research laboratories of Government of India/State Government located in the State/R&D Centres of Public Sector Undertakings/Private R&D Centres of Industries with a turnover of not less than Rs.500 crores with at least two eligible Research Supervisors in the Department concerned along with required infrastructure, supporting administrative and research promotion facilities as per UGC Regulations shall be considered eligible to be recognized as Research Centres.

3.2 Affiliated Colleges as Research Centres

Colleges may be considered eligible to offer M.Phil./Ph .D programmes only if they satisfy the availability of eligible Research Supervisors, required infrastructure and supporting administrative and research promotion facilities as mentioned below -

- a) In case of science and technology disciplines, exclusive research laboratories with sophisticated equipment as specified by the Institution concerned with provision for adequate space per research scholar along with computer facilities and essential software, and uninterrupted power and water supply
- b) Earmarked library resources including latest books, Indian and International journals, e-journals, extended working hours for all disciplines, adequate space for research scholars in the Department/ library for reading, writing and storing study and research materials
- c) Colleges may also access the required facilities of the neighbouring Institutions/Colleges, or of those Institutions/Colleges/R&D laboratories/ Organizations which have the required facilities.
- d) The P.G. Course in Science /Arts and Commerce/ Engineering/Pharmacy must be in existence for at least five years
- e) Necessary amount per course as prescribed by the university should be invested for procurement of latest journals and books.
- f) An amount per course prescribed by the University should be invested to upgrade the Laboratory facilities for the courses.
- g) At least two regular eligible faculty members should be available for recognition as research guides in each subject who should be associated with the P.G. course.
- h) A minimum of two years working experience for the faculty in teaching the P.G. course in the college after obtaining Ph.D. having at least two research articles in journals having science citation index/journals having impact factor given by Thomson Reuters/UGC listed journals.

- i) Failure to ensure the recognized research guide's stay in the college for a period of three years from the date of admission of the candidates into research, the college has to pay a minimum penal fee of Rs.1 lakh for each scholar admitted.
- j) If the teacher is retired or leaves the Institution the research student may be transferred to any other eligible guide or to any other research centre recognized by University. For any reason, if that is not possible the teacher may have to suggest any person from any of the recognized research institutes.
- k) In case of admission in affiliated colleges recognized as research centers of University, there shall be a co-guide from the concerned academic department of the constituent college of University or PG center of University.

3.3 Process of recognizing research centres

The process of awarding recognition will be initiated on receipt of application from the Institute in a prescribed proforma. Recognition to these institutions will be approved by the Academic Senate based on the recommendations of a committee appointed by the Vice-Chancellor to examine the infrastructure and other facilities. These institutions will be required to bear the cost of inspection. Institutions thus recognized as research centers shall pay a recognition fee as prescribed by the University from time-to-time.

In case of institutions of national and international eminence, the Academic Senate may recognize them as research centers for offering Ph.D. programmes based on the information provided by the institutions and the recommendations of the Committee constituted by the Vice-Chancellor for examining the infrastructure and other facilities.

4. Admission Procedure – M.Phil./Ph.D.

The degree of Master of Philosophy (M.Phil.) is the first research degree and the study will provide the necessary advanced training in research methodology and recent developments in a subject. There will be direct admission into PhD Course or else PhD can be pursued after completing M.Phil.

4.1 Eligibility

M.Phil./Ph.D. can be pursued by candidates possessing the minimum qualifications as specified below either on Full-Time (FT) / Part-Time (PT) basis in the Faculties of Science, Arts, Humanities, Social Sciences, Fine Arts, Education, Physical Education, Commerce and Management Studies, Engineering, Science, Law and Pharmaceutical Sciences. Admissions into M.Phil./Ph.D. programme will be made within the framework of reservation rules in force prescribed by the Government of Andhra Pradesh from time to time.

4.1.1 Full-Time (FT)

- (a). Candidates for admission to M.Phil./Ph.D. programme shall have 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.
- (b). A relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade, may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled and other categories of candidates as per the decision of the University Grants Commission from time to time, or for those who had obtained their Master's degree prior to 19th September, 1991. The eligibility marks of 55% (or an equivalent grade in a point scale wherever grading system is followed) and the relaxation of 5% to the categories mentioned above are permissible based only on the qualifying marks without including the grace mark procedures.

4.1.2 Part-Time (PT)

Candidate satisfying the eligibility conditions noted under 4.1.1 above can be admitted as Part-time candidate through, entrance test, as per the following order of priority. Admission into Part-time category will be made on the basis of service seniority in the respective categories.

1. Regular Faculty working in the University or the P.G. Centers.
2. (a) Faculty working in Post graduate and Professional colleges having completed atleast two years of service. This provision is not applicable to Faculty teaching Physics, Chemistry, Mathematics and Humanities in professional colleges.
or
- (b) Faculty/Librarians/Asst. Librarians working in affiliated degree /PG colleges and Faculty teaching Physics, Chemistry, Mathematics and Humanities in professional colleges having completed atleast two years of service.
or
- (c) Faculty working in Polytechnic/Government or private aided Junior Colleges having completed at least four years of service. Seniority for candidates under each category shall be calculated with the following weightage.
 - (i) Teaching at P.G. level / Professional - five points for each completed year of service in colleges as specified in 2(a)
 - (ii) Teaching at graduate level/Professional - two points for each completed year of service in colleges as specified in 2(b).
 - (iii) Teaching at Polytechnic/ junior college - one point for every completed year of service as specified in 2(c).
3. Technical employees working in research institutes having completed atleast five years of service.

