



Sir P. T. Sarvajanik College of Science

Autonomous

Affiliated to Veer Narmad South Gujarat University, Surat

Re-Accredited 'A+' with CGPA 3.35

SYLLABUS

FOR

SEM IV

Program: M. Sc.

Course: Organic Chemistry

For

Academic year

2025-26

(NEP-2020)

(To be effective from June, 2025)

M. Sc. (Chemistry) SEMESTER IV
COURSE TITLE: Internship Programme
COURSE CODE: CHEMSC-S4PR1-24CR25

Internship Programme	Course Code: CHEMSC-S4PR1-20CR25
Course Learning Outcomes	
After the successful completion of the course, learners will be able to	
1. Recall fundamental concepts, laboratory techniques, and safety protocols relevant to organic chemistry research and industrial practices. 2. Explain experimental methods, instrumentation, and data analysis techniques used in organic chemistry applications. 3. Apply theoretical knowledge and practical skills to conduct experiments, troubleshoot issues, and analyze results in a professional setting. 4. Evaluate experimental data, interpret findings, and compare different methodologies to optimize chemical processes. 5. Assess the effectiveness of chemical reactions, research methodologies, and industrial practices while identifying areas for improvement. 6. Compile a structured report and deliver a formal presentation summarizing key learnings, research findings, and hands-on experiences gained during the internship.	
INTERNSHIP PROGRAMME	
[720 hrs]	
Learning Objectives:	
The primary objective of the internship program is to provide MSc Organic Chemistry students with practical exposure to industrial processes, laboratory techniques, and professional working environments in pharmaceutical, dye, and chemical industries. The internship aims to:	
• Bridge the gap between academic knowledge and industrial applications in organic chemistry. • Provide hands-on experience in chemical synthesis, process optimization, quality control, and safety regulations. • Develop analytical and problem-solving skills through exposure to industrial research and production units. • Enhance technical and instrumental skills by working with advanced analytical instruments such as HPLC, GC, FTIR, and NMR. • Cultivate teamwork, communication, and professional ethics essential for a successful career in the chemical industry.	
Following guidelines should be followed for the conduction and evaluation of Internship Programme	

- Every student shall work on an Internship programme under the mentorship of faculty member of the Department.
- Industrial working hours should be 30 hours for each credit.
- An internship may be carried out at the Industries/ Research Organizations/Other Institute.
- Choose Industries/ Research Organizations/ Other Institute that aligns with your interests and career goals, but also consider its feasibility within the available resources and time frame
- Adhere to ethical principles and standards in all aspects of your internship.
- Allotment of the mentors shall be done by the Department.
- The mentor shall make continuous monitoring every 15/30 days based on the understanding, experimental/theoretical formulation, performance, interpretation of results and writing of Report.
- End-semester evaluation will be based on evaluation of certificate provided by respective Industry/ Research Organization/ Other Institute, Internship report, presentation and viva voce examination of the candidate at the end of the semester by a panel of examiners.
- Students have the obligation to secure an internship in the industry as a part of their curriculum.
- In case, if a student fails to complete an internship programme and above-mentioned End-semester evaluation requirements at institution, student will not be given credits for particular programme till the completion of internship programme requirements.

Note:

- Students have to submit the copies of the report in due time (declared by the Department).
- Internship report must be written systematically and presented in bound form: The report will consist of Title, name page, certificate, content, summary of work done during Internship programme.
- Student has to prepare a PowerPoint presentation comprising all his/her internship work.
- Student's report and PowerPoint presentation shall be evaluated by a panel of examiners decided by the Department Officials.