

Role of an external supervisor of the BS-MS Physics Major fifth-year dissertation:

Following are the various roles and responsibilities of an External Supervisor (outside IISER Berhampur) for fifth-year dissertation:

1. Academic mentorship of the student, including helping him/her design and carry out the research work, analyse and interpret results etc.
2. A full support of the supervisor that can lead to a substantial one-year dissertation is expected.
3. The dissertation should not be a mere training in techniques, and should involve generation of data/theories/models.
4. Should the research conducted by the student lead to a publication, the supervisor is free to decide the authorship. IISER Berhampur has no role to play in this matter.
5. The supervisor is also expected to assist the student to find a convenient accommodation, preferably at the institute hostel.
6. Assessment: The dissertation includes one mid-year evaluation (scheduled in the month of December), besides the final evaluation(scheduled in the month of April). The Department Undergraduate Committee (DUGC) of IISER Berhampur will constitute a Dissertation Assessment Committee (DAC), in consultation with the supervisor. The composition of the committee and other details can be found in the Annexure. The final evaluation will be conducted by the Supervisor and the DAC.
7. DUGC/Departmental office will, from time to time, help the Supervisor in meeting all the formal/official requirements.

ANNEXURE

Guidelines for the BS-MS Physics Major fifth-year dissertation evaluation

I. On-set of the dissertation:

- At the time of registration, each student will propose where and with whom do they want to carry out their fifth-year dissertation.
- Some students will opt for an in-house dissertation (Case A. dissertation at IISER Berhampur under the mentorship of an existing faculty member), whereas others will opt for an outstation dissertation (Case B. dissertation at any other institution under the mentorship of a faculty not affiliated to IISER Berhampur).
- For case B, a consent letter from the outstation mentor to be produced by the student at the time of registration.
- The student may propose an in-house Co-mentor (a faculty member at IISER Berhampur), with his/her consent.

II. Assessment and evaluation:

The two-semester long dissertation includes 9th and 10th semesters and carries a total of 28 credits, split into 10 credits in the 9th semester and 18 credits in the 10th semester. In the following section, we will describe the proposed format for evaluation following both the semesters.

Mentor and Co-mentor:

At the time of registration, both in-house (case A) and the outstation (case B) students will be assigned a **Mentors**, as endorsed by the respective department. For outstation candidates, the local official issues will be handled by the DUGC, while the signatory will be the Convener, DUGC.

Dissertation assessment committee (DAC):

For both A and B students, two (minimum)-member DAC will be formed immediately after the completion of the registration. The composition of the committee is as follows:

1. Mentor (Convener)*
2. Internal or External** member - Mentor's nominee
3. Additional member (optional) - mentor's nominee

*External mentor can be present through video conferencing (Skype/Google meet etc.). In such cases, the DUGC will nominate the DAC members in consultation with the external mentor.

**External here refers to external to the department - either another department from IISER Berhampur or from outside IISER Berhampur

**In case of the Convener, DUGC himself/herself is the Mentor/Co-mentor, FIC will nominate.

**In case of an external mentor, this should be compulsorily an internal member

9th Semester assessment:

- Submission of a short progress report after completion of 9th semester.
- Grading will be done by the mentor on 10 credits
- Grade needs to be submitted along with comments and the progress report by the Mentor or Co-mentor, whichever is applicable, to the DAC.
- DAC will forward the document to the Office of Academic Affairs with the progress termed as Satisfactory (S) or Unsatisfactory (X).
- In the case of unsatisfactory progress, the Dean of AA will issue a **warning letter** to the student with copies to the DAC members and parent of the student under consideration. DAC may take the warning letter into consideration during the final grading at the end of the 10th semester.

[The idea behind keeping the 9th-semester assessment is that students should not be put through the pressure to produce results. Instead, they should get proper training and motivation for scientific research. At the same time, students who are nonperformers, particularly those lacking seriousness should be made aware of the significance of the dissertation.]

10th Semester final evaluation and thesis submission:

- The initial submission of a thesis (soft-copy only) - for circulation among the DAC members
- An open defense of the thesis through oral presentation
- Evaluation of 18 credits will be done by the mentor (30% weightage) and DAC (70% weightage)
- The final grading will be forwarded by DAC to the office of AA for further processing.
- The (external) supervisor has to be present during the final presentation, at least through an online mode.