4.1.3 Extra-Mural Research (EMR Extramural)

- a. For admission into Ph.D. programme under Extra-mural category, there should be an Internal Guide recognized by the University in the recognized research institution where the candidate is working. In addition to the Internal Guide, a faculty member eligible to guide research from within the concerned Department of University or its PG Centers has to be included as an External Guide.
- b. Registration of a candidate under extramural category shall be done once in a year, i.e., in July every year.
- c. Eligibility for admission under Extramural category shall be as follows :
 - i. Scientists or technical Officers working in a research institution recognized by University with a P.G. or equivalent degree satisfying the eligibility conditions noted under 1.1.1 and having put in two years of experience (Ph.D. Part Time).
Or
 - ii. Research Scholars with P.G. or equivalent degree satisfying the eligibility conditions noted under 1.1.1 having a fellowship awarded by a duly constituted selection committee approved by University and attached to institutions recognized as Research Centers by University and having completed at least six months with scholarship tenable for a further period of two years (Ph.D. Full Time).

4.1.4 Conversion from Full-Time to Part-Time and Vice-Versa

- a. Candidates pursuing full-time Ph.D. programme may be permitted to convert into part-time Ph.D. programme provided they satisfy the eligibility conditions for part-time notwithstanding the length of service. However, the candidate has to pay the prescribed fee for such conversion. This conversion of full time to part time will be permitted only if one gets a job (Academic/Scientific). Full Time to Part Time conversion is allowed only after 9 months of registration and with the permission of the Guide(s), DRC

approval and with the permission of the Principal.

- b. Conversion from Part-time to full-time is not allowed, except in case of candidates joining under Faculty Development Programme or getting a National /State Government/State Government undertaking body Fellowship.

4.2 Procedure for admission

- a. Universities shall admit M.Phil./Ph.D. students through a Common Entrance Test conducted at the State level on behalf of the Universities concerned.
- b. The Universities shall decide on an annual basis through their academic bodies a predetermined and manageable number of M.Phil. and/or Ph.D. scholars to be admitted depending on the number of available Research Supervisors and other academic and physical facilities available, keeping in mind the norms regarding the scholar- teacher ratio, laboratory, library and such other facilities;
- c. The Universities shall notify well in advance in the institutional website, the number of seats for admission, subject/discipline-wise distribution of available seats, criteria for admission and procedure for admission and all other relevant information for the benefit of the candidates. The same shall be communicated to the Convener for Common Research Entrance Test. In turn the Convener has to notify through advertisement in atleast two national news papers of which one shall be regional language. The advertisement shall contain the information with respect to number of seats for admission, subject/discipline wise, distribution of available seats, criteria for admission, procedure for admission, examination centres and all other related information for the benefit of the Candidates.
- d. Admissions to the Foreign nationals will be as per the UGC guidelines.
- e. Scientists having minimum of 10 years regular service/ Candidates having JRF/any national fellowships working at national laboratories are eligible for extramural research admissions without entrance test.

4.2.1 Entrance Test

Universities shall admit candidates by a two stage process, i.e., entrance test and interview.

4.2.1.1 Scheme of the Entrance Test

An Entrance test shall be conducted for 180 marks. The Entrance Test consists of two parts, i.e., Part-A and Part-B. Part-A shall be the Teaching and Research Aptitude for 90 marks, whereas Part-B shall be the subject specific for 90 marks. There will be 1/6 negative mark for each wrong answer.

4.2.1.2 Syllabus of the Entrance Test

Part-A shall be the Teaching and Research Aptitude on the lines of UGC NET Paper-I Syllabus. For Paper-II, Syllabus shall be Paper II of the UGC NET for the subjects for which UGC is conducting NET; CSIR-NET Syllabus for Sciences; GATE Syllabus for Engineering; and GPAT Syllabus for Pharmacy. For the other subjects, University shall prepare the syllabus.

4.2.1.3 Qualifying marks in the Entrance Test

An Entrance Test shall be conducted with qualifying marks as 50% for open category candidates and 45% for OBC/SC/ST/PH categories.

4.2.1.4 Interview

Qualified Candidates in the Entrance Test will be called for interview/viva-voce by the concerned University Department where the candidates are required to discuss their research interest/area through a presentation before a duly constituted Committee. Interview is for 20 marks.

Interview Committee shall consist of three members; Head of the Department, Chairman, Board of Studies and one Senior Faculty member from the Department nominated by the Vice-Chancellor.

The interview shall also consider the following aspects, viz. whether:

- the candidate possesses the competence for the proposed research;
- the research work can be suitably undertaken at the Institution/College;
- the proposed area of research can contribute to new/additional knowledge.

4.2.1.5 Ranks/Final Marks

Admissions Committee will give ranks/final marks awarded out of 200 after clubbing the marks of entrance test (180 marks) and interview marks (20 marks).

