





REALTINE INTERNSHIP

Crafting Competence for Pharma's Next Generation.

PHARMACEUTICAL PRODUCT DEVELOPMENT

We Are Invisible, But Our Impact is Inevitable.....

FROM 19-05-2025 TO 12-07-2025

DOMAIN DIRECTOR Dr M Raj Kumar, M.Pharm., Ph.D Dean of Academics, MIPER

"We Are Invisible, But Our Impact Is Inevitable.
Crafting Competence for Pharma's Next Generation.
Real-Time Internships. Real-World Innovation."

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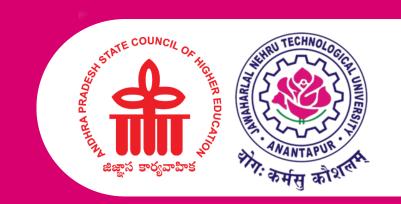
Objectives

- -To provide a foundational understanding of pharmaceutical product development, including its principles, processes, and industry relevance.
- -To build competence in preformulation studies and formulation design, with a focus on evaluation, optimization, and problem-solving strategies.
- -To develop proficiency in technical documentation and reporting, aligned with regulatory standards and industry practices.

A MODULE UNLOCKING SYSTEM

- Self-Paced Learning
- 17 8 Weeks
- **5** Modules
- 5 Advanced Modules
- Conceptual Teaching

- **Conceptual Discussion**
- Addressing Queries
- **Advanced Assessment Tools**
- *Certification with Grade Point
- Pour Execution decides your job



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DOMAIN OUTCOMES Upon completion of internship students able to

- -Demonstrate understanding of pharmaceutical development stages and key terminologies.
- -Analyze and interpret preformulation data to aid in drug design.
- -Apply formulation techniques to develop stable and effective pharmaceutical products.
- -Evaluate formulation problems and propose practical solutions.
- -Prepare professional documentation and reports as per industry standards.

MODULES & TIME LINES

MODULE 1 : 04 DAYS

Pasics on Pharmaceutical Product Development (M1)

MODULE 2: 10 DAYS

Preformulations Studies (M2)

MODULE 3: 10 DAYS

Formulation Development and Evaluation (M3)

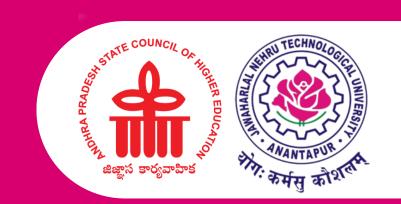
MODULE 4: 12 DAYS

Formulation Challenges & Addressing Methods (M4)

MODULE 5: 08 DAYS

Documentation and Report Writing Tools (M5)





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ADVANCED MODULES

MODULE 6:

Novel drug delivery Design

MODULE 7:

Review Article Publication

MODULE 8:

Statistical Tools & Applications MODULE 9:

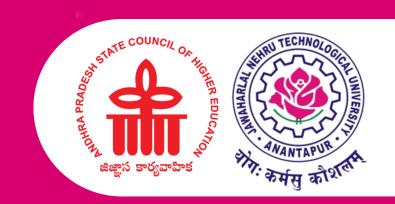
Research Protocol Writing

MODULE 10

Industry Required Profile Development

ADVANCED ASSESSMENT TOOLS

- 1. Activity Designs-Design Novel Activity for Easy Concept Understanding
- 2. Analytical Discrepancy Analysis-Identify Problems in Concepts
- 3. Articulate Acquired Knowledge-Speak What You Learn
- 4. Assignments-Develop Word Document
- 5. Case Studies-Resolve Issues from Given Data
- 6. Conceptual Paraphrasing-Simplify Concept in Your Own Words
- 7. Demonstrate Conceptual Comprehension-Present What You Understand
- 8. Error Resolution Strategy-Solve Identified Problems
- 9. Exploratory Visual Demonstration-Experimental Video Presentation
- 10. MCQs Creation with Justification-Create MCQs with Justifications
- 11. Mental Ability Analysis-Thinking Ability
- 12. Mini projects-Design the Project Protocol
- 13. Structured Data Development-Develop Data Base in Excel
- 14. Verbal Comprehension-Answer from Given Paragraph
- 15. Visual Analytics-Data visualisation in Excel



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Industrial Opportunities

- 1. Formulation Scientist
- 2. Process Development Scientist
- 3. Research Scientist (Drug Delivery)
- 4. Technology Transfer Scientist
- 5. Production Pharmacist / Associate
- 6. Regulatory Affairs Associate (CMC)
- 7. Packaging Development Officer
- 8. Analytical Development Scientist
- 9.QC Analyst
- 10. QA Executive
- 11. Stability Analyst
- 12. Regulatory Affairs Associate (Analytical)
- 13. Instrumentation Specialist

Instruments Handling

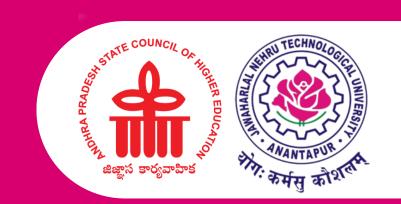
- -HPLC
- -UV SPECTROPHOTOMETER
- -MULTISTATION TABLET PUNCHING

MACHINE

- -DISSOLUTION APPARATUS
- -BROOKFIELD VISCOMETER
- PH METER
- DISINTEGRATION APPARATUS
- -CAPSULE FILLING APPARATUS

Key Responsibilities

- Design solid dosage forms, select excipients, and optimize formulations
- Develop and scale manufacturing processes
- Work on novel delivery systems to improve bioavailability
- Transfer processes from R&D to production
- Oversee manufacturing operations; ensure GMP compliance
- Prepare CMC documentation related to formulations
- Design and test packaging suitable for dosage form stability
- Develop, validate methods (HPLC, UV); impurity and assay testing
- Perform routine quality control tests on materials and products
- Ensure documentation, audit readiness, and batch record review
- Conduct and monitor stability studies as per ICH guidelines
- Compile and review analytical data for regulatory submissions
- Maintain and calibrate analytical instruments; troubleshoot equipment



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Real-Time Internship Program Overview

Initiated by Dr. A. Sathish, Founder & Director of MIPER, this Real-Time Internship Program is a transformative step toward bridging the gap between academia and industry. In collaboration with APSCHE (Andhra Pradesh State Council of Higher Education), the program also provides an official internship certificate issued by APSCHE, enhancing the value and credibility of the experience. Tailored for students who are eager to learn but unable to afford advanced training, the program offers in-campus, industry-integrated learning led by expert professionals from the pharmaceutical and healthcare sectors. Delivered across two core domains—Healthcare Industry and Pharmaceutical Product Development—the internship emphasizes hands-on skill-building in formulation, analysis, regulatory practices, and documentation. Students gain real-world exposure to industrial workflows through guided mentorship and practical engagement. With a focus on accessibility and career readiness, this initiative empowers students with essential technical, analytical, and professional skills making industry expertise and certification a reality for every aspiring professional.

Motivation is a point of ignition
Discipline is the process for Development
Inspiration is for sustainability....
Than Result Fallows...

-Dr M Raj Kumar, M.Pharm, Ph.D

