



STUDENT HANDBOOK

*Graduate Program in
Bio-Innovation and
Entrepreneurship*

**Master of Science (M.Sc.) /
Doctor of Philosophy (Ph.D.)**

Study Duration:

- Master's: 2 years (max. 5 years)
- Doctoral: 3 years (max. 6 years)

August, 2025

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Introduction

Welcome to the Graduate Program in Bio-Innovation and Entrepreneurship, offered at Chulabhorn International College of Medicine, Thammasat University. This handbook is designed as a practical guide for students enrolled in both the Master of Science (M.Sc.) and Doctor of Philosophy (Ph.D.) programs.

The handbook provides essential information about the philosophy, structure, and requirements of the program, together with key policies, assessment methods, and support services available during the course of study. It aims to help students understand their rights, responsibilities, and academic expectations while navigating their graduate journey.



This program equips graduates with knowledge, practical skills, ethical awareness, and an entrepreneurial mindset to succeed in academia, industry, and society. Through an interdisciplinary approach combining science, technology, and business, the program fosters innovation and prepares graduates to contribute to the advancement of bio-innovation and entrepreneurship at both national and international levels.

The handbook also highlights Programme Learning Outcomes (PLOs), academic progression and graduation standards, and procedures for appeals. It includes useful forms and templates, such as progress reports, ethics applications, and graduation request forms. Students are encouraged to consult this handbook regularly and seek guidance from advisors, the program committee, or the Graduate School whenever needed.

* General Information *

PROGRAM NAME AND DEGREES OFFERED

Program Name: Graduate Program in Bio-Innovation and Entrepreneurship

Degrees Offered

Master's Degree (ภาษาไทย):

- ชื่อเต็ม: วิทยาศาสตรมหาบัณฑิต (นวัตกรรมชีวภาพ และการเป็นผู้ประกอบการ)
- ชื่อย่อ: วท.ม. (นวัตกรรมชีวภาพ และการเป็นผู้ประกอบการ)

Master's Degree (English):

- Full Title: Master of Science (Bio-Innovation and Entrepreneurship)
- Abbreviation: M.Sc. (Bio-Innovation and Entrepreneurship)

Doctoral Degree (ภาษาไทย):

- ชื่อเต็ม: ปรัชญาดุษฎีบัณฑิต (นวัตกรรมชีวภาพ และการเป็นผู้ประกอบการ)
- ชื่อย่อ: ปร.ด. (นวัตกรรมชีวภาพ และการเป็นผู้ประกอบการ)

Doctoral Degree (English):

- Full Title: Doctor of Philosophy (Bio-Innovation and Entrepreneurship)
- Abbreviation: Ph.D. (Bio-Innovation and Entrepreneurship)

1.2 Major / Field of Study

- No specific major (general program in Bio-Innovation and Entrepreneurship).

1.3 Program Type and Study Plan

• Master's Program (2 years):

- Plan 1 (Academic Track) – Coursework and Thesis
- Language of Instruction: English
- Collaboration: Supported by international academic and industrial partners such as:
 - Ben-Gurion University of the Negev, Israel
 - Erasmus University Rotterdam, Netherlands
 - Hemp Thai Co., Ltd.

• Doctoral Program (3 years):

- Plan 2.1 – Coursework and Thesis (for Master's degree holders)
- Language of Instruction: English
- Collaboration: Supported by national and international partners in bio-innovation, health sciences, and medical technology (same as above).

Both programs award a single degree in Bio-Innovation and Entrepreneurship.

* General Information *

HOST FACULTY AND GRADUATE SCHOOL

The program is hosted by the Chulabhorn International College of Medicine (CICM), Thammasat University, in collaboration with the Graduate School, Thammasat University.

- CICM provides academic and research expertise in biomedical sciences, bio-innovation, and entrepreneurship.
- The Graduate School oversees academic regulations, quality assurance, and degree conferral for graduate-level programs.

PHILOSOPHY AND OBJECTIVES OF THE PROGRAM

The program is founded on the philosophy of integrating science, innovation, and entrepreneurship to create impactful solutions for health sciences, biotechnology, and related industries. It seeks to produce graduates who can:

- Apply interdisciplinary knowledge to develop innovative products and services.
- Conduct high-quality research and generate new knowledge in bio-innovation.
- Demonstrate ethical awareness, integrity, and responsibility in professional and academic contexts.
- Lead organizations with confidence and an entrepreneurial mindset, contributing to society and industry at both national and international levels.

STUDY DURATION

Master of Science (M.Sc.):

- Normal study period: 2 years
- Maximum study period: 5 years

Doctor of Philosophy (Ph.D.):

- Normal study period: 3 years
- Maximum study period: 6 years

Programme Learning Outcomes (PLOs)

Graduates of the Master's (M.Sc.) and Doctoral (Ph.D.) programs in Bio-Innovation and Entrepreneurship are expected to achieve the following learning outcomes, which are aligned with the philosophy, objectives, and needs of academia, industry, and society.

Domain	M.Sc.	Ph.D.
Knowledge (K)	K1: Explain fundamental theoretical principles clearly. K2: Design business plans to transform research into innovation. K3: Integrate fundamental knowledge to create innovation.	K1: Explain fundamental theoretical principles clearly. K2: Design business plans to develop research into innovation. K3: Apply fundamental knowledge effectively to create innovation.
Skills (S)	S1: Demonstrate self-directed learning skills. S2: Use IT appropriately for knowledge acquisition and self-development.	S1: Demonstrate self-directed learning skills. S2: Use IT appropriately for knowledge acquisition and self-development. S3: Create new knowledge in the field of innovation.
Ethics (E)	E1: Exhibit fundamental ethics and morality. E2: Demonstrate ethical reasoning and professional conduct in their field.	E1: Exhibit fundamental ethics and morality. E2: Demonstrate ethical reasoning and professional conduct in their field.
Character (C)	C1: Exhibit leadership, confidence, responsibility, and rationality. C2: Possess traits of innovators and entrepreneurs.	C1: Exhibit leadership, confidence, responsibility, and rationality. C2: Possess traits of innovators and entrepreneurs.

Curriculum Structure

MASTER OF SCIENCE – 36 CREDITS

Component	Credits
Basic Supplementary (if required)	(not counted)
Core / Compulsory	12
Electives	6
Thesis	18

DOCTOR OF PHILOSOPHY – 48 CREDITS

Component	Credits
Basic Supplementary (if required)	(not counted)
Core / Compulsory	6
Electives	6
Dissertation (CME 900)	36

Teaching Format: Hybrid (on-site + online), full-time, bi-semester system.

Assessment: Coursework, thesis proposal & defense, qualifying exam, publication in peer-reviewed journal.