4.3 Admission without Entrance Test

- a) M.Phil./Ph.D. Admissions shall be given without Entrance Test for those students who qualify UGC-NET/UGC-CSIR NET JRF/teacher fellowship holder/National fellowship holder twice in a year, i.e., in January and in July of the calendar year.
- b) Faculty Development Programme - Regular Faculty working in University affiliated colleges/ University local area colleges and institutions intending to pursue M.Phil./Ph.D. programme under FDP or other similar programmes would be required to get their nominations processed by the concerned agencies and join in respective colleges and departments either in the month of January or July in a calendar year.

4.4 Allocation of Research Supervisor

The registration of a candidate can be done either at university department or any Institution recognized by the university as a centre of research.

1. The allocation of Research Supervisor for a selected research scholar shall be decided by the Departmental Research Committee (DRC) concerned depending on the number of scholars per Research Supervisor, the available specialization among the Supervisors and research interests of the scholars as indicated by them at the time of interview/viva voce.
2. In case of topics which are of inter-disciplinary nature where the Department concerned feels that the expertise in the Department has to be supplemented from outside, the Department may appoint a Research Supervisor from the Department itself, who shall be known as the Research Supervisor, and a Co-Supervisor from outside the Department/ Faculty/College/Institution on such terms and conditions as may be specified and agreed upon by the consenting Institutions/Colleges.
3. The Number of Research Scholars to be allotted to each teacher is as follows:

Not more than two Ph.D. scholars should be registered with a supervisor per year. A Research Supervisor, who is a Professor, at any given point of time, cannot guide more than three (3) M.Phil., and Eight (8) Ph.D. scholars (both Full-time and Part-time). An Associate Professor as Research Supervisor can guide up to a maximum of two (2) M.Phil. and six (6) Ph.D. scholars (both Full-time and Part-time) and an Assistant Professor as Research Supervisor can guide up to a maximum of one (1) M.Phil. and four (4) Ph.D. scholars (both Full-time and Part-time).

4.5 Change of Guide

If a candidate wishes to change a guide or include a co-guide for valid reasons, the request may be considered as per the merits of the case. However, such cases where the candidate is permitted, he/she can submit the thesis only after one year from the date of change of guide or inclusion of additional guide.

5. Course Work and Evaluation - M.Phil. Programme

The requirements for the award of M.Phil. Degree shall be the completion of the course work and submission of dissertation based on the research work carried out under the supervision of a recognized guide in the University Department or in its post-graduate centers or in the institute recognized by the University for the purpose. Prior to submission of the dissertation, the student shall make a presentation (Pre-talk) in the department.

5.1 Duration

- a. For Full-time research, M.Phil. programme shall be for a minimum duration of two (2) consecutive semesters / one year and a maximum of three (3) consecutive semesters / 1 ½ years. For Part-time research, minimum duration is 2 years and the maximum duration is 3 years.
- b. Registration of the Candidate under full-time and part-time M.Phil. programme category shall lapse after the completion of maximum period.
- c. In deserving cases, the Principal concerned in the University campus college may permit extension of time for candidates pursuing M.Phil. (Full-Time) up to a maximum period of six months and for candidates pursuing M.Phil.(Part-Time) up to a maximum period of one year from the date of expiry of registration. The candidates who have excellent progress and who have got employment and up on the recommendation of the concerned DRC may be considered for conversion of their full-time programme to part time provided they have fulfilled the attendance criteria and passed the M.Phil. written Examinations.
- d. Women candidates and Persons with Disability (more than 40% disability) may be allowed a relaxation of one year for M.Phil. and two years for Ph.D. in the maximum duration prescribed. In addition, the women candidates may be provided Maternity Leave/Child Care Leave once in the entire duration of M.Phil/Ph.D. for upto 240 days.

5.2 Attendance

A full-time candidate shall be required to put up a minimum of 75% attendance. However, candidates with not less than 66% of attendance can be considered for condonation on medical grounds.

5.3 Progress monitoring

A research scholar along with progress report shall appear before the Committee consisting of Research Guide, Head of the Department and Chairman, Board of Studies once in six months to make a presentation for evaluation on the following. The Committee will evaluate the progress and allot marks.

Full-time M.Phil.

	Open Seminar Presentation on	
I Semester End	Chosen research topic	50 marks – 2 Credits
II Semester	Part-I Examination Seminar	
II Semester End	Published/to be published research paper of the Scholar (Research Paper 1)	50 marks – 2 Credits
	(Presentation of paper in the Seminar/ Conferences) Pre-talk on the Thesis	50 marks – 2 Credits

Part-time M.Phil.

	Open Seminar Presentation on	
II Semester End	Chosen research topic	50 marks – 2 Credits
II/III Semester End	Part-I Examination Seminar	
III Semester End	Published/to be published research paper of the Scholar (Research Paper 1)	50 marks – 2 Credits
IV Semester	Presentation of paper in the Seminar/ Conferences Pre-talk on the Thesis	50 marks – 2 Credits

Out of 6 credits, candidate has to secure 4 credits to become eligible for the submission of the Dissertation.

