

**POSTGRADUATE INSTITUTE OF SCIENCE (PGIS)
University of Peradeniya**



**RESEARCH PROJECTS FOR
M.Sc. DEGREE PROGRAMMES (SLQF Level 10)**

**GUIDELINES FOR STUDENTS AND SUPERVISORS
(2020)**

1. INTRODUCTION

Students following an M.Sc. Degree Programme (SLQF 10) at the PGIS are required to undertake a research project related to their area of specialization. This is a compulsory requirement for all students registered for the M.Sc. Programme. The research project is equivalent to 30 credits and the students are expected to carry out the project, write a thesis under the guidance of a supervisor/s within a period of 12 months and submit to PGIS for evaluation. The ability to select a research project of their interest in consultation with a supervisor/s, carrying it out independently with minimum guidance from the supervisor while adhering to accepted scientific standards, and completing it within the specified time frame are recognized as important skills that are needed to be developed as pre-requisite learning outcomes for entry into the world of scientific research.

2. THE PROCESS

- (i) Only those students who have successfully completed 30 credits of course work with a GPA of 3.00 or above are entitled to undertake the research project.
- (ii) The tentative title, the project proposal and the appointment of the supervisor/s shall be approved by the relevant Board of Study and the Coordinating Committee of the PGIS.
- (iii) If ethical clearance is required for the research study, the relevant application for ethical clearance should be submitted at least 2 months before the commencement of the project work. The written approval needs to be appended to the Thesis.
- (iv) The student will undertake his/her research project under the guidance of the supervisor/s. The programme coordinator shall arrange a seminar for the presentation of project proposals and preliminary literature survey within about 2 - 3 weeks of assigning the projects.
- (v) The student and the supervisor shall meet regularly, at least once a fortnight, to review the progress of the research and prepare for Mid-term Progress Report and Review Seminar scheduled after 6 months.
- (vi) If there are problems encountered in adhering to the time frame and other constraints, the problems should be brought to the notice of the supervisor/s and the M.Sc. Programme Coordinator without delay.
- (vii) The student shall present the status of his/her project, at a mid-term Progress Review Seminar arranged by the Coordinator about 6 months after assigning the projects. S/he shall also submit a written Report of progress at least a week before the oral presentation.
- (viii) The student shall complete the project, write a draft thesis and submit it to the supervisor for comments/corrections adhering to the time frame given in Table 1. When preparing the theses, the students are expected to read and follow the instructions and guidelines given in the 'PGIS Format for Thesis (M.Sc., M.Phil. and Ph.D. Degrees) - 2018', available on the PGIS website.

The literature review shall not exceed one-tenth of the total number of pages of the thesis. Only the most important and relevant references shall be quoted and listed. The students should have personally read and assessed the relevance to the project of each publication given in the List of References.

Students should refrain from cutting and pasting from published/unpublished articles that would lead to plagiarism. All instances of the use of data, information, ideas, inferences etc. from other sources must be duly acknowledged. Plagiarism will result in the rejection of the Thesis and may result in the cancellation of the M.Sc. registration. Students should use the plagiarism checker (software) available at the PGIS and get the plagiarism report on his/her thesis and append the report to the Thesis.

- (ix) The student shall submit three copies of the soft-bound thesis (written according to the PGIS format/guidelines) to the PGIS through the supervisor/s, M.Sc. Programme Coordinator and the Chairperson of the relevant Board of Study. The students are strongly advised to **correct English and typographical mistakes** before submitting the thesis to the PGIS.
- (x) The thesis shall be evaluated by two independent examiners and depending on their recommendations, either an Oral Examination will be arranged for the student to present and defend the M.Sc. thesis or he/she may be asked to revise the thesis or the research project. The details are given in the PGIS Handbook 2019 (pages 13 - 14).
- (xi) Details of the final submission of the thesis and the award of the M.Sc. Degree are given in the PGIS Handbook 2019 (pages 14 - 16).