Student Assessment System



GRADING SCALE

Assessment and grading follow the regulations of the Graduate School, Thammasat University. The grading system for graduate programs is as follows:

Grade	Point Value
A = 4.00	B = 3.00
A- = 3.67	B- = 2.67
B+ = 3.33	C+ = 2.33
C = 2.00	C- = 1.67
D = 1.00	F = 0.00

Requirements for Graduation:

- Students must maintain a minimum cumulative GPA of 3.00 throughout their studies.
- For the Master's Degree, a cumulative GPA of not less than 3.00 is required to graduate.
- For all graduate diploma and degree programs, students must achieve a minimum grade of B in every course.



Student Assessment System



ASSESSMENT METHODS

The program uses a wide range of assessment methods to ensure that students achieve the Programme Learning Outcomes (PLOs). Assessments are designed to measure not only theoretical knowledge, but also research ability, professional ethics, leadership, and entrepreneurial qualities.

Master's Degree (M.Sc.)

- **Knowledge (K1–K3):**

- Students are assessed through final examinations, analytical reports, and business plan presentations. These methods evaluate both theoretical understanding and the ability to apply knowledge to innovation and entrepreneurship.

- **Skills (S1–S2):**

- Assessment includes group projects, oral presentations, and the use of IT tools for research. These activities test teamwork, communication skills, and digital literacy, while encouraging independent learning.

- **Ethics (E1–E2):**

- Ethical behavior is evaluated through classroom participation, accuracy in academic referencing, and participation in discussions on research and professional ethics.

- **Character (C1–C2):**

- Leadership and responsibility are assessed through group activities, project management roles, and active involvement in classroom discussions.



Student Assessment System



ASSESSMENT METHODS

Doctoral Degree (Ph.D.)

- **Knowledge (K1–K3):**

- Ph.D. students are assessed using more advanced methods such as qualifying examinations, publications in international peer-reviewed journals, and oral defenses. These ensure the integration of deep academic knowledge and its application to high-level innovation.

- **Skills (S1–S3):**

- Doctoral assessments emphasize research depth and originality. Students are evaluated through their thesis, contributions to new knowledge, and research outputs that are recognized internationally.

- **Ethics (E1–E2):**

- Ethical standards are strictly monitored through the requirement of Research Ethics Approval and plagiarism check reports. This ensures research integrity and compliance with international academic standards.

- **Character (C1–C2):**

- Leadership is assessed through roles as principal investigators in research projects, presentations at international conferences, and collaboration within research teams. These experiences demonstrate responsibility, vision, and the ability to lead in academic and professional contexts.

Student Assessment System

ASSESSMENT APPEAL POLICY

The program provides a clear and transparent policy for students to appeal their assessment results. This policy follows the regulations of the Graduate School, Thammasat University and ensures fairness and consistency.

- **Right to Appeal:**
- Students who are not satisfied with their assessment results may submit an appeal for review. Appeals must be made within 7 working days after the official announcement of grades or examination results.
- **Submission Process:**
 - Appeals must be submitted in writing using the official Assessment Appeal Form.
 - The form should be submitted to the Program Director or Graduate School Office.
 - Supporting evidence (e.g., examination papers, graded assignments, or other relevant documents) must be attached.
- **Review Process:**
 - Appeals are reviewed by an independent committee that does not include the course instructor.
 - The committee ensures impartiality and fairness in considering the case.
- **Notification of Results:**
 - Students will receive official written notification of the committee's decision within a specified timeframe.
 - The committee's decision is final.

This policy ensures that assessment procedures remain transparent, fair, and consistent, while also safeguarding students' rights.

Standards for Progression and Graduation

I. ACADEMIC PROGRESSION

1.1 Registration Status

- Students must register as full-time students in each regular semester unless permission for a leave of absence has been officially approved by the Graduate Studies Committee.
- Continuous enrollment is required to maintain student status within the program.

1.2 Course Load and Academic Standing

- Master's students must complete a minimum of 12 credits of coursework before registering for the thesis.
- Doctoral students (Plan 2.1) must complete a minimum of 12 credits of coursework and maintain a cumulative GPA of not less than 3.00 before being allowed to register for dissertation research.
- A student who receives a grade lower than "C" in any course must repeat that course or take an alternative course as approved by the Program Committee.

1.3 English Proficiency Requirement

- All students must obtain an approved English proficiency score before graduation.
- Accepted tests and minimum scores are as follows:
 - TU-GET (PBT/CBT): 500 / 61
 - TOEFL (PBT/iBT): 500 / 61
 - IELTS: Band 6.0
- The test results must not be older than two years from the date of application.
- Students who do not meet the minimum score may be given conditional acceptance, but the required score must be achieved before the thesis/dissertation defense.

Standards for Progression and Graduation

I. ACADEMIC PROGRESSION

1.4 Qualifying Examination (Ph.D. only)

- Ph.D. students must pass the Qualifying Examination before officially registering for the dissertation.
- The exam is conducted up to three times per academic year, and students are allowed a maximum of three attempts.
- Failure to pass within the allowed attempts will result in termination of student status.

2. RESEARCH PROGRESS AND SUPERVISION

2.1 Thesis/Dissertation Registration

- M.Sc. students may register for the thesis (18 credits) after completing required coursework.
- Ph.D. students may register for the dissertation (36 credits) after completing at least two regular semesters of study with a GPA ≥ 3.00 .

2.2 Proposal Defense

- A formal thesis/dissertation proposal defense must be approved by the appointed committee before data collection or experimental work can begin.
- The proposal and final document must be written in English.

2.3 Advisory Committee

- Each student will be assigned an advisor and thesis/dissertation committee, appointed by the Dean of CICM in accordance with the MHESI postgraduate program regulations.
- Students must meet regularly with their advisor(s) to report progress and receive feedback.

Standards for Progression and Graduation

3. GRADUATION REQUIREMENTS

To be eligible for graduation, students must:

1. **Complete all required courses** in accordance with the approved curriculum.
 - M.Sc. – minimum of **36 credits**
 - Ph.D. – minimum of **48 credits**
2. Achieve a **cumulative GPA of not less than 3.00**.
3. **Pass all required examinations**, including:
 - English proficiency examination (University requirement)
 - Qualifying examination (Ph.D. only)
 - Thesis/dissertation proposal defense
 - Final oral defense (open to the public)
4. Submit and **successfully defend** a thesis or dissertation that demonstrates originality, innovation, and contribution to the field of bio-innovation and entrepreneurship.
5. Have the thesis/dissertation **published or accepted for publication** in an international peer-reviewed journal, or be granted a **patent/innovation output** approved by external experts.
6. Fulfill all **university administrative obligations**, including submission of the final thesis/dissertation in both printed and electronic formats, library clearance, and tuition fee settlement.