5.4 Course Work

- The credit assigned to the M.Phil. course work shall be 14 credits (Three Theory Papers, each 4 credits + One Seminar Paper, 2 Credits).
- The Department where the scholar pursues his/her research shall prescribe the course(s) to him/her based on the recommendations of the DRC.
- Course work for M.Phil. Part-I/Pre. Ph.D. Examination consists of the following four papers.

Paper – I: Research Methodology which could also cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, field work, etc. for 100 marks/Four Credits.

Paper – II: Advanced Subject Paper/Recent Advances in the Subject for 100 marks/Four Credits

Paper – III: Paper on research Area for 100 marks/Four Credits

Paper – IV: Open Seminar for 50 marks/Two Credits

Seminar Examination Committee shall consist of the concerned Research Guide, Head of the Department and the Chairman, Board of Studies. The candidate shall give a seminar on the research topic emphasizing the importance of the problem, review of literature, methodology and techniques to be adopted including interpretation of data and the expected outcome. The seminar is open to all members of the department.

- In case of full-time scholars, Pre. Ph.D./Part-I Examination examinations are to be conducted after 9 months and before one year from the date of registration, while in case of part-time candidates the examination is to be conducted after 18 months and before the completion of 2nd year from the date of registration. The date of payment of fee at the time of admission will be treated as the date of registration.
- The following are the credits of M.Phil. programme

Part-I	Paper-I	4 credits
	Paper-II	4 credits
	Paper III	4 credits
	Seminar	2 credits
	Progress monitoring Seminar Presentations	6 credits
Part-II	Dissertation	8 credits
	Viva Voce	2 credits

5.5 Evaluation of M.Phil. Course Work

- The panel of paper setters and examiners for Paper-I, II & III should be provided by the Chairperson, Board of Studies from the list approved by Board of Studies.
- Evaluation of the Paper-I, II & III of Part-I Course work shall be double valuation with TWO External Examiners.
- An M.Phil. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the dissertation/thesis.
- Failed Candidates in first attempt will be given only one another chance to qualify in the examination. Registration for appearing the examination shall be considered as an attempt.

5.6 Submission of Dissertation

- i. An M.Phil. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work and candidate has to secure 4 credits out of 6 credits in the progress monitoring seminars in order to be eligible to submit the dissertation.
- ii. After successful completion of the research work under the supervision of the research guide and the pre-talk upon satisfactory completion of course work, obtaining the marks/grade prescribed as above, publishing research papers and presenting research papers in seminars/conferences, the candidate shall submit a dissertation embodying the results of his/her study. Three copies of the dissertation are to be submitted out of which one should be hard bound.

5.6.1 Pre-talk

Prior to the submission of the dissertation/thesis, the scholar shall make a presentation in the Department before the DRC of the Institution concerned which shall also be open to all faculty members and other research scholars. The feedback and comments obtained from them may be suitably incorporated into the draft dissertation/thesis in consultation with the Research Supervisor. Departmental Research Committee should certify the eligibility for the submission of Thesis.

5.6.2 Publication of research papers and seminar/conference paper presentations

M.Phil. scholars shall publish at least one (1) research paper in a refereed journal and make two paper presentations in conferences/seminars before the submission of the dissertation for adjudication and produce evidence for the same in the form of presentation certificates and/or reprints.

5.7 Evaluation of M.Phil. Dissertation

1. The dissertation will be evaluated for 200 marks (8 credits) separately.
2. The panel of examiners for valuation of the dissertation should be provided by the Chairperson, Board of Studies from the list approved by Board of Studies.
3. The M.Phil. Dissertation submitted by a research scholar shall be evaluated by two external examiners who are not in the employment of the same University.
4. In case the external examiner does not evaluate the dissertation within 2 months, he/she may be replaced by a new external examiner.

5. In case the examiner suggests modifications / revisions for the M.Phil. Dissertation work, the dissertation should be revised.
6. If both the external adjudicators recommends for award of the M.Phil. degree by awarding the marks, there shall be a Viva-Voce examination for 50 marks (2 credits) on the topic of dissertation which will be evaluated by a duly constituted committee. The viva-voce is open for all. The viva-voce committee shall consist of the Head of the Department, the Chairperson of Board of Studies, the research guide and a teacher who is a specialist in the subject of the dissertation nominated by the Vice-Chancellor. The Research guide is the convener of the viva-voce committee. Viva- voce examination in case of candidates from the University colleges and PG Centers will be held in the respective departments. However, in case of candidates registered in Research Centers recognized by the University the viva-voce examinations will be conducted by the HOD of the University department.
7. After the completion of the Viva-Voce examination, the Convener of the Viva-Voce Committee shall submit the recommendations along with two soft copies of the dissertation in DVD form for placing them in the University library and on SHODHGANGA INFLIBNET through UGC respectively.
8. Grades

Sl. No.	Range of Marks %	Grade	Grade Points	
1.	91-100	O	10	Outstanding
2.	81-90	A+	9	Excellent
3.	71-80	A	8	Very Good
4.	61-70	B+	7	Good
5.	56-60	B	6	Average
6.	50-55	C	5	Pass
7.	<50	F	0	Fail
8.		Ab	0	Ab (Absent)

The candidate must obtain a minimum of C Grade in each theory paper, seminar, dissertation and viva for a pass.

