

**COURSE HANDOUTS AND OPERATIONAL DETAILS OF
BITS G540 RESEARCH PRACTICE**

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**ACADEMIC GRADUATE STUDIES & RESEARCH DIVISION (AGSRD)
BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI-
K. K. BIRLA, GOA CAMPUS**

CALENDAR OF EVENTS

First Semester Deadlines

I Sem	Particulars to be submitted	From	Submit to
AUG 16	TS-1 Form	Student	AGSRD
OCT 08	Mid. Sem. Presentation & Written Report	Student	Supervisor
OCT 11	Mid Semester Evaluation Form	Supervisor	AGSRD
NOV 28	Final Report (Final viva by the Supervisor & Examiner)	Student	Supervisor
DEC 1	Final Evaluation, mid semester and final reports	Supervisor	AGSRD

Second Semester Deadlines

II Sem	Particulars to be submitted	From	Submit to
JAN 22	TS-1 Form	Student	AGSRD
MAR 15	Mid. Sem. Presentation & Written Report	Student	Supervisor
MAR 17	Mid Semester grade sheet	Supervisor	AGSRD
APR 30	Final report (Final viva should be engaged by Supervisor & examiner)	Student	Supervisor
MAY 3	Final grade sheet & other evaluation forms	Supervisor	AGSRD

N. B.

1. If any of the above date happens to be a Sunday or a holiday, the immediate next date will be the calendar date.
2. Student should ensure with his supervisor that the Mid. Semester grade and the Final Grade are sent to the AGSRD by the due date
3. The time and venue of Seminars to be fixed by the Supervisor
4. The final viva-voce examination is to be held as per the Calendar of Events above. Students should invariably submit Final report on or before the above mentioned dates.
5. Specified formats of the Cover/Title page and Certificate from the supervisor should be adhered to in the preparation of final report. Attention should be given to the items in the checklist for preparation of the report.

**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI-
K. K. BIRLA, GOA CAMPUS
BITS G540 RESEARCH PRACTICE**

Associate Dean-AGSRD

1. Aims and Objectives

This course aims at training the higher degree students towards acquiring competence in research methodologies, writing research reports/proposals, enhancing experimental/ laboratory skills, providing opportunities for involvement in laboratory/course development activities and such other related professional knowledge/skills.

2. Scope of the Course

The course broadly covers following aspects:

- (i) Research related activities
- (ii) Development related activities
- (iii) Research proposal

Under the research related activities, which carries 50% weight age, a broad topic of research will be assigned to the higher degree student by the Supervisor and the student would conduct literature search in the specified area, learn various research methodologies/techniques for data collection and data analysis, testing techniques/methods etc and deliver seminars in his/her research area to the supervisor. The student should also write research report(s) that along with the seminar/viva would form part of evaluation component related to research related activities.

For developmental activities, which carry 25% weight age, the supervisor would assign to the student working with him an appropriate developmental work, which can be related to Centres/Laboratories/Assistance in course development or in the R&D activities of the supervisor. The student would have the teaching/research skills by assisting the supervisor in teaching, evaluation and research activities of the supervisor.

The remaining 25% weight age would be for the project proposal, which the student would be required to write, based on the skills acquired during the activities mentioned above.

3. Operational Details

Associate Dean, AGSRD will display the list of students registered for Research Practice (RP) course in the first week of the semester. Besides the ID Number and names of the students, the list would also show the title of the RP Project and name of Supervisor for each student. This will be displayed on AGSRD Notice Board. The details would also be sent to all the supervisors in the beginning of the semester. Any discrepancy in ID No., Name, Title of RP Project and/or Supervisor should be brought to the notice of Associate Dean, AGSRD at the earliest and latest by the second week of semester.

Within 2 weeks of registration, the student should prepare the work plan for his research project and also for the developmental activities in consultation with the supervisor. The student should get these work plan approved by the supervisor and submit a copy of the same along with the TS-I form.

Mid semester grading will be done jointly by the supervisor and examiner based on the work done and progress made towards planned objectives by the student in the assigned research area and also the work done by the student in the areas related to developmental activities (i.e. developmental activities at Centres/Laboratories/Assistance in course development or in the R&D activities of Supervisor). The student is required to submit mid semester report describing the work done and progress made by him in these two areas. He should also deliver a seminar to highlight these activities.