4. TIME LIMITS FOR COMPLETION

Program	Normal Duration	Maximum Duration
M.Sc.	2 years	5 years
Ph.D.	3 years	6 years

- Students exceeding the maximum duration must obtain special approval from the Graduate Studies Committee and the University Council.

Standards for Progression and Graduation

5. MILESTONE CHECKLIST

- The Milestone Checklist serves as a progress-tracking tool for both students and advisors throughout the study period.
- It ensures that all academic, research, and administrative requirements are completed in a timely manner prior to graduation.
- Each student must regularly update their milestone record in consultation with their advisor and submit it to the Program Office for annual progress review.

Instructions for Use

- Review milestones with your advisor each semester and record progress.
- Submit the updated checklist annually during the progress evaluation meeting.
- Completion of all milestones is required before final thesis submission and graduation approval.
- Copies of the completed checklist are retained by the Program Office and the Advisor.



Standards for Progression and Graduation

5. MILESTONE CHECKLIST

Master of Science (M.Sc.) Milestone Checklist

Year / Semester	Milestone or Activity	Expected Outcome / Description	Responsible Party	Status (✓)
Year 1 – Semester 1	CME 603 Bio-innovation & Entrepreneurship / CME 606 Responsible Research & Ethics / CME 607 Seminar	Complete ≥ 12 core credits	Student	☐
	CME 612 Laboratory Techniques & Medical Device Approvals	Complete elective courses	Student	☐
	Meet Advisor & Plan Research	Discuss topic and direction	Student / Advisor	☐
	Attend Seminars & Workshops	Academic development	Student	☐
Year 1 – Semester 2	CME 605 Research Methodology / CME 633 Molecular Medical Biology / CME 634 Genetic Engineering	Complete coursework	Student	☐
	Research Proposal Development	Submit proposal for approval	Student	☐
	Ethics Approval Process	Submit to Ethics Committee	Student / Ethics Committee	☐
Year 2 – Semester 1	CME 604 Innovation Laboratory / CME 800 Thesis	Conduct experiments or fieldwork	Student	☐
	Progress Presentation	Mid-term progress review	Student / Advisor / Committee	☐
Year 2 – Semester 2	CME 662 Intellectual Property for Entrepreneurs / CME 800 Thesis	Complete data analysis; finalize thesis	Student	☐
	Thesis Submission & Defense	Successful oral defense	Student / Committee	☐
	Publication / Patent Submission	Submit to journal or file patent	Student	☐
Post-Graduation	Career Development & Outreach	Participate in networking and professional activities	Student	☐

Standards for Progression and Graduation

5. MILESTONE CHECKLIST

Doctor of Philosophy (Ph.D.) Milestone Checklist

Year / Semester	Milestone or Activity	Expected Outcome / Description	Responsible Party	Status (✓)
Year 1 – Semester 1	CME 603 Bio-innovation & Entrepreneurship / CME 662 Intellectual Property for Entrepreneurs / CME 612 Lab Techniques & Medical Device Approvals	Complete ≥ 6 core and 6 elective credits	Student	☐
	Supervisor & Committee Formation	Appoint committee and define expectations	Student / Advisor	☐
	Attend Research Seminars & Workshops	Academic development	Student	☐
Year 1 – Semester 2	CME 900 Dissertation	Develop and defend proposal	Student / Committee	☐
	Ethics Approval and Registration	Obtain ethical clearance and register study	Student / Ethics Committee	☐
	Literature Review & Background Study	Build theoretical framework	Student	☐
Year 2 – Semester 1	CME 604 Innovation Laboratory / CME 900 Dissertation	Begin data collection / experimentation	Student	☐
	Progress Presentation	Present progress at seminars	Student / Advisor / Committee	☐
Year 2 – Semester 2	CME 900 Dissertation	Data analysis and manuscript drafting	Student	☐
	Paper Submission	Submit to journals/conferences	Student	☐
Year 3 – Semester 1	CME 900 Dissertation	Revise per committee feedback	Student	☐
	Thesis Submission for Defense	Submit complete dissertation	Student	☐
Year 3 – Semester 2	Thesis Defense & Publication	Successful oral defense and publication	Student / Committee	☐
Post-Graduation	Publication / Patent Filing / Career Outreach	Disseminate findings, apply patents, join alumni network	Student	☐

Student Conduct And Rights

I. STUDENT RIGHTS AND RESPONSIBILITIES

A. Student Rights

All students enrolled in the Graduate Program in Bio-Innovation and Entrepreneurship are entitled to the following rights:

1. Academic Rights

- To receive fair and transparent teaching, supervision, and evaluation.
- To access learning resources, laboratories, research facilities, and online academic databases.
- To participate in classes, discussions, and academic activities that encourage freedom of thought and scientific inquiry.
- To receive timely and constructive feedback on coursework, thesis, or dissertation progress.
- To appeal academic decisions in accordance with the Assessment Appeal Policy.

2. Research Rights

- To conduct research in an environment that promotes integrity, creativity, and ethical compliance.
- To receive due acknowledgment in publications, patents, or research collaborations.
- To access research grants and funding as available.
- To retain intellectual property rights according to Thammasat University's Research and Intellectual Property Policy.

3. Welfare and Administrative Rights

- To study in a safe, inclusive, and non-discriminatory learning environment.
- To access university facilities such as library, health services, counseling, and IT systems.
- To participate in extracurricular, innovation, and community activities supported by CICM.
- To be informed of all program policies, procedures, and academic requirements.
- To receive official documentation (e.g., transcripts, certificates) in a timely manner.

Student Conduct And Rights

I. STUDENT RIGHTS AND RESPONSIBILITIES

B. Student Responsibilities

With these rights come the following responsibilities:

1. Academic and Research Integrity

- Uphold honesty, accuracy, and transparency in all academic and research activities.
- Avoid plagiarism, data falsification, or any form of academic dishonesty.
- Properly cite sources and acknowledge all collaborators.
- Obtain ethical approval for all research involving human or animal subjects before data collection.

2. Professional Conduct

- Demonstrate respect toward faculty, staff, and peers at all times.
- Maintain punctuality, diligence, and professionalism in academic work.
- Represent CICM and Thammasat University with integrity in all academic, professional, and public contexts.
- Cooperate with advisors and supervisors for academic and research progress.

3. Compliance and Accountability

- Follow all university regulations and laws of Thailand.
- Maintain accurate student records and pay tuition and fees within specified deadlines.
- Use university facilities responsibly and report any misuse or safety hazards.
- Participate in program evaluations and contribute to quality improvement efforts.

Student Conduct And Rights

2. CODE OF CONDUCT AND ETHICS

Students of Thammasat University are expected to uphold the highest **standards of academic excellence, social responsibility, and moral behavior** in accordance with the University's philosophy, "Be the Light of the Nation."

A. General Behavioral Expectations

1. **Respect and Courtesy** – Treat others with politeness, empathy, and consideration regardless of background, culture, or opinion.
2. **Integrity** – Maintain honesty in academic submissions, examinations, and research activities.
3. **Responsibility** – Be accountable for one's actions and contribute positively to the academic community.
4. **Discipline** – Attend all scheduled classes, meetings, and research sessions punctually.
5. **Safety and Cleanliness** – Preserve a safe, clean, and healthy environment within classrooms, laboratories, and common areas.
6. **Professional Appearance and Communication** – Dress appropriately and communicate in a respectful and constructive manner.
7. **Representation** – Uphold the reputation of CICM and Thammasat University in all professional or public events, both online and offline.

B. Academic and Research Ethics

- Ensure all research complies with ethical standards, including informed consent, confidentiality, and humane treatment of subjects.
- Disclose any conflicts of interest in research, publications, or funding.
- Avoid misrepresentation or unauthorized use of data or results.
- Seek proper mentorship and advisory approval before disseminating research findings.



Student Support And Services



The Graduate Program in Bio-Innovation and Entrepreneurship is committed to providing comprehensive academic, personal, and professional support to ensure students' success throughout their studies.

All services are designed to promote academic excellence, well-being, and innovation leadership.

I.ACADEMIC ADVISING AND MENTORING

A. Purpose

Academic advising and mentoring are essential components of graduate education. They ensure that each student receives continuous guidance and supervision to achieve academic, research, and career objectives.

B. Roles and Responsibilities

1. Academic Advisor

- Assigned upon admission or within the first semester.
- Provides guidance on course selection, study planning, and academic performance.
- Monitors academic progress and provides feedback each semester.
- Supports students in preparing for qualifying exams (Ph.D.) and research readiness.
- Acts as the first contact for academic or personal concerns related to the program.

2. Thesis / Dissertation Supervisor

- Appointed by the Program Committee according to Thammasat University regulations.
- Guides the student in developing the research proposal, methodology, and data collection plan.
- Ensures that research adheres to ethical and scientific standards.
- Provides feedback on drafts, progress reports, and defense preparation.
- Encourages publication or innovation outcomes derived from the research.



Student Support And Services



3. Co-Advisor (if applicable)

- Offers specialized expertise in complementary research areas.
- Collaborates with the main advisor to ensure interdisciplinary integration and academic rigor.

C. Student Responsibilities

- Maintain regular communication with advisor(s) and attend scheduled meetings.
- Submit research progress reports and academic documents as required.
- Seek feedback proactively and follow professional conduct in all advisor-student interactions.

2. FACILITIES AND LEARNING RESOURCES

A. Shared Work & Teaching Spaces

- **CICM Co-Working Space (Room 1016, 1st Floor)** — collaborative hub for students, faculty, and external liaison; quiet study & group work.
- **Small Group / Control Rooms (3rd Floor)** — digitally controlled classrooms for group learning and recorded sessions.
- **Biosafety Laboratories (8th Floor)** — research and teaching laboratories with controlled access.

Teaching & Research Rooms Overview

Building Zone	Floor	Room	Room Type	Area (m ²)	Capacity
Integrated Teaching & Research Bldg.	1	1016	Co-Working / Meeting	36.08	20
Integrated Teaching & Research Bldg.	3	3028	Small Group – Control Room	23.94	10
Integrated Teaching & Research Bldg.	3	3029	Small Group – Control Room	23.94	10
Integrated Teaching & Research Bldg.	3	3030	Small Group – Control Room	23.94	10
Integrated Teaching & Research Bldg.	8	—	Biosafety Laboratory Zone	~500	—



Student Support And Services



B. Laboratory Readiness & Safety

- **Certified Research Labs:** BSL-1 (2 rooms: A—shared instruments, B—research) and BSL-2 (3 rooms: A—human specimens/GMOs; B—cell culture; C—microorganisms, risk groups 1–3).
- **Access & Training:** Mandatory lab safety training, SOP assessment, and (where applicable) biosafety certification prior to access.
- **Quality & Recognition:** Legacy “Outstanding Lab Safety” recognition (2019) and continual improvement; currently pursuing ESPReL evaluation with the National Research Council of Thailand.
- **SOPs & Practical Workshops:** Annual hands-on training in biosafety and SOPs for faculty and students; centralized oversight by the Lab Management Committee and Institutional Biosafety Committee.

C. Digital-Forward Teaching

- **Control-Room Automation:** Timetabled auto on/off for AV systems and automatic lecture capture (recording & editing) per teaching schedule.
- **Content Availability:** Recordings uploaded to TU Moodle within 1 business day for review-on-demand.
- **Skill Labs:** Simulation manikins and procedural practice rooms to support medical and biomedical competencies.

D. Maintenance & Booking

- **Preventive Upkeep:** Admin unit performs regular readiness checks; in-house technicians repair immediately when possible; otherwise proceed under procurement regulations.
- **Fault Reporting:** Utility/IT incidents can be reported via designated LINE channel.
- **Online Reservations:** Digital systems for booking classrooms, meeting rooms, laboratories, and vehicles.

E. Campus Mobility & Student Spaces

- Student activity rooms available (including music/practice room via Line Official key checkout).
- Electric shuttle service supports campus mobility for faculty, staff, and students.



Student Support And Services



3.IT AND E-LEARNING SUPPORT (MOODLE, EMAIL, VPN, ETC.)

A. Licensed & Enterprise Systems

- Core Software: Windows & Microsoft Office (licensed).
- Teaching Platforms: Moodle (LMS) and ExamPlus for assessments.
- Online/Hybrid Delivery: Microsoft Teams and Cisco Webex.
- Program-Developed Systems:
 - a. Faculty Workload System (academic workload management)
 - b. Teaching Evaluation System (central, student-driven; instructors see only aggregated results)
 - c. Room Booking System (class/meeting rooms)
 - d. Central Control-Room System (hybrid classroom operations)

B. Network & Access

- Campus LAN in all offices and classrooms; high-speed Wi-Fi across teaching/office areas (planned Wi-Fi 6 upgrade by 2025/2568).
- Dual-Path Internet (Load-Balanced) leveraging TU backbone and a private ISP for resilience.
- VPN & Remote Access to internal resources and licensed databases.
- IT Helpdesk: Regular monthly classroom equipment checks; network performance monitored and tuned; multi-channel support (onsite & online).