5.8 Conversion from M.Phil. to Ph.D.

A candidate who has been awarded M.Phil. degree can register for Ph.D. programme by applying within two months from the date of award of M.Phil. degree provided he/she gets the consent of a research guide from the same department. This provision is applicable for M.Phil. (Full-Time) to Ph.D. (Full-Time) and M.Phil. (Part-Time) to Ph.D. (Part-Time) conversions only. Notwithstanding anything contained in the above in exceptional cases, the Vice-Chancellor can review and take a decision which is final.

6. Course Work and Evaluation - Ph.D. Programme

6.1 Duration of the Programme

- a) A full-time Ph.D. student is required to spend the minimum prescribed period of three years, in the case of Master's Degree holders and two years in the case of M.Phil. degree holders, in the University or in one of the P.G. Centers or Institutions recognized by University as Centers of Research.
- b) The prescribed minimum period for Ph.D. part-time research with M.Phil. degrees is four years and five years for those without M.Phil. A part-time candidate employed in an outside institution will be required to spend at least six weeks every year in the concerned University Department during the prescribed total period of research.

- c) If a candidate pursuing Ph.D. programme under either Full-Time/Part-Time/Extramural is unable to complete the work in the prescribed period the Principal of the concerned constituent college can give extension of time up to six months from the date of expiry of registration beyond which the registration of the candidate ceases.
- d) A grace period of 30 Days will be given to the M.Phil./Ph.D. Research Scholars after completion of stipulated period for submission of thesis. After 30 days the candidate has to pay the Extension/Re-registration fee as prescribed in fee structure for submission of thesis. However, candidates who have excellent progress and who have got employment may be considered for conversion of their full- time programme to part time upon recommendations of the concerned DRC provided they have fulfilled the attendance criteria and qualified in the Pre-Ph.D. examination. Such candidates have to pay necessary conversion fee.
- e) If a candidate has completed the requirement earlier than the prescribed period, the Vice-Chancellor may permit for an early submission of thesis before six months provided the request is justified and substantiated by publications in refereed journals recommended by DRC & CRC.
- f) Women candidates and Persons with Disability (more than 40% disability) may be allowed a relaxation of one year for M.Phil. and 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 M.Phil/Ph.D. for up to 240 days.

6.2 Review of Progress

Research Scholars have to undergo progress evaluation test for every six months. The Candidate has to give an open seminar for every six months on the concerned research topics specified in the following table. The Committee consists of Guide, Head and Chairman, Board of Studies will award maximum marks of 50 for each seminar based on the candidate performance on the selected research topic. All the DRC members and other scholars have to participate in the seminar. If a candidate has not given progress evaluation test for two consecutive years then his/her registration will be cancelled. Research Centers affiliated with the University should submit the progress evaluation report of the Center every 6 months and also the progress evaluation results of the research scholars every 6 months. If any Research Center does not submit the activities and the progress of the Research of the concerned center the University Administration may cancel the research center.

A research scholar along with 10 copies of seminar paper shall appear before the Departmental Research Committee once in six months to make a presentation for evaluation on the following:-

Full-time Ph.D.

At the end of	Open Seminar Presentation on	Credits
I Semester	Chosen research topic	50 marks (2 credits)
II Semester	Part-I Examination Seminar	
III Semester	Published work in the chosen topic	50 marks (2 credits)
IV Semester	Published/to be published research paper of the Scholar (Research Paper 1)	50 marks (2 credits)
V Semester	Published/to be published research paper of the Scholar (Research Paper 2)	50 marks (2 credits)
VI Semester	Pre-talk on the Thesis	50 marks (2 credits)

Part-time Ph.D.

At the end of	Open Seminar Presentation on	Credits
I Year	Chosen research topic	50 marks (2 credits)
II Year	Part-I Examination Seminar	
III Year I Semester	Published work in the chosen topic	50 marks (2 credits)
III Year II Semester	Published/to be published research paper of the Scholar (Research Paper 1)	50 marks (2 credits)
IV Year I Semester	Published/to be published research paper of the Scholar (Research Paper 2)	50 marks (2 credits)
IV Year II Semester	Pre-talk on the Thesis	50 marks (2 credits)

Two credits shall be awarded for each presentation. Credits shall be awarded by the Committee constituted with the Head of the Department, Chairman Board of Studies and the Research Supervisor.

In case the progress of the research scholar is unsatisfactory, the Committee shall record the reasons for the same and suggest corrective measures. If the research scholar fails to get 60% of marks in progress evaluation, the Committee may recommend to the University with specific reasons for cancellation of the registration of the research scholar. For Ph.D., the Candidate has to secure a minimum of 6 credits (60% marks) out of total 10 credits (600 marks) during the last two years to become eligible to submit his/her Ph.D. Thesis.

6.3 Course Work

- The credit assigned to the Ph.D. course work shall be 14 credits (Three Theory Papers, each 4 credits + One Seminar Paper, 2 Credits).
- The Department where the scholar pursues his/her research shall prescribe the course(s) to him/her based on the recommendations of the DRC.
- Course work for Pre. Ph.D. Examination consists of the following four papers.

