LEARNING OUTCOMES
FOR BIOTECHNOLOGY

1. **Major in:** Biotechnology   **Code:** 7420201
2. **Level:** Undergraduate   **Mode of study:** Full - time
3. **Degree:** Engineering
4. **Programme Objectives - (POs)**

PO1: Graduates will become biotechnology engineers with good basic knowledge, both in theory and practice.

PO2: Graduates will master good research methods, critical thinking, creativity, independent learning and improve knowledge in Biotechnology.

PO3: Graduates are able to apply and work with modern biotechnology techniques, equipment operation and control in bioproduction, management or consultation for biotechnology projects, especially in the Industry and Agriculture 4.0.

PO4: Graduates have ability to work independently as well as together in groups in high pressure conditions; develop and integrate in high quality job market.

PO5: Graduates are trained to be biotechnology engineers with high specialized quality, good personality, health and professional ethics.

5.Expected learning Outcomes- (ELOs)

No	Description of ELOs	Generic Learning Outcomes	Specific Learning Outcomes
1	Demonstrate good scientific knowledge in fields related to biology, mathematics and chemistry.	☑	
2	Apply the knowledge of law and policies of the Government in genetic engineering and biosafety.	☑	
3	Apply English fluently (IELTS 5.0 or equivalent), and Microsoft Office proficiently (MOS Certificate 750 or equivalent)	☑	
4	Analyse basic problems in biological characteristics, structure, technical process, principle of methods and techniques in Biotechnology.		☑

5	Apply specialised knowledge in specific biotechnology problems: making properly bioproduction processes, demonstrating effectively scientific biology methods and analytic techniques.		☑
6	Evaluate practical biotech - related problems properly to find out suitable and effective solutions.		☑
7	Research for new solutions and development in biotechnology – related fields.		☑
8	Operate and control effectively technical process, equipment, technology in Biotechnology.		☑
9	Consult and plan biotechnology projects and technology for development and applications.		☑
10	Master skills in teamwork, collaboration and organization for effective management.	☑	
11	Study independently for research and further specialized education.	☑	
12	Demonstrate good personality, responsibility, discipline, honesty and professional ethics.	☑	