The student should submit mid-semester report in the 9th week (see calendar of events) of the semester to the supervisor and this should be followed by seminar/presentation by the student. The supervisor in turn is required to send mid-semester grades of all the students working with him to Associate Dean, AGSRD, by the end of 9th week of the semester. (Please refer to the date mentioned in the calendar of events)

End semester report would provide details of work done by the student in research related area as well as in development related activities. End semester report should be submitted to the supervisor in the 15th week of the semester (please refer to the calendar of events) and should be followed by seminar/presentation. In addition to the details of work done in research related area and brief report about the developmental activities carried out by the student (to be shown as section A of the end-semester report), the end semester report should also contain a research proposal as section B of the end semester report. (The details regarding section B of the end semester report are given in the following section i.e. section 6 on the next page).

Every student would write a research proposal beginning in the 12th week of the semester. This research proposal would form a part of the final (end semester) report (Section-B). The research proposal carries 25% weight age and should be written in the proper format i.e. (i) Topic of Research (ii) Background and current status of research work in the area as evident from the literature search/review, (iii) scope of the proposed research work, (iv) methodology (v) work plan and time schedule (vi) references and bibliography.

The references and bibliography should be written in standard format and should be cited within the text of the research proposal.

Properly written research proposal would help the student for his Higher Degree Dissertation (HDD) course, if he/she continues in the same area for HDD too.

4. Evaluation Scheme

Component	Indicators	Weight age
1. Research related activities	Reports Seminar/presentation/viva	50%
2. Development related Activities	Report Viva/presentation	25%
3. Research Proposal	Literature survey, research gaps Objectives, methodology, Equipment estimation and Presentation	25%
Total		100

5. Components for Mid semester Grading

The concerned supervisor will announce mid-semester grade to the student sometime in the 9th week of the semester (please refer to the calendar of events). The supervisor should submit the mid-semester evaluation form to Associate Dean, AGSRD by the end of 9th week of the semester (please refer to the calendar of events).

Sr. No.	Component	Indicators
1.	Research related activities	
	Report	15
	Viva/Presentation	10
2.	Development related Activities	
	Report	05
	Viva/presentation	05
3	Research Proposal	10
	Literature survey and research gaps.	
Total		45

6. Components for end-semester grading

The end semester grade would be based on the following components:

Sr. No.	Component	Indicators
1.	Research related activities	
	Report	15
	Viva/Presentation	10
2.	Development related Activities	
	Report	10
	Viva/presentation	05
3.	Research Proposal	15
	Objectives, methodology, Equipment estimation (10) and Presentation (5)	
Total		55

The supervisor should submit the final evaluation form along with one copy of final report to Associate Dean, AGSRD after final presentation and viva is over.

7. Course Notices

Notices pertaining to this course will be displayed on **AGSRD Notice Board**.

8. General

Part – 1 of the Handout given in the Institute Bulletin should also be consulted.

9. Check List of Items for final report of Research Practice

- Is the Report's 'Cover/Title page' in proper format ?
- Is 'Supervisor's Certificate' in proper format? Has it been signed?
- Is 'Abstract' included in the Report? Is it in properly written?
- Does the 'Table of Contents' page include chapter page numbers?
- Does the Report contain a summary of the literature survey?
- Check:
 - Are the Pages numbered properly?
 - Are the Figures numbered properly?
 - Are the Tables numbered properly?
 - Are the Figures and tables titled properly? Are the Appendices numbered?
- Does the Report have 'Conclusion' of the work?
- Are References/Bibliography given in the Report?
- Have the 'References' been cited in the Report?
- Is the citation of 'References and Bibliography' in the standard format?

Note: Attention should be paid on the above items while preparing the FINAL REPORT. Supervisors are also requested to ensure that their candidate(s) have prepared the FINAL REPORT properly

TS-1 Form (Page-1)

**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI
K.K.BIRLA GOA CAMPUS
ACADEMIC GRADUATE STUDIES & RESEARCH DIVISION (AGSRD)
FIRST/SECOND SEMESTER 20 - 20
Particulars of RESEARCH PRACTICE**

The student should correctly fill in this proforma immediately after all the changes (in topic, supervisor or both) are finalized and submit it to AGSRD within two weeks of registration along with a copy of the work plan duly approved by supervisor

A. Personal Particulars

Name ----- ID No. -----

Local Address: -----

Permanent Home Address & Tel No. if any:

Email address -----

B. Research Practice Particulars

Name of Supervisor -----

Research Topic -----

Research Area -----

Date:

(Signature of Student)

Panel of Examiners (To be suggested by the Supervisor) -----

S.No. Name of Faculty

Dept

1.

2.

Date:

(Signature of Supervisor)

TS-1 Form (Page-2)

OUTLINE OF PROJECT

(Attach extra sheet, if necessary)

Aim and objectives:

Background of work:

Plan of work:

Bibliography & References:

ID No. , Name & Signature of the Student

Name & Signature of the Supervisor