Paper – I: Research Methodology which could also cover areas such as quantitative methods, computer applications, research ethics and review of published research in the relevant field, training, field work, etc. for 100 marks/Four Credits

Paper – II: Advanced Subject Paper/Recent Advances in the Subject for 100 marks/Four Credits

Paper – III: Paper on research Area for 100 marks/Four Credits

Paper – IV: Open Seminar for 50 marks/Two Credits

Seminar Examination Committee shall consist of the concerned Research Guide, Head of the Department and the Chairman, Board of Studies. The candidate shall give a seminar on the research topic emphasizing the importance of the problem, review of literature, methodology and techniques to be adopted including interpretation of data and the expected outcome. The seminar is open to all members of the department.

- In case of full-time scholars, Pre. Ph.D. Examination examinations are to be conducted after 9 months and before one year from the date of registration, while in case of part-time candidates the examination is to be

conducted after 18 months and before the completion of 2nd year months from the date of registration. The date of payment of fee at the time of admission will be treated as the date of registration.

6.4 Evaluation of Ph.D. Course Work

- The panel of paper setters and examiners for Paper-I, II & III should be provided by the Chairperson, Board of Studies from the list approved by Board of Studies.
- Evaluation of the Paper-I, II & III of Part-I Course work shall be double valuation with TWO External Examiners.
- A Ph.D. scholar has to obtain a minimum of 55% of marks or its equivalent grade in the UGC 7-point scale (or an equivalent grade/CGPA in a point scale wherever grading system is followed) in the course work in order to be eligible to continue in the programme and submit the dissertation/thesis.
- Candidates who fail in first attempt will be given only one another chance to qualify in the examination. Registration for appearing the examination shall be considered as an attempt.

6.5 Exemption from Pre. Ph.D. Examination

Candidates already holding M. Phil. degree and admitted to the Ph.D. programme, or those who have already completed the course work in M.Phil. and have been permitted to proceed to the Ph.D. in integrated course, may be exempted by the Department from the Ph.D. course work. All other candidates admitted to the Ph.D. programme shall be required to complete the Ph.D. course work prescribed by the Department.

6.6 Requirements for the award of Ph.D. Degree

The requirements for the award of a Ph.D. degree are

- a) Candidates should have been qualified in Pre-Ph.D. Examination.
- b) Candidate should have been qualified in progress evaluation tests.
- c) Prior to submission of final copy of thesis the candidate should make a presentation of the Ph.D. thesis work (Pre-Talk).
- d) Candidate should have published at least two published research paper in a refereed Journal before the submission of the thesis for adjudication. In addition, two paper presentations in conferences/ seminars before the submission of the dissertation/thesis for adjudication and produce evidence for the same in the form of presentation certificates and/or reprints. The journal publications must be in journals having impact factor given by Thomson Reuters/Science Citation Index Journals/UGC listed journals.
- e) Candidate should submit a thesis based on the research work carried out under the supervision of one or more recognized research guides as per the University norms.
- f) After receipt of positive recommendations on the presentation of the thesis from adjudicators, the candidate should defend the thesis in a viva-voce examination successfully before a committee appointed by the Vice-Chancellor.

6.6.1 Pre-talk

Prior to the submission of the dissertation/thesis, the scholar shall make a presentation in the Department before the DRC of the Institution concerned which shall also be open to all faculty members and other research scholars. The feedback and comments obtained from them may be suitably incorporated into the draft dissertation/thesis in consultation with the Research Supervisor. Departmental Research Committee should certify the eligibility for submission of the thesis.

6.6.2 Publication/Presentation of research papers

Ph.D. scholars must publish at least Two (2) research papers in refereed journal and make two paper presentations in conferences/seminars before the submission of the dissertation/thesis for adjudication, and produce evidence for the same in the form of presentation certificates and/or reprints. The journal publications must be in journals having impact factor given by Thomson Reuters/Science Citation Index Journals/UGC listed journals.

6.6.3 Plagiarism test

"Plagiarism" includes an act of academic dishonesty and a breach of ethics. It involves using someone else's work as one's own. It also includes data plagiarism and self-plagiarism. Plagiarism would be quantified into following levels in ascending order of severity for the purpose of its definition:

- i. Similarities up to 30% including publications is allowed for submission.
- ii. Level 1: Similarities above 30% to 40%
- iii. Level 2: Similarities above 40% to 60%
- iv. Level 3: Similarities above 60%

6.6.3.1 Penalties for faculty and researchers

(i) Level 1: Similarities above 30% to 40%

Such Scholar shall not be allowed for submission of the Thesis and shall be asked to submit a revised thesis within a stipulated time period of not exceeding 6 months

(ii) Level 2: Similarities above 40% to 60%

Such Scholar shall not be allowed for submission of the Thesis and shall be asked to submit a revised thesis after a time period of one year but not exceeding eighteen months.

New research scholars shall not be allocated to such Research Supervisor for a period of two years.

(iii) Level 3: Similarities above 60%

Such Scholar shall not be allowed for submission of the Thesis and shall be asked to submit a revised thesis after a time period of three years.

