



**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**

### **BBT4706: Biosensors**

<b>BBT3501</b>	<b>Course Outcomes</b>
<b>CO1</b>	<b>Understand</b> the definition, historical development, and components of biosensors, and their applications in various fields
<b>CO2</b>	<b>Analyze</b> the types of bioreceptors, their mechanisms of interaction, specificity, sensitivity, and methods of immobilization
<b>CO3</b>	<b>Explain</b> the types of transducers used in biosensors, their principles of operation, signal processing, and selection criteria
<b>CO4</b>	<b>Apply</b> knowledge of materials, microfabrication techniques, and integration methods in the fabrication and design of biosensors
<b>CO5</b>	<b>Evaluate</b> biosensor performance, calibrate and validate biosensors, and explore real-world applications and emerging trends