4. COUNSELING AND MENTAL HEALTH SUPPORT

- Student Counseling (Confidential): Access to licensed counselors for stress, adaptation, anxiety, and academic burnout.
- Medical & Emergency: Thammasat University Hospital (TUH) services; TU student ID required.
- Peer Advisors: CICM peer mentors for informal support; mental-health workshops each semester.

All counseling data are handled under university ethics and PDPA requirements.



Student Support And Services



5. STUDENT CLUBS AND RESEARCH NETWORKS

- Co-Curricular & Clubs: University-wide clubs, CICM Student Committee, intercultural and community-engagement activities; Co-Working Space (1st floor) available for group learning and student-led events.
- Research Clusters: Participation encouraged in CICM clusters (Biomedical Innovation, Regenerative Medicine, Health-Tech & Entrepreneurship, Molecular Diagnostics & Biomaterials).
- International & Student Services: International Office supports Thai and international students with welfare, visas, and scholarships; coordinates information and outreach.
- Safety, EHS & Accessibility (Operational Note):
- Annual fire prevention & suppression drills; occupational health & safety training; formal EHS policy and committee in place.
- Access control with card/fingerprint scanners; CCTV coverage across CICM and campus security integration.
- University-level initiatives (e.g., smart poles, campus safety app, smoke-free zones, helmet campaigns) enhance a safe and inclusive learning environment.

Stakeholder Engagement

I. PURPOSE AND PRINCIPLES

- The program engages key stakeholders to co-create value in teaching, research, and innovation. Engagement is guided by:
- Transparency & Accessibility (clear channels, timely information)
- Mutual Benefit (co-teaching, research collaboration, employability)
- Quality & Compliance (SOPs, biosafety, PDPA, university policies)
- Continuous Improvement (feedback loops and annual reviews)

2. STAKEHOLDER MAP, COMMUNICATION CHANNELS, AND ACTIVITIES

Stakeholder	Primary Communication Channels	Typical Activities / Information
Students	University/College website, official social media, Moodle/LMS, direct announcements	Program announcements, academic calendar, course information, study skills events, advising schedules
Teaching Faculty (Course Instructors)	Direct communication (meetings, email), Curriculum Handbook/Syllabi	Program meetings, curriculum review, assessment moderation, lecture capture coordination
Invited Lecturers / External Instructors	Direct correspondence, formal invitation letters	Guest lectures, external teaching sessions, industry talks, joint workshops
Inter-Faculty Collaborators (within TU)	Curriculum documentation, joint planning meetings	Co-teaching, shared modules/labs, cross-disciplinary seminars
Inter-Institution Partners (MoU/MoA)	Formal Memoranda of Understanding, exchange agreements	Visiting professors, faculty/student exchanges, joint research and training
Companies / Industry Partners	Direct coordination (meetings, email), partnership agreements	Research collaboration, sponsored projects, facilities support, internships, expert consultation

- Operational note: Communication is supplemented by the Control-Room/AV scheduling (for hybrid/recorded sessions) and online booking systems (rooms, labs, vehicles).

BIE



CONTACT INFORMATION



www.cicm.tu.ac.th



Program Office: Graduate Studies
Division, Chulabhorn International
College of Medicine (CICM)
Thammasat University, Rangsit Campus
Pathum Thani 12120, Thailand

Appendices

APPENDIX A: COURSE LIST (FULL)

Master of Science (M.Sc.) Program (Total 36 Credits)

The Master's curriculum is designed to integrate scientific research, innovation, and entrepreneurship.

Students are required to complete a total of 36 credits, consisting of 12 credits of compulsory courses, 6 credits of electives, and 18 credits of thesis work.

Core / Compulsory Courses (12 Credits)

- **CME 603 Bio-Innovation and Entrepreneurship (3 credits)**

Introduces the foundation of bio-entrepreneurship, innovation ecosystems, and strategies for developing biotechnology ventures. Students learn how to transform research ideas into viable business concepts.

- **CME 604 Innovation Laboratory (3 credits)**

Focuses on applied innovation through practical design projects. Students work in teams to develop prototypes and integrate biomedical concepts with business principles.

- **CME 605 Research Methodology (3 credits)**

Covers quantitative and qualitative research designs, statistical methods, and critical literature analysis. Emphasis is placed on preparing students for independent research.

- **CME 606 Responsible Research and Ethics (3 credits)**

Provides understanding of ethical issues in research, biosafety, intellectual honesty, and compliance with institutional and international standards.

Elective Courses (6 Credits)

Students may select at least two elective courses relevant to their research or professional interests.

Thesis (18 Credits)

- **CME 800 Thesis**

An independent research project under faculty supervision. Students must conduct experiments, analyze data, defend their proposal and final thesis, and produce a publishable research paper or innovation outcome.

Appendices

APPENDIX A: COURSE LIST (FULL)

Doctor of Philosophy (Ph.D.) Program (Total 48 Credits)

The Ph.D. program aims to produce independent researchers and innovators capable of translating scientific discoveries into practical applications.

Students are required to complete 48 credits: 6 credits of compulsory courses, 6 credits of electives, and 36 credits of dissertation research.

Core / Compulsory Courses (12 Credits)

- **CME 603 Bio-Innovation and Entrepreneurship (3 credits)**

Introduces the foundation of bio-entrepreneurship, innovation ecosystems, and strategies for developing biotechnology ventures. Students learn how to transform research ideas into viable business concepts.

- **CME 604 Innovation Laboratory (3 credits)**

Focuses on applied innovation through practical design projects. Students work in teams to develop prototypes and integrate biomedical concepts with business principles.

Elective Courses (6 Credits)

Students may select at least two elective courses relevant to their research or professional interests.