New research scholars shall not be allocated to such Research Supervisor for a period of five years.

6.6.4 Submission of the Thesis

- a. After passing the Pre-Ph.D. examination and completing the research work, the candidate shall submit his/her thesis on the concerned topic of research.
- b. Research Scholars working in the University Campus shall submit Ph.D. Thesis through the concerned department in the campus. Whereas scholars working in all the Research Centers of University Colleges, Affiliated colleges, and other recognized Research Centers, will submit their Thesis through proper channel.
- c. Prior to submission of the thesis 10 copies of the synopsis along with soft copy should be submitted to the University.
- d. On completing the research work, the candidate is required to submit four copies of the thesis on the subject of his / her research. Out of four copies at least one should be hard bound and others shall be of soft bound.

- e. A candidate may utilize for his/her thesis the contents of any work which he/she may have already published on the subject. But he/she shall not submit the whole or any substantial part of the work for which a degree has been conferred on him/her by the University or any other University.
- f. The candidate shall enclose to his/her thesis, the printed contribution(s) to the advancement of the subject which he/she has published independently or jointly with others. (i) The thesis in all subjects shall be written and submitted only in English except in language subjects where the candidate shall have the option of writing the same either in English or in the language concerned. Where the thesis is submitted in a Language other than English, a detailed summary in English version of the thesis shall also be submitted.
- g. Candidates working for Ph.D. in subjects such as Music, Fine Arts and Theatre arts can write their thesis in English, Telugu or Hindi. If the thesis is not written in English a detailed summary in English should accompany the thesis.

6.7 Evaluation of Ph.D. Thesis

1. The Ph.D. thesis submitted by a research scholar shall be evaluated by at least three external examiners, who are not in employment of the same University, of whom ONE examiner shall be from out of State and one examiner shall be from outside the country. In the case of Indian Languages, there shall be no foreign examiner, where another out of State/within State examiner will evaluate.
2. The Research Supervisor shall submit to the Chairperson, Board of Studies three Panels of Experts in a confidential cover from research institutions of national importance and universities with not more than one expert from each institution/university in the related research area with full postal and e-mail addresses and contact numbers to the University as detailed below. Chairperson, Board of Studies with the approval of the BoS will submit above three Panels of Experts to the Examination Section.

Panel I - List of at least six Foreign Adjudicators

Panel II - List of at least six Indian Adjudicators outside the State of AP and Telangana (In case of Engineering, six adjudicators shall be from the national institutes/laboratories)

Panel III – List of at least six examiners from AP and Telangana States

3. The Ph.D. thesis shall be adjudicated by three examiners selected by the Vice-Chancellor one from Panel I; one from Panel II; and one from Panel III described above.
4. In case of theses in Fine Arts including Music and National Languages other than English, Panel –I may also be replaced by Indian Adjudicators. If all the three examiners recommend the thesis for the award of Ph.D. there shall be a viva-voce examination.
5. The Adjudicator's summary report of the thesis should be accompanied by a detailed report. In case the thesis is recommended for revision or rejected outright, the reason for the same has to be incorporated in the report.
6. If the reports of all the examiners are favourable, the candidate shall be permitted to take Viva-voce and he/she shall be awarded the Ph. D degree on the recommendation of the Vive-voce committee.
7. If all the examiners reject the thesis, the registration of the candidate stands cancelled.
8. If a thesis is approved by two examiners and suggested for revision by the third examiner or the thesis is approved by one examiner and suggested for revision by two examiners or all three examiners ask for revision, the candidate will be permitted to resubmit and it will be referred to the same examiners(s), who have suggested for revision and resubmission. At the time of resubmission, the guide has to certify that all the suggestions made by the examiner(s) have been incorporated. A minimum time limit of one month shall be enforced for resubmission in all such cases.

9. If two of the examiners approve the thesis and one rejects, or vice-versa or if one of the examiners approves the thesis, one rejects and the other asks for revision, the candidate may be permitted for resubmission. However, in such cases, the examiner(s) who have rejected the thesis shall have to be replaced by new examiner(s) while keeping the other examiner(s) the same. A minimum time limit of one month shall be enforced for resubmission in all such cases.
10. If two of the examiners ask for revision and one examiner rejects the thesis or one examiner asks for revision of the thesis and the remaining two reject the thesis, the thesis shall be rejected.
11. In a nutshell, the following are the guidelines for taking further course of action in recommending the thesis for the award of Ph.D. degree.

Sl. No.	Recommendation of the adjudicator(s)	Action on the further processing of the thesis
1	All the three adjudicators have recommended for the award of the degree	To constitute Viva-Voce committee
2	One/Two of the three adjudicators has/have recommended for revision of the thesis	To revise the thesis by the scholar on the suggestions of the adjudicator(s) and submit the revised thesis through proper channel certified by Research Guide. The thesis will be sent to the same adjudicator to evaluate the revised version
3	One of the three adjudicators has recommended for rejection of the thesis	To send it to another foreign/out of state/state adjudicator, as the case may be.
4	One examiner asks for revision of the thesis and the remaining two reject the thesis	To reject the thesis
5	All of the three adjudicators recommended for rejection of the thesis	To reject the thesis

6.8 Expediting evaluation process

1. The University shall develop appropriate methods so as to complete the entire process of evaluation of Ph.D. thesis within a period of six months from the date of submission of the thesis.
2. In cases where a foreign examiner is not fixed within 15 days from the date of giving e-mail or has not sent the report within three months from the date of dispatch of the thesis (by airmail), the Vice-Chancellor may consider the change of the foreign examiner with another foreign examiner.
3. In cases where an Indian examiner is not fixed within 15 days from the date of giving e-mail or has not sent the report within two months from the date of dispatch of the thesis (by airmail), the Vice-Chancellor may consider the change of the Indian examiners with another Indian examiner.

