

Value added course

Advanced Analytical Techniques

AY
2024-2025

SEMESTER
IV
M. Pharmacy

COURSE DURATION
30 HRS

Modules

- Nuclear Magnetic Resonance Spectroscopy, Mass Spectroscopy. (10 Hrs)
- Thermal Methods of Analysis (10 Hrs)
- Calibration and Validation as per ICH and USFDA Guidelines.: (10 Hrs)

Course objective

- To understand concept of Nuclear Magnetic Resonance Spectroscopy, Mass Spectroscopy its principle and working.
- To learn the different Thermal Methods of Analysis, different thermal analysis, different scanning calorimetry.
- To study about general principles of calibration, qualification and Validation, importance and scope of validation, types of validation, validation master plan. Calibration of pH meter, Calibration of Dissolution apparatus, Qualification of UV-Visible spectrophotometer.

Course outcome

- Understand the advanced instruments used and its applications in drug analysis.
- Understand the calibration of various analytical instruments
- Study hyphenated techniques-LC-MS/MS, GC-MS/MS, HPTLC-MS.

COURSE COORDINATOR
DR. ASHOK THULLURU

NAME OF DEAN
DR. MAKARAND GAMBHIRE

Campus: Mahiravani, Trimbak Road, Tal & Dist. Nashik-422213, Maharashtra, India.