

SBT GRADUATE STUDENT HANDBOOK

2026

SCHOOL OF BIORESOURCES AND TECHNOLOGY

KING MONGKUT'S UNIVERSITY OF TECHNOLOGY THONBURI

Message from the Dean

Dear Students,

It is my great pleasure to welcome you to the SBT family. Whether you are from Thailand or abroad, you are now part of a diverse and vibrant community dedicated to learning, innovation, and creating positive impact through science and technology.

At SBT, we believe that university education is more than earning a degree. It is an opportunity to develop knowledge, skills, character, and an entrepreneurial mindset that will prepare you to thrive in a rapidly changing world. We encourage you to be curious, embrace new challenges, think creatively, and work collaboratively across cultures and disciplines.

During your time at SBT, you will have opportunities to engage in research, innovation, international experiences, and activities beyond the classroom. I encourage you to make the most of these opportunities, build meaningful friendships, and learn from the diverse perspectives of those around you.

This Student Guidebook has been prepared to help you navigate university life and become familiar with the academic resources, services, and opportunities available to support your success. I hope it will be a valuable companion throughout your journey at KMUTT.

On behalf of our faculty members and staff, I wish you every success and happiness in your studies. We look forward to supporting your growth and celebrating your achievements in the years ahead.

Once again, welcome to SBT. I wish you an inspiring, rewarding, and memorable university experience.

Assoc. Prof. Dr. Varit Srilaong

Dean

School of Bioresources and Technology

King Mongkut's University of Technology Thonburi

1. Welcome and Strategic Vision

Welcome to the School of Bioresources and Technology (SBT), where scientific curiosity meets impactful global solutions. As you embark on your graduate journey with us, we invite you to align your academic aspirations with our collective pursuit of technological breakthroughs and environmental stewardship. Our community is driven by a unified purpose to shape a sustainable future, guided by our institutional vision and mission:

SBT Institutional Vision:

"We have committed to being a leading organization that creates workforces, research, and innovation to drive bio-based economic growth and sustainable development."

SBT Institutional Mission:

1. Create high-quality bio-based workforces of all ages.
2. Produces valuable research and innovation.
3. Provides academic and scientific services for sustainable development.

Background of SBT

Founded in 1993 to bolster Thailand's industrial evolution, the School of Bioresources and Technology (SBT) at KMUTT has continuously adapted to meet global shifts in climate change, food security, and digital transformation. Today, SBT is a pivotal driver of the Bio-Circular-Green (BCG) Economy, operating through three core divisions: Integrative Biosciences and Innovation (IBI), Bioinformatics and Systems Biology, and Conservation Ecology. Our strategic framework is built upon five pillars—Biotechnology, Biochemical Technology, Post-harvest Technology, Bioinformatics, and Conservation Ecology—designed to enhance agricultural productivity and create high-value biological products. By blending global competitiveness with local strategic advantages, SBT remains committed to the sustainable management of Thailand's bio-resources. Furthermore, the school stands as a premier research hub for biomolecular innovation, specializing in the development of starch, lipids, proteins, and functional fragrances.

Board of Directors & Program Chairmen

Position	Name-Surname	E-mail	Telephone
Dean	Assoc.Prof.Dr. Varit Srilaong	varit.sri@kmutt.ac.th	0-2470-7726
Assoc. Dean for Administration	Assoc.Prof.Dr. Kornkanok Aryusuk	kornkanok.ary@kmutt.ac.th	0-2470-7758
Assoc. Dean for Academic Affairs	Asst.Prof.Dr. Sudarut Tripetchkul	sudarut.tri@kmutt.ac.th	0-2470-7556
Assoc. Dean for Research	Assoc.Prof.Dr. Pawinee Chaiprasert	pawinee.cha@kmutt.ac.th	0-2470-7525

