

Programme: B.Sc.		Year: III		Semester: VI	
Discipline: Physics					
Course Name: Summer Internship					
Course Code: SI601					
Course Type: SI (Practical)		Course Details: SIMC-1		L-T-P: 0 - 0 – 4	
Course Credit: 2	Full Marks: 50	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	---	20	---
Course Overview: Internship in Physics is gaining wide attention and importance in course curriculum as it promises to provide first-hand experience to the students, along with conventional class room teaching. It enables students in comprehending the way of working in an organization, leading to improvement of the skill/ aptitude needed to tackle real-world spatial challenges and building research capabilities with learning opportunities.					
Course Objectives: Following are the intended objectives of engaging undergraduate students with major course as Physics in internship for employability and research internship programs: (i) Integration of workshop with workplace; (ii) Understanding of the world of work; (iii) Physical and hybrid model learning; (iv) Developing research aptitude; (v) Exposure in emerging technologies; (vi) Enhance entrepreneurial capabilities; (vii) Development of decision-making and teamwork skills; (viii) Stimulate collaborative influence; and (x) Enhancing professional competency.					
Learning Outcome: ✧ Students shall get an excellent opportunity to see how the theoretical aspects learned in classes are integrated into the practical world. On-floor experience during the internship provides much more professional experience, often worth more than classroom teaching. ✧ The students will learn various soft skills such as time management, positive attitude and communication skills while performing the tasks assigned in the internship organization.					
Professional Skill Development: ✧ The obtained knowledge is vital to test the theoretical learning in practical situations by accomplishing the tasks assigned during the internship. ✧ This knowledge will help to develop essential soft skills like time management, organization, adaptability, problem-solving, and teamwork.					
	Internship Categories (students can opt any one)				60 hrs
I. Conventional					
In conventional/traditional internships, interns may work on specific projects or tasks in an organization (IIT, NIT, IIIT, IISER, IISC, IACS, Engineering colleges etc.), research institutes (CSIR-CMERI, TIFR etc.) / science laboratory (CGCRI, NPL etc.)/parent university (KNU)/other Universities and R&D institutions. These academic/research institutes will be referred as External Entities in our subsequent sections.					

	After completion of the course, the respective mentor will issue a completion certificate along with his/her opinion about the merit of the course.
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II. Field-based Learning

Interns may undertake a **field-based learning** in collaboration with local industry, government and private organizations to enhance employability. Interns will be provided opportunities to actively engage in on-site learning and hands-on training to work on research tools, techniques, methodologies, equipment and other aspects for enhancing employability.

Role of Internship Supervisor

An internship supervisor is any individual of the host Department/Institute who will be nominated by the Institution/Department for monitoring, supervising, and evaluating the student during the internship duration.

- Internship Supervisor will be selected at the start of the academic year for each batch.
- The Internship Supervisor from the host institute/department should monitor the regularity of the intern at his/her workplace. Students should preferably inform the Internship Supervisor at least one day before availing leave during the internship except for emergencies.

Role of Mentor

A mentor is an individual professional of any External Entity (mentioned above) who is identified by the HEI or by students himself/herself through their network. The mentor should be identified and his/her concurrence should be conveyed to the internship supervisor. He/she will be providing professional/research guidance to the student during the internship. The mentors will also facilitate networking with other subject matter experts/professionals, which will enhance the internship experience and learning of the intern.

They shall be making the timely evaluation of a student and provide him completion certification/report for submission in HEI.

- The mentor needs to guide the students digitally or physically throughout the internship duration.
- The mentor needs to check and validate the performance of students fortnightly and after the completion of the internship, issue the certificate/report.
- The mentor must ensure the learning of competencies with research orientation among the students during the internship duration.

Summary Guidelines:

- **Title:** Internship Assessment through Projects (Group Internship is allowed)
- **Duration:** 60 hours (may be undertaken at any time during the 2nd/ 4th/ 6th Semester)
- **Nature of Internship Project:** Inter-Institutional Activities/ Activities with Industrial/ Research Organizations/ Soft-skill/ Technological Skill providing Institutes/ Science Laboratory

• After the completion of the Internship Programme, the student will submit a report with relevant photographs as part of the report include an **Attendance Document** and an **Authenticated Certificate** jointly signed by the **Supervisor/ Mentor**.

• A **mentor** will be identified for **Conventional Internship/ Field-based Learning** by the mother department or by students himself/ herself through their network. The mentor should be identified, and his/ her concurrence should be conveyed to the internship supervisor. He/ she will be providing professional/ research guidance to the student during the internship. The mentors will also facilitate networking with other subject matter experts/ professionals, which will enhance the internship experience and learning of the intern.

• Students can opt for activities from the list of Internships for enhancing the employability and/ or developing the research aptitude.

Course Evaluation:

- ✧ Short term project work will be performed by students in any universities/research institutes/research centre/industry (Except his/her own college).
- ✧ Concerned Department of the College will approach the External Entities (mentioned above) for seeking the permission to pursue the project work.
- ✧ Students may also approach to the External Entities for carrying out their internship. However, the students should get approval from the mother department before commencing the project work.
- ✧ There will be one internal member (supervisor) from college department who will liaise with the mentor for monitoring the project work.
- ✧ After completion of project work, he/she will deliver a power point presentation in his/her own college for the assessment of his/her project work.
- ✧ Finally, the completion certificate will be signed by the supervisor and the mentor.

• Continuous Assessment: 30 Marks

1. Evaluation of Report: There shall be an evaluation of the report by the Internship Mentor and Supervisor. [Mentor : 20 Marks, Supervisor: 10 Marks]

• End Semester Examination: 20 Marks

At the end of the semester, a viva-voce will be conducted by the department and one External Examiner/ Expert appointed by the University (concerned UGBOS) to assess the report and knowledge acquired by the students.

Marks Pattern: Format of presentation and the quality of the intern's report: 10; Viva voce: 10.