6.9 Ph.D. Open Viva-voce examination

- a) The public viva-voce of the research scholar to defend the dissertation/thesis shall be conducted only if the evaluation report(s) of the external examiner(s) on the dissertation/thesis is/are satisfactory and include a specific recommendation for awarding the Ph.D. Degree.

- b) The viva-voce examination, based among other things, on the critiques given in the evaluation report, shall be conducted by the Research Supervisor and at least one of the two Indian external examiners, and shall be open to be attended by Members of the DRC, all faculty members of the Department, other research scholars and other interested experts/ researchers.
- c) The viva-voce relating to Ph.D. thesis shall be conducted by a viva-voce committee to be appointed by the Vice-Chancellor. The viva-voce committee shall consist of
 - 1. Dean of the Faculty
 - 2. Research Guide cum Convener
 - 3. The Head of the Department (all the concerned Heads, in the case of interdisciplinary).
 - 4. The Chairperson of the Board of Studies (all the concerned chairpersons, in the case of inter-disciplinary)
 - 5. One of the Indian examiners who adjudicated the thesis (to be nominated by the Vice-Chancellor)
- d) A quorum with 1/3 of the members is required. However, one of the Indian Examiner must be present at the viva-voce examination.
- e) Research guide shall be the Convener for viva-voce committee. In case of Extramural candidate, the External Guide and for Part Time candidate the Guide from the University will be the Convener of the Viva-Voce Committee. Further wherever there is a co-guide, he will also be a Member of the Committee.
- f) In case if the guide superannuates from the University service or is on long leave/ deputation or cannot attend on any other valid reasons the co-guide/ Chairperson will be the convener.
- g) The Viva is open to all members of the department and allied departments. The candidate shall have to successfully defend his/her work to the satisfaction of majority members of the Viva-Voce committee.
- h) A candidate who is not successful at the Viva-Voce may be permitted to take the viva-voce a second time within a period of three months. No candidate shall be permitted to take the viva-voce more than twice. If the candidate fails for the second time, the case shall be disposed off by the Vice-Chancellor on its merits.
- i) After the completion of the Viva-Voce examination, the Convener of the Viva-Voce Committee will submit the recommendations along with the Corrected final copy of the thesis in Hard Bound and two soft copies in DVD form for placing them in the University library and on INFLIBNET through UGC, respectively.
- j) The Ph.D. degree shall be awarded only after uploading of the thesis in INFLIBNET (Shodhganga).

7. Self-submission

Self-submission by the University Faculty for Ph.D. degree is allowed for those having 10 years of teaching experience in the University or its PG Centers as per the submission procedure state above, i.e., duration from the date of registration (part-time), publication of research papers, seminar/conference presentations, plagiarism test, etc.

8. Provisional Certificate

Prior to the actual award of the degree, the degree-awarding Institution shall issue a provisional Certificate to the effect that the Degree has been awarded in accordance with the provisions of the UGC Regulations, 2016.

9. Treatment of Ph.D / M.Phil. through Distance Mode/Part-time

- a. Notwithstanding anything contained in these Regulations or any other Rule or Regulation, for the time being in force, no University shall conduct M.Phil. and Ph.D. Programmes through distance education mode.
- b. Part-time Ph.D will be allowed provided all the conditions mentioned in the extant Regulations are met.
- c. Ph.D. degrees which are pursued either full time or part time will be treated as degrees awarded through Regular Mode provided these are in conformity with the existing Statutes/Byelaws/Ordinances etc. of the degree awarding University. However, the Ph.D. acquired under distance mode is not permitted to consider as Regular Mode.

10. List of Research Scholars on website

The University shall maintain the list of all the M.Phil. / Ph.D. registered students on its website on year-wise basis. The list shall include the name of the registered candidate, topic of his/her research, name of his/her supervisor/co-supervisor, date of enrolment/registration.

11. Depository with SHODHGANGA INFLIBNET

Following the successful completion of the evaluation process and before the announcement of the award of the M.Phil./Ph.D. degree(s), the Institution concerned shall submit an electronic copy of the M.Phil. dissertation /Ph. D. thesis to the SHODHGANGA INFLIBNET, for hosting the same so as to make it accessible to all Institutions/Colleges.

12. M.Phil./Ph.D. degrees awarded by foreign Universities

If the M.Phil./Ph.D. degree is awarded by a Foreign University, the Indian Institution considering such a degree shall refer the issue to a Standing Committee constituted by the concerned institution for the purpose of determining the equivalence of the degree awarded by the foreign University.