Assoc. Dean for Quality Assurance	Asst.Prof.Dr. Kanokwan Poomputsa	kanokwan.poo@kmutt.ac.th	0-2470-7500
Chairman - Integrative Biosciences and Innovation (IBI) (IBI)	Assoc.Prof.Dr. Apiradee Uthairatanakij	apiradee.uth@kmutt.ac.th	0-2470-7724
- Biochemical Technology Track	Assoc.Prof.Dr. Natta Laohakunjit	nutta.lao@kmutt.ac.th	0-2470-7752
- Biotechnology Track	Asst.Prof.Dr. Sarawut Cheunkar	sarawut.che@kmutt.ac.th	0-2470-7431
- AgriScience & Postharvest Track	Assoc.Prof.Dr. Chalermchai Wongs-Aree	chalermchai.won@kmutt.ac.th	0-2470-7725
Chairman - Conservation Ecology (CE)	Assoc.Prof.Dr. Dusit Ngoprasert	dusit.ngo@kmutt.ac.th	0-2470-7571
Chairman - Bioinformatics & Systems Biology (BIF)	Assoc.Prof.Dr. Saowalak Kalapanulak	saowalak.kal@kmutt.ac.th	0-2470-7513

■ 3. ACADEMIC PROGRAMS & CREDITS

The School of Bioresources and Technology provides advanced Master of Science (M.Sc.) and Doctor of Philosophy (Ph.D.) degrees across multiple disciplines that focus on addressing 21st-century bioscience challenges, national BCG economy strategies, and academic development.

List of Offered Programs

Doctoral Level:

- Doctor of Philosophy Program in Integrative Biosciences and Innovation (International Program)
- Doctor of Philosophy Program in Conservation Ecology (International Program)
- Doctor of Philosophy Program in Bioinformatics and Systems Biology (International Program)
- Doctor of Philosophy Program in Bioinformatics and Systems Biology for Driving Frontier BCG Economy (Multidisciplinary Sandbox Program) (International Program)

Master's Level:

- Master of Science Program in Integrative Biosciences and Innovation (International Program)
- Master of Science Program in Conservation Ecology (International Program)
- Master of Science Program in Bioinformatics and Systems Biology (International Program)
- Master of Science Program in Bioinformatics and Systems Biology for Driving Frontier BCG Economy (Multidisciplinary Sandbox Program) (International Program)

Core Program Descriptions

Integrative Biosciences and Innovation (IBI)

Designed for a new generation of scientists who aspire to move beyond traditional academic boundaries and use science as a powerful driver of innovation, sustainability, and real-world impact. The program responds directly to global challenges such as climate change, food and health security, and digital transformation by integrating Biochemical Technology, Biotechnology, and Postharvest Technology into a single, forward-looking curriculum.

Conservation Ecology (CE)

Developed in response to accelerating habitat loss, fragmentation, and biodiversity crises in Southeast Asia. Our program objectives are to generate rigorous scientific evidence to understand threatened

species, quantify human impacts on wildlife, identify conservation priorities, and inform species co-existence strategies using a quantitative multidisciplinary approach combining ecology, population genetics, and social science.

Bioinformatics and Systems Biology (BIF)

Equips learners with the skills to solve complex biological problems using biology, computer science, and statistics. Focuses on programming, high-throughput omics data analysis, software development, database design, and plant phenotype prediction through cellular modeling.

Bioinformatics for Driving Frontier BCG Economy (Thachavit Sandbox)

A specialized multidisciplinary Sandbox program developed in partnership with the Thailand Academy of Sciences (TAS) and Thachavit initiative (launched in 2024). It bridges the gap between academia and industry through strategic partnerships with KMUTT and the private sector, emphasizing hands-on, applied research to drive the circular bio-based economy.

Program Credit Breakdown Matrix

Degree Program / Plan	Comp.	Comp. Elect.	Sem.	Elect.	Thesis	Total
M.Sc. Integrative Biosciences & Innovation Plan 1	3*	-	-	-	36	36
M.Sc. IBI Plan 2 - Biochemical Technology Track	6	4	-	14	12	36
M.Sc. IBI Plan 2 - Biotechnology Track	6	9	-	9	12	36
M.Sc. IBI Plan 2 - AgriScