



TULSIRAMJI GAIKWAD-PATIL College of Engineering and Technology

Wardha Road, Nagpur - 441108

Accredited with NAAC A+ Grade

Approved by AICTE, New Delhi, Govt. of Maharashtra

(An Autonomous Institution Affiliated to RTM Nagpur University)



Department of Biotechnology

B. Tech Biotechnology
BBT4703: Good Manufacturing and Laboratory Practice

| BBT3501 | | Course Outcomes |
|----------------|--|------------------------|
| CO1 | Apply the principles of Good Manufacturing Practice (GMP) and Good Laboratory Practice (GLP) to ensure regulatory compliance in biotechnology and pharmaceutical manufacturing. | |
| CO2 | Implement Quality by Design (QBD) methodologies and Design of Experiment (DOE) techniques in the development and optimization of biotech products. | |
| CO3 | Interpret and apply ICH guidelines and regulatory requirements from national and international authorities to the design and development of pharmaceutical products. | |
| CO4 | Analyze and apply laws and regulations governing drug development, approval processes, and marketing authorizations to ensure compliance in pharmaceutical jurisprudence. | |
| CO5 | Evaluate and manage production processes by implementing Good Manufacturing Practices (GMP) to ensure quality and compliance in biotech and pharmaceutical production. | |