

## Guidelines for 5<sup>th</sup> year BS-MS thesis work (MTH 501)

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1. The student should identify his/her supervisor by the last day of classes of Semester VIII.
2. After the supervisor is decided, a mutually agreed upon thesis work should be developed. The proposed thesis work can either be an extension or independent of the courses credited by the student. If the thesis work is an extension of a course, then only the new study material that is not covered in the course will be counted towards thesis evaluation.
3. The supervisor should form an Evaluation Committee (EC) consisting of the supervisor and two other faculty members from the department, and an external member in consultation with the DUGC convener (the external member is optional) and submit the names to the DUGC no later than August 1<sup>st</sup>. The EC will play a primary role in the evaluation of the Semester IX seminar, the Thesis Defense, and the Thesis.
4. The student should submit a Synopsis (see page 2) of the proposed thesis work duly forwarded/endorsed by the EC, to the DUGC by August 30<sup>th</sup>. As several factors could determine how the thesis work progresses, even after the initial approval, the contents of the Synopsis may be revised with the consent of the EC. These revisions should also be submitted to the DUGC.
5. There will be one seminar in the 9<sup>th</sup> semester, and a Thesis Defense during the 10<sup>th</sup> semester. The DUGC will release a schedule (detailed later in this document) for each semester during the first week of that semester containing all relevant dates and deadlines. **No deadlines will be relaxed except under special circumstances duly approved by the EC and the DUGC.**
6. The student should submit the seminar details (title and abstract) for the seminars to the EC & DUGC as per the given schedule. Care should be taken to ensure that the contents of each seminar are relevant to the approved synopsis.
7. All details pertaining to the seminars and the thesis should be sent via an email to the Convener, DUGC and the EC members. This is to confirm that the document submitted has the prior approval of the EC. After a submission is made, if no response is received from any EC member within the next 48 hours, it will be assumed by the DUGC that the document submitted has been approved by the EC.
8. **The Synopsis and Thesis Progress Report should be according to the prescribed format appended with this document. Note that all these documents must be typed in LaTeX.**
9. The semester-wise distribution of thesis work credits is given below:

### Semester 9

Thesis work component	Marks (out of 100)	Evaluated by
Reading component	50	Supervisor
Seminar	30	Two members of EC (other than supervisor)
Thesis progress report	20	EC

## Semester 10

Thesis work component	Marks (out of 100)	Evaluated by
Reading component	40	Supervisor
Final defense	30	Two members of EC (other than supervisor)
Final Thesis	30	EC

## Format of Synopsis and Progress Report of the proposed thesis work

**1. Synopsis:** to be submitted at the beginning of Semester IX is a brief summary of the study taken up for the proposed thesis work. Following points should be used as guidelines to write it:

- Start with a motivation for the study.
- State the problem clearly.
- Briefly discuss any previous results in the context of the problem.
- Without going into too many details, give an idea of the important mathematical tools used in arriving at these results.
- State any particular personal insights into the problem.
- Briefly describe the required mathematical background to understand and investigate the problem.
- State in specific terms how you are going to achieve the required mathematical background.
- All previous known results referred to in your document should be cited properly.

**2. Progress Report:** to be submitted at the end of Semester IX is intended to make your EC aware of the progress you are making towards fulfilling the goals stated in your synopsis. *Attach a copy of your Synopsis with this report.* The following questions should be addressed in the report:

- How far have you progressed in the direction of understanding or solving the problem?
- At what stage is the study at the time of submission of this report?
- What remains and what do you expect to get done?
- What was your seminar topic and how, if at all, it helped you in your thesis work?
- How much of the required mathematical background you stated in your Synopsis were you able to cover since the beginning of the semester (Details should be given; highlight concepts or results that you found particularly interesting)?
- How much more of the mathematical background remains to be covered?
- In your opinion, how is the thesis work going vis-à-vis the final goals of your proposed thesis work?

## Schedule

### Semester 9

<b>Event</b>	<b>Schedule</b>
Submission of title/abstract for Seminar to the DUGC	One week before the scheduled seminar
Seminar	Saturday which falls a week before the first day of end semester exam of Semester IX
Submission of Thesis Progress Report to the EC and DUGC	The last day of end-semester exam of Semester IX
Submission of grades by the thesis supervisor to the DUGC	One day before the last day for end-semester exam grade submission of Semester IX

### Semester 10

<b>Event</b>	<b>Schedule</b>
Submission of Thesis progress report draft to the EC	15 days before the thesis defense
Submission of title/abstract for Thesis defense to the DUGC	One week before the final defense
Final defense	Saturday which falls a week before the first day of end-semester exam of Semester X
Submission of Thesis progress report to the EC and DUGC	The last day of end-semester exam of Semester X
Submission of grades by the thesis supervisor to the DUGC	One day before the last day for end-semester exam grade submission of Semester X