3. RESPONSIBILITIES OF THE STUDENT

The students carrying out an M.Sc. research project at the PGIS are expected to undertake the following responsibilities:

- (i) It is a requirement that the students engage in their project work on a **full-time basis** and complete his/her project (including the submission of the thesis) within a period of **12 months**.
- (ii) Before starting the research project, the student should have held preliminary discussions with the supervisor/s and the M.Sc. Programme Coordinator, do a literature survey and prepare a brief outline of the work plan (2 - 3 weeks may be spent on this).

Students are expected to write a brief project proposal (2 -3 pages) and submit to the PGIS along with the prescribed form (*M.Sc. Research Project Proposal Submission Form - downloadable from the PGIS website*) through Supervisor/s, Coordinator and Chairman of the relevant Board of Study.

The student is required to present the project outline and the work plan at a group seminar, during the first month of the project period.

- (iii) The student should commence the project on a full-time basis under the guidance of the supervisor/s. Once the Board of Study is satisfied with the Research Proposal, the student should meet the supervisor/s regularly (at least once a fortnight) by prior appointment and correspond with the supervisor/s via telephone/emails etc. frequently on matters connected with the conduct of the project. For this purpose, it may be useful to exchange the contact telephone numbers and e-mail addresses with the supervisor/s.
- (iv) The student shall maintain a work diary (preferably in electronic format) of all the activities completed and the important decisions taken during the discussions with the supervisor/s.

- (v) Students shall continuously use library facilities and other literature sources throughout the project. Literature surveys are extremely important not only in designing the experiments and generating results but also in their interpretation.
- (vi) The student shall ensure that each step of the project is completed as planned and within the expected time frame (see Table 1).
- (vii) The student shall keep the supervisor/s and the M.Sc. Programme Coordinator informed promptly of any problems that may cause delays in carrying out of the project as planned.
- (viii) The student shall maintain cordial relationships with all the people he/she may interact with during the project phase, be ethical in all conduct and maintain good discipline in the laboratory, field and other workplaces.
- (ix) The student should submit a 6-month Progress (written) Report and make a 20-minute presentation of the progress of his/her project at the Mid-term Progress Review Seminar, arranged by the M.Sc. Programme Coordinator 6 months after the starting the project. At these seminars, for each student, a panel consisting of two reviewers shall be assigned to assess the half-way progress of the project and make comments/suggestions.
- (x) The student should divide the available time frame (maximum 12 months) appropriately so that the project can be completed on time as suggested below:

Table 1 - The time frame and suggested activities for a 12-month research project

Suggested Time Frame	Activity
1 st month	Preliminary discussions and literature survey; submitting the project outline; planning and commencing the project (2 - 3 weeks) and presentation at a group seminar
2 nd - 4 th months	Carrying out the project
5 th - 6 th months	Analysis of data gathered, preliminary interpretations/conclusions etc., Submission of 6-month Progress Report (written according to the 'PGIS Format for Thesis-2018') and Presentation of Progress Review Seminar
7 th - 9 th months	Continuation of the project incorporating the comments/suggestions made at the Progress Review Seminar
10 th - 11 th months	Completion of project work, preparation and submission of the draft thesis to the supervisor/s (Supervisor is expected to return the corrected thesis within 2 - 3 weeks of submission.)
12 th month	Preparation and initial submission of the thesis (loose bound form - 3 copies) together with the duly completed Initial Submission Form to the PGIS (see PGIS Handbook 2019 - page 13 for details). After the submission, about 3 - 4 weeks would be needed for the examiners to evaluate the thesis and send their comments). During this 1-month period, the student can prepare for the oral presentation.

13 th month	Oral examination* and final submission of the thesis - hard bound form (see Handbook 2019 - page 14 for details).
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Reasons for any major deviations from this time frame should be brought to the notice of the PGIS through the Supervisor/s and Programme Coordinator without delay. Maximum period allowed for a student to submit the M.Sc. thesis would be 12 months from the date of release of final GPA for course work.

