Master of Biotechnology — Programme Specification (summary)

Thạc sĩ Công nghệ Sinh học — Programme code 8420201 — 60 credits, 4 semesters — Updated May 2026 (English version)

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs) — 3-5 YEARS AFTER GRADUATION

PEO1 — Biotechnology Expert: mastery of knowledge and competency in advanced areas of Biotechnology by solving scientific and technological problems.

PEO2 — Research and Innovation: be able to conduct research, pursue lifelong learning and promote innovative and entrepreneurial ideas.

PEO3 — Leadership and Ethics: become an effective leader and practise professionalism, ethical conduct and biosafety.

PROGRAMME LEARNING OUTCOMES (PLOs) — AT THE TIME OF GRADUATION

PLO1	Critically select, integrate and apply advanced and interdisciplinary knowledge in biotechnology research and professional practice.
PLO2	Analyse complex biotechnology problems and develop appropriate solutions, considering technical requirements, feasibility, intellectual property, and quality management.
PLO3	Apply and critically evaluate appropriate biotechnology methods and techniques with accuracy, safety and reproducibility.
PLO4	Design and conduct biotechnology investigations, analyse and critically evaluate experimental data, and draw evidence-based conclusions.
PLO5	Communicate scientific knowledge, research findings and technical information effectively to diverse academic, professional and non-specialist audiences.
PLO6	Comply with research ethics, biosafety and relevant laws, and demonstrate responsibility towards the community.
PLO7	Work independently, collaborate effectively in teams, and demonstrate commitment to lifelong learning and professional development.

CT1 — RESEARCH ORIENTATION

23 courses — Projects 1-3, Master's Thesis (15 cr).
At least 01 scientific publication before the defence.

CT2 — APPLICATION ORIENTATION

27 courses — Master Project (9 cr) + Graduation Internship (6 cr).
Application product evaluated jointly with the enterprise.