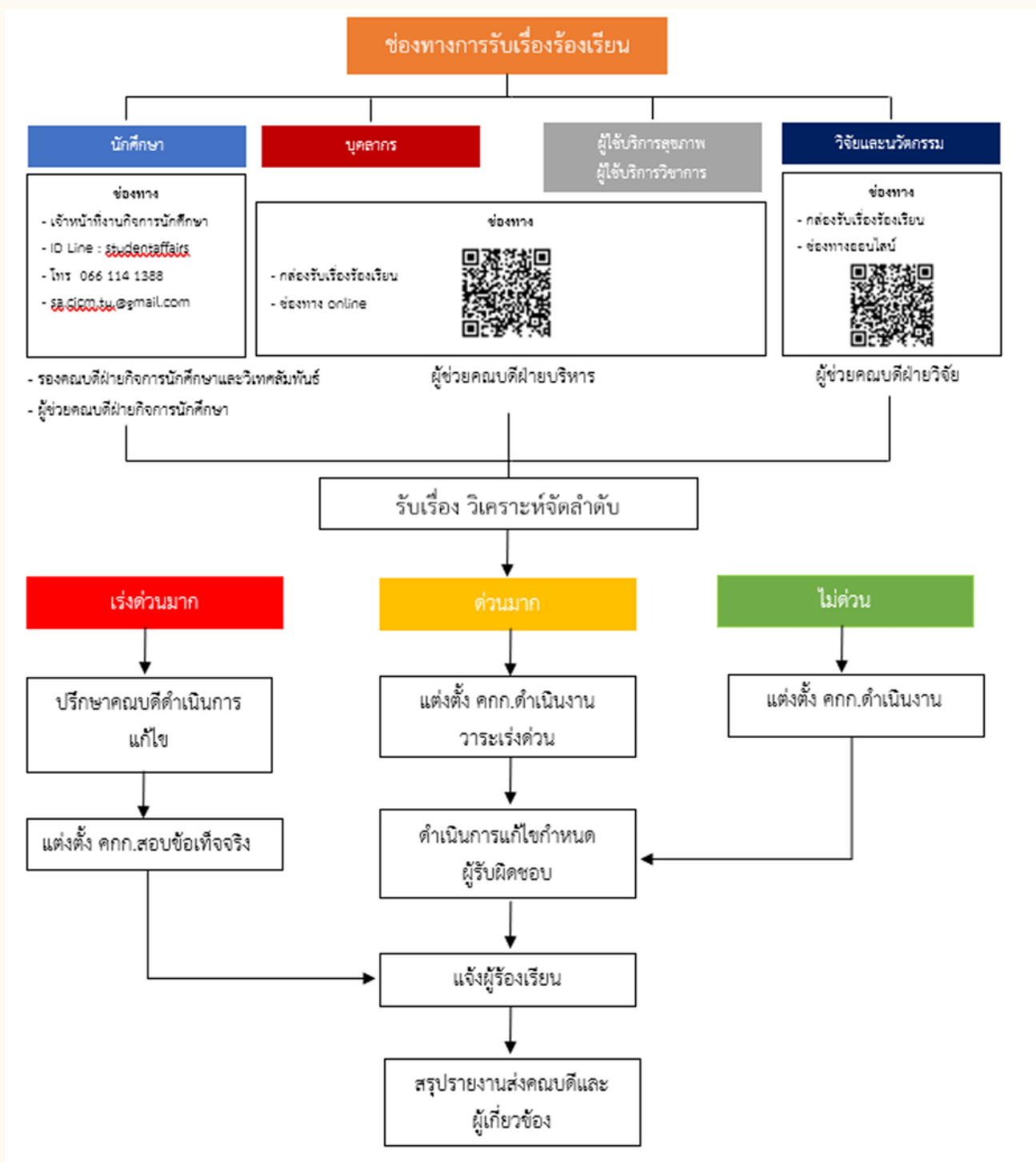
Dissertation (36 Credits)

- **CME 900 Dissertation**

A comprehensive independent research work under supervision. Students must pass the qualifying examination, present their proposal, conduct research, publish in a peer-reviewed journal or patent their innovation, and successfully complete a public oral defense.

Appendices

APPENDIX B: STUDENT COMPLAINT SYSTEM



Appendices

APPENDIX C: ACADEMIC CALENDAR

BIE1/2025

- CMB 600 RESEARCH ETHICS AND RESPONSIBLE RESEARCH(OS)
- CME 601 PHYSIOLOGY FOR BIOINNOVATION AND ENTREPRENEURSHIP (HB)
- CME 602 INTRODUCTION TO ENGINEERING DECIDE AND PROCESS (HB)
- CME 603 BIOINNOVATION AND ENTREPRENEURSHIP (OL)
- CME 606 RESPONSIBLE RESEARCH AND ETHICS (OS)
- CME 607 SEMINAR (OS)
- CME 612 LABORATORY TECHNIQUES AND MEDICAL DEVICE APPROVALS (HB)
- CME 633 MOLECULAR MEDICAL BIOLOGY (OS)

OS-ONSITE CLASS

OL-ONLINE CLASS

HB-HYBRID CLASS

CLASS SCHEDULE:

MORNING CLASS (GREEN): 9:00 AM - 12:00 PM

AFTERNOON CLASS (ORANGE): 1:00 PM - 4:00 PM

EVENING CLASS (BLUE): 18.00-21.00 PM



Appendices



APPENDIX C: ACADEMIC CALENDAR

august

2025

sunday	monday	tuesday	wednesday	thursday	friday	saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13 CME 606 CME 606	14 CME 606 CME 606	15 CME 606 CME 606	16
17	18 CME 606 CME 606	19 CME 601 CME 602	20 CME 606	21 CME 602	22 CME 603	23
24	25	26 CME 601 CME 602	27 CME612 OL	28 CME 602	29 CME 603	30
31						



Appendices



APPENDIX C: ACADEMIC CALENDAR

september

2025

sunday	monday	tuesday	wednesday	thursday	friday	saturday
	1	2 CME 601	3 CME612 OL	4	5 CME 602 CME 603	6
7	8 CME633	9 CME 601	10 CME612	11 CME 607 CME633	12 CME 602 CME 603	13
14	15 CME633	16 CME 601	17 CME612	18 CME 607 CME633	19 CME 602 CME 603	20
21	22 CME633	23 CME 601	24 CME612	25 CME 607 CME633	26 CME 602 CME 603	27
28	29 CME633	30 CME 601				



Appendices



APPENDIX C: ACADEMIC CALENDAR

october

2025

sunday	monday	tuesday	wednesday	thursday	friday	saturday
			1 CME612	2 CME 607 CME633	3 CME 602 CME 603	4
5	6 CME633	7 CME 601	8 CME612	9 CME 607 CME633	10 CME 602 CME 603	11
12	13	14 CME 601	15 CME612	16 CME633	17 CME 602 CME 603	18
19	20 CME633	21 CME 601	22 CME612	23	24 CME 602 CME 603	25
26	27 CME633	28 CME 601	29 CME612	30 CME 607 CME633	31 CME 602 CME 603	



Appendices



APPENDIX C: ACADEMIC CALENDAR

november

2025

sunday	monday	tuesday	wednesday	thursday	friday	saturday
						1
2	3 CME633	4 CME 601	5 CME612	6 CME 607 CME633	7 CME 602 CME 603	8
9	10 CME633	11 CME 601	12 CME612	13 CME 607 CME633	14 CME 602 CME 603	15
16	17 CME633	18 CME 601	19 CME612	20 CME633	21 CME 603	22
23	24	25 CME 601	26 CME612	27	28	29
30 CME633					CME 603	