** Guidelines for Oral Presentations: During the oral presentation do not spend much time on Introduction section, but concentrate more on Experimental, Results and Discussion sections. Make sure that the visual aids are clear; view your slides ahead of time. You may use the Computer Laboratory facilities (Room B.2.3) and/or get assistance from the Audio-visual Technical Officer (Contact number: 081-2394785). You are advised to wear a formal/national dress at the oral examination.*

4. ROLE OF THE SUPERVISOR

A project supervisor/s for each M.Sc. student project shall be appointed by the PGIS on the recommendation of the relevant Board of Study. The supervisor/s may be from the University of Peradeniya or any other University/research institute/organization. Depending on the circumstances, the Board of Study may recommend the appointment of an internal supervisor as well as an external supervisor for a project.

When guiding the student, in order to ensure the completion of a meaningful project of acceptable quality and standard within the specified time frame, the supervisors are requested to undertake the following responsibilities, among other relevant tasks:

- (i) Finalize a project title, an outline and a work plan after discussion with the student (if necessary in consultation with the Programme Coordinator). Students are expected to write a brief project proposal (2 -3 pages) and submit to the PGIS along with the prescribed form (*M.Sc. Research Project Proposal Submission Form - downloadable from the PGIS website*) through Supervisor/s, Coordinator and Chairman of the relevant Board of Study.

It should be a realistic project of an acceptable standard, which can be completed within 12 months. Students are expected to work **full-time** on the project. Supervisors are expected to assist the students to familiarize with the latest research publications in the area of the project undertaken.

Student will be asked (by the Coordinator) to present his/her project title, work plan and preliminary literature survey at a Group Seminar, arranged by the Coordinator after about 2 - 3 weeks of assigning the projects under the guidance of the project supervisor/s.

- (ii) It is important that the supervisor meets the student assigned to him/her on a regular basis, at least **one meeting every fortnight** on a pre-scheduled and agreed time. E-mail and telephone would facilitate communication between the supervisor and the student, all the time.
- (iii) The initiative and independence of the student should be encouraged , and the supervisor should avoid giving excessive prescriptive guidance.

Student will be asked (by the coordinator) to present his/her project title, work plan and literature survey at a Preliminary Group Seminar, arranged by the Coordinator after about 2 - 3 weeks of assigning the projects.

- (iv) Results, data analysis, discussion and conclusions should be periodically reviewed. If mistakes have occurred and the correct procedures have not been followed, action should be taken to rectify those. Any other problems or constraints that affect the progress of the project in relation to the scheduled timeframe shall be brought to the notice of the programme coordinator immediately.
- (v) Advise and guide the student to write the 6-month Progress Report (according to the 'PGIS format for Thesis-2018' available on the PGIS website), and to present his/her project results at the Mid-term Progress Review (Group) Seminar, held about 6 months after commencing the project.
- (vi) After the student completes the project (about 4 months after the Mid- term Review Seminar), the outline of the thesis should be discussed with the student. The student is expected to spend about 2 - 3 weeks to write the draft thesis, which must be handed over to the supervisor/s in a soft-bound form. When writing the thesis, the student is expected to follow the 'PGIS Format for Thesis (M.Sc., M.Phil. and Ph.D. Degrees) - 2018'.
- (vii) The supervisor is expected to read through the draft thesis and make necessary corrections/suggestions/comments including grammar and return it to the student within about 2 - 3 weeks. Any major flaws are to be discussed with the student and corrective measures suggested.

5. GENERAL

- (i) After receiving the corrected thesis from the supervisor, the student is expected to prepare the final soft-bound copy within one month and submit three copies to the PGIS through the supervisor/s, Programme Coordinator and the Chairman of the relevant Board of Study.
- (ii) The PGIS will make arrangements to send copies of the thesis to the two Examiners, recommended by the Board of Study for evaluation. The Examiners are expected to evaluate the thesis and return it with their comments to the PGIS within about 3 - 4 weeks.
- (iii) After receiving the theses from the Examiners, an oral examination will be scheduled by the Board of Study where the student's oral presentation is evaluated by a panel of examiners and a final decision on the acceptance of the thesis is made.
- (iv) Details of the final submission of the hard-bound version of the thesis and the effective date of the degree are given in the PGIS Handbook 2019 (pages 14 - 16).