Vishwakarma Research Internship Scheme (VRIS) 2020
Invitation to Float a Proposal under VRIS 2021

The management of BRACT promotes research projects to be undertaken by the faculty pursuing research in various areas. To strengthen it, VIIT has set up special interest groups, research mentor and mentee schemes and research internship is further step towards it.

The aim of the VRIS is to strengthen the research activity in the niche area by providing research interns to work on the problems, where faculty can visualize the problems, chalk out the plan and young minds can work on it with some addition and out of the box thinking from their side.

The students will work FULL TIME for one semester, counting to approx. 450 (05 hours * 90 days) hours on a specific topic and innovate/ develop / implement / test an idea from the faculty mentor. These students might be sitting in labs / library / Computer center / Workshop / Open areas in the institute for their work. These students and mentor faculty might need to visit some collaborator / research institute / Labs for the work. Need to attend online / physical seminars and conferences / attend some specific training sessions available / work on the data including validation of it.

If a student or two are working on an idea, it will be approx. 500 to 1000 man-hours of the work along with some inputs from experts in and outside the institute. This shall certainly help in developing an idea and passing it to next group for implementation / implementing an idea and passing it for testing to next group for testing and product out of it. / Publishing research papers or applying for a patent / Industrial Design / Copyright as one of the outcome along with research outcomes from the work.

In order to utilize the man-hours effectively and to achieve the set objectives of the research, pre-work while floating a proposal for internship plays a vital role. Set objectives with the justification behind, thought on methodology and its feasibility, planning of resources in terms of HR and Infra is what will make it work and progress.

Faculties with special interest in some of the technology domain / fundamental research / applications in Industry /development of prototypes and products are invited to float a proposal of internship in an attached format. One faculty can have multiple proposals (limited to THREE) or a proposal with multiple interns (limited to THREE) or combination of both. Longer duration research projects can be floated in phased manner, where entire project proposal has to be submitted during first stage with

some lesser details of the subsequent phases like methodology and few of the outcomes, however a phased project plan with objectives for every semester and quantifiable outcomes must be submitted at the start, maximum duration of such projects can be of FOUR semesters, i.e. TWO years.

The VRIS is aiming at (along with other objectives of it) providing assistance to institutional research, which shall be of a types like

<u>**A. Technology / Fundamental Research:**</u>   Aiming towards collaborating with the research institutes in India and abroad, participating in the multi-institute joint research activity and to be a part of bigger projects and research. Preferred duration of project is up-to **TWO years**. However detailed plan has to be submitted at start to get the interns.

<u>**B. Special Purpose Group (SPG) / Proof of Concept (POC):**</u>   Faculties working on POC, which can be extended towards external funding, where faculty mentor is expected to write a proposal for funding research / contract research or collaboration with research institute. Preferred duration of internship on such POC or interest group formation proposals is **ONE semester**. Senior faculty with doctoral qualifications are encouraged to float proposals under this category. Once the SPG is formed it shall be working towards its aims and float proposals towards getting interns for its targets.

<u>**C. Consultancy / Modernization of Laboratory**</u>: Faculties or group of faculties, actively involved into providing consultancies based on available resources by adding value to it can get interns for the task with some specific tasks allotted to interns, where interns will also get the learning / research opportunity. Attempts to modernize / upgrade the existing laboratory resources for matching it with industry standards, can be supplemented with interns if required for development. These types of proposals shall have clear development plan and requirement of student's man-hours. Time-frame of such internships is not more than **ONE year.**

<u>**While submitting a proposal to get interns, few points has to take care of are like**</u>

1. **BE Projects are not research internships, as the man hours for BE projects are 90 per student, whereas for internship it is 450. BE Project is prescribed as group activity and Internship is prescribed for individual only.**

2. **Internship is not a group activity,** every intern has to earn his credits through gained credentials during the period. Though some of the interns might working on same problem / idea, individual contribution has to be counted while evaluating it for award of credits.

3. **Some of the quickly quantifiable outputs are publications / IPRs / funding etc.**

4. While designing internship idea, it shall not be subjected to some un-available or un-manageable resources, pre-text of collaboration or funding. However this can be supported based on the availability and merit.

5. Interns shall work on the faculty or interns idea, however this shall not to work on somebody else problem like a PhD topic of faculty mentor or somebody else. This is strictly prohibited. Interns shall work to earn credentials. Faculties pursuing PhD shall make a note of this.

6. If a Doctorate faculty pursuing research in the same area of doctoral studies, he/ she is welcome to float an idea, provided it is extension of the work or future scope of the studies.

7. Submit your proposal in a prescribed format of VRIS 2020 only on or before the deadlines of invitation of proposals.

Selection, Allotment and Monitoring of Internship

1. The selection of the internship proposal will be based on peer review of proposal and presentations of short-listed proposals in front of Expert Committee on recommendation from Head of Department.
2. The maximum number of interns per faculty at any given time is limited to FIVE.
3. Internship proposals from faculty in collaboration with faculty from within and other departments (intra and interdepartmental) involving interdisciplinary research areas are given preference in order to form inter departmental center of excellence.
4. Review of internships shall be conducted at end of every month, at the departmental level.
5. Final review, which shall be prior to evaluation by expert from outside VIIT, will be conducted at institute level where objectives-vis-à-vis outcomes shall be discussed and approved Recommendation for future work shall be sought by a mentor, if required.
6. Evaluation of interns has to be carried out by external experts from either research institutes, institutes of repute in SPPU and Industry experts working in the domain. External evaluator shall be paid as per the rules of examination section.
7. All intellectual properties generated out of the fund for the internship will become the property of the institution.

Expected outcomes:

1. A bound copy of the final report of work done during the internship along with softcopy to be submitted with department on completion of the internship. A copy of the final report shall be kept in the library of the respective department(s).
2. **Minimum one of the following has to be completed before evaluation:** A publication of a research paper in an international / national peer reviewed, indexed journal International Conference / Filing a patent is mandatory.
3. Faculty mentor shall submit a report which reflects achievements out of internships as per the category of internships and further progress in the aligned objectives of the institutes.

Important Dates:

Sr. No.	Activity	Time Line
1	Submission of proposals to get	Before start of Semester (During vacation of

	interns (From faculties to research wing)	earlier Semester) **Last Date for proposal: 30 June 2021**
2	Presentation schedule: by Faculty to students who applied for internship	First Week of Semester : Upto 07 July
3	Allotment of Internship:	Second Week of Semester : Upto 15 July
4	Duration of FULL TIME internship	From second week of semester to last week of semester. (can be extended in vacation, in mutual consent of mentor and student)
5	Evaluation of Interns	As per schedule published by examination section (Preferably in a week of project examination)

WHO SHALL FLOAT a PROPOSAL?

For Category A

    Faculty members with doctoral qualifications (Assistant Professors / Associate Professors / Professors with minimum ONE year experience at VIIT are eligible to get interns under this category.

For Category B and C:

1. Faculty members working at VIIT including those **pursuing doctoral studies or wish to enroll for doctoral studies**, shall apply under this category

POLICY FOR EXECUTION

1. On publication in International Journal, one copy of the paper to be submitted to the research wing. The affiliation of the institute is MUST in the research paper.
2. The final report of internship report should include
   - (i) Technical Report along with conclusions (two hard bound copies) / and published, presented, accepted paper(s) (A soft copy)
   - (ii) Activity Log books showing weekly break-up of activities during internships
3. In addition to terms and conditions in the document, governing rules of the institute and trust will govern the execution of the internships and these will be binding to all faculty members taking students for internship.

    Dean (R&D)

                            Director