Appendices



APPENDIX C: ACADEMIC CALENDAR

december

2025

sunday	monday	tuesday	wednesday	thursday	friday	saturday
	1	2	3 CME612 OL	4	5	6
7	8	9	10 Constitution Day	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31 New Year's Eve			

Appendices

APPENDIX C: ACADEMIC CALENDAR

BIE2/2025

- CME 604 INNOVATION LABORATORY (HB)
- CME 605 RESEARCH METHODOLOGY (OS)
- CME 662 INTELLECTUAL PROPERTY FOR ENTREPRENEURS (OS)

OS-ONSITE CLASS

HB-HYBRID CLASS

CLASS SCHEDULE:

MORNING CLASS (GREEN): 9:00 AM - 12:00 PM

AFTERNOON CLASS (ORANGE): 1:00 PM - 4:00 PM



Appendices



APPENDIX C: ACADEMIC CALENDAR

January

2026

sunday

monday

tuesday

wednesday

thursday

friday

saturday

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CME605

CME662

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CME605

CME662 CME604



Appendices



APPENDIX C: ACADEMIC CALENDAR

February

2026

sunday

monday

tuesday

wednesday

thursday

friday

saturday

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CME605

CME662 CME604

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CME662 CME604

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Appendices



APPENDIX C: ACADEMIC CALENDAR

March

2026

sunday

monday

tuesday

wednesday

thursday

friday

saturday

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CME662

CME604

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CME605

CME662

CME604

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CME605



Appendices



APPENDIX C: ACADEMIC CALENDAR

April

2026

sunday

monday

tuesday

wednesday

thursday

friday

saturday

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CME662

CME604

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CME605

CME662

CME604

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CME605



Appendices



APPENDIX C: ACADEMIC CALENDAR

May

2026

sunday

monday

tuesday

wednesday

thursday

friday

saturday

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Appendices

APPENDIX D: UNIVERSAL ASSESSMENT RUBRIC

Purpose

- This rubric is designed as a standard assessment tool for evaluating student performance across all courses, seminars, and research presentations.
- It aligns with the program's Learning Outcomes (Knowledge – Skills – Ethics – Character) and promotes academic integrity, scientific communication, and entrepreneurial competence.

Scoring Guideline

Average Score	Descriptor	Interpretation
3.50 – 4.00	Excellent	Exceeds expectations; demonstrates innovation and professionalism.
3.00 – 3.49	Good	Meets program requirements with sound performance.
2.50 – 2.99	Satisfactory	Acceptable performance; moderate improvement needed.
2.00 – 2.49	Fair	Minimum acceptable; major improvement needed.
< 2.00	Unsatisfactory	Does not meet minimum program standards.

Learning outcome	Inadequate and Improvement is Necessary (1)	Minor Improvement Will Make It Adequate (2)	Adequate Expected (3)	Better than Adequate (4)	Score	Total Weight (%)
Knowledge	30%					
Relevant knowledge (10%)	One piece supported of information related to the selected/assigned topic	two pieces of supported information related to the selected/assigned topic	Three pieces of supported information related to the selected/assigned topic	Four pieces of supported information related to the selected/assigned topic		
Contents (20%)	Less information related to presented topics	Able to explain, specify and connect, some knowledge to the topic	Enough background and and information related to presented topics	Able to explain, understand, specific and connect most knowledge to the topic		
Skills	45%					
Scientific communication (15%)	Lack of scientific communication	Scientific communication, support with evidences, less extract information for presentation	Scientific communication, support with evidences, faire extract information for presentation	Scientific communication, support with evidences, well extract information for presentation		
Delivery – Entrepreneurial Presentation Skill (15%)	Inadequate: Reads slides monotonously; little confidence; no audience connection; fails to convey vision or purpose.	Minor Improvement: Some confidence but limited persuasion; message unclear; minimal business insight.	Adequate: Confident speaker with reasonable structure; conveys ideas and potential value but lacks strong persuasion or call-to-action.	Better than Adequate: Presents like an entrepreneur — confident, engaging, and persuasive; articulates opportunity, value, and vision clearly; inspires audience confidence and interest.		
Q and A (15%)	Unable to answer most of the questions	able to answer few questions but less convincing the audiences	able to answer few questions and can convince the audiences	able to answer most of questions and can strongly convince the audiences		
Ethics	10%					
References (10%)	No cited references	Cited references with some irrelevant	Cited references with few irrelevant	Cited appropriate relevant references		
Character	15%					
Organization (5%)	poor organization, no order	average organization, good order, too much text	well prepare presentation slide, text, picture but miss some	Prepare informative and effective slides (Text and graphic are clear and understandable)		
Punctuality (10%)				On time		



Appendices



APPENDIX E: STUDENT LEARNING LOGBOOK

This logbook is designed for students to use as a manual to track their learning progress. It also serves as an evaluation tool during advisory meetings to ensure students achieve the Program Learning Outcomes (PLOs) defined by the curriculum.

Part 1 Profile & Goals

Student Name:

Student ID:

Advisor Name:

.....

Career Goals / Research Interests:

.....

Appendices

APPENDIX E: STUDENT LEARNING LOGBOOK (MASTER DEGREE)

PROGRAM LEARNING OUTCOMES (PLOS)

Category	Code	Program Learning Outcome (PLO)	Type	Category	Code
Knowledge	K1	Learners can clearly explain the core	Generic	Knowledge	K1
	K2	Learners can design business plans for the	Specific		K2
	K3	Learners can demonstrate the integration	Specific		K3
Skills	S1	Learners demonstrate self-directed	Generic	Skills	S1
	S2	Learners can appropriately utilize	Specific		S2
Ethics	E1	Learners demonstrate basic ethics	Generic	Ethics	E1
	E2	Learners can apply ethical reasoning and	Specific		E2
Character	C1	Learners exhibit leadership,	Generic	Character	C1
	C2	Learners possess the characteristics	Specific		C2

Appendices

APPENDIX E: STUDENT LEARNING LOGBOOK (MASTER DEGREE)

LEARNING OUTCOMES TRACKING TABLE

INSTRUCTIONS: STUDENTS SHOULD MARK A CHECK (✓) IN THE "SELF-ASSESSMENT" COLUMN AT THE END OF EACH SEMESTER. PLEASE RECORD ANY EVIDENCE OR ARTIFACTS THAT REFLECT THE ACHIEVEMENT OF THE OUTCOMES FOR THAT SPECIFIC COURSE.

Course Code	Course Title	Category	Core PLOs Developed	Self-Assessment (CLOs/YLOs Achieved)	Evidence / Reflection
CME601	Physiology for Bio-Innovation and Entrepreneurship	Foundation	Knowledge (1, 3), Skills (1, 2, 3), Ethics (2)	☐ Achieved ☐ Needs Improvement	..... .....
CME602	Engineering Design and Basic Processes	Foundation	Knowledge (1, 2), Skills (1, 2, 3), Personal Characteristics (1)	☐ Achieved ☐ Needs Improvement	..... .....
CME603	Bio-Innovation and Entrepreneurship	Core	Knowledge (2, 3), Skills (1, 2), Ethics (1), Personal Characteristics (1)	☐ Achieved ☐ Needs Improvement	..... .....
CME604	Innovative Practice	Core	Knowledge (2, 3), Skills (1, 2), Ethics (1), Personal Characteristics (1)	☐ Achieved ☐ Needs Improvement	..... .....

Appendices

APPENDIX E: STUDENT LEARNING LOGBOOK (MASTER DEGREE)

LEARNING OUTCOMES TRACKING TABLE

INSTRUCTIONS: STUDENTS SHOULD MARK A CHECK (✓) IN THE "SELF-ASSESSMENT" COLUMN AT THE END OF EACH SEMESTER. PLEASE RECORD ANY EVIDENCE OR ARTIFACTS THAT REFLECT THE ACHIEVEMENT OF THE OUTCOMES FOR THAT SPECIFIC COURSE.

Course Code	Course Title	Category	Core PLOs Developed	Self-Assessment (CLOs/YLOs Achieved)	Evidence / Reflection
CME605	Research Methodology	Core	Knowledge (1, 3), Skills (2), Ethics (1), Personal Characteristics (1)	☐ Achieved ☐ Needs Improvement	..... .....
CME606	Research Responsibility and Ethics	Core	Knowledge (3), Skills (1, 2), Ethics (1), Personal Characteristics (1)	☐ Achieved ☐ Needs Improvement	..... .....
CME607	Seminar	Core	Knowledge (2, 3), Skills (2), Ethics (1, 2)	☐ Achieved ☐ Needs Improvement	..... .....
.....	..... ..... .....	Elective 1	..... ..... .....	☐ Achieved ☐ Needs Improvement	..... .....

Appendices

APPENDIX E: STUDENT LEARNING LOGBOOK (MASTER DEGREE)

LEARNING OUTCOMES TRACKING TABLE

INSTRUCTIONS: STUDENTS SHOULD MARK A CHECK (✓) IN THE "SELF-ASSESSMENT" COLUMN AT THE END OF EACH SEMESTER. PLEASE RECORD ANY EVIDENCE OR ARTIFACTS THAT REFLECT THE ACHIEVEMENT OF THE OUTCOMES FOR THAT SPECIFIC COURSE.

.....	..... ..... .....	Elective 2	..... ..... .....	☐ Achieved ☐ Needs Improvement	..... .....
.....	..... ..... .....	Elective 3	..... ..... .....	☐ Achieved ☐ Needs Improvement	..... .....
.....	..... ..... .....	Elective 4	..... ..... .....	☐ Achieved ☐ Needs Improvement	..... .....
CME800	Thesis	Thesis	Knowledge (2, 3), Skills (2, 3), Ethics (1, 2), Personal Characteristics (1)	☐ Achieved ☐ Needs Improvement	..... .....

Appendices

APPENDIX E: STUDENT LEARNING LOGBOOK (PH.D.)

PROGRAM LEARNING OUTCOMES (PLOS)

Category	Code	Program Learning Outcome (PLO) Description	Type
Knowledge	K1	Learners can clearly explain the core theories of relevant fundamental disciplines.	Generic
	K2	Learners can design business plans for the development of innovative research.	Specific
	K3	Learners can demonstrate the integration of fundamental knowledge in creating innovations.	Specific
Skills	S1	Learners demonstrate self-directed learning skills.	Generic
	S2	Learners can appropriately utilize information technology to acquire knowledge for self-development.	Specific
	S3	Learners create new innovative knowledge	Specific
Ethics	E1	Learners demonstrate basic ethics and morality.	Generic
	E2	Learners can apply ethical reasoning and professional codes of conduct within their discipline.	Specific
Character	C1	Learners exhibit leadership, assertiveness, responsibility, and rational thinking.	Generic
	C2	Learners possess the characteristics of an innovator and an entrepreneur.	Specific

Appendices

APPENDIX E: STUDENT LEARNING LOGBOOK (PH.D.)

LEARNING OUTCOMES TRACKING TABLE

INSTRUCTIONS: STUDENTS SHOULD MARK A CHECK (✓) IN THE "SELF-ASSESSMENT" COLUMN AT THE END OF EACH SEMESTER. PLEASE RECORD ANY EVIDENCE OR ARTIFACTS THAT REFLECT THE ACHIEVEMENT OF THE OUTCOMES FOR THAT SPECIFIC COURSE.

Course Code	Course Title	Category	Core PLOs Developed	Self-Assessment (CLOs/YLOs)	Evidence / Reflection
CME601	Physiology for Bio-Innovation and	Foundation	Knowledge (1, 3), Skills (1, 2, 3), Ethics (2)	☐ Achieved	..... .....
CME602	Engineering Design and Basic Processes	Foundation	Knowledge (1, 2), Skills (1, 2, 3), Personal	☐ Achieved	..... .....
CME603	Bio-Innovation and Entrepreneurshi	Core	Knowledge (2, 3), Skills (1, 2), Ethics (1),	☐ Achieved	..... .....
CME604	Innovative Practice	Core	Knowledge (2, 3), Skills (1, 2), Ethics (1),	☐ Achieved	..... .....
.....	..... ..... .....	Elective 1	..... ..... .....	☐ Achieved	..... .....
.....	..... ..... .....	Elective 2	..... ..... .....	☐ Achieved	..... .....
CME900	Thesis	Thesis	Knowledge (2, 3), Skills (2, 3), Ethics (1, 2), Personal Characteristics (1)	☐ Achieved ☐ Needs Improvement	..... .....

Appendices

APPENDIX F: ADVISOR MEETING LOG (AT LEAST 2 TIMES/YEAR)

Date	Discussion Topic (Academic/Research/Well-being)	Progress vs. YLOs/PLOs	Advisor's Suggestions	Student's Signature	Advisor's Signature
.....					
.....					
.....					
.....					
.....					

Appendices

APPENDIX F: ADVISOR MEETING LOG (AT LEAST 2 TIMES/YEAR)

Date	Discussion Topic (Academic/Research/Well-being)	Progress vs. YLOs/PLOs	Advisor's Suggestions	Student's Signature	Advisor's Signature
.....					
.....					
.....					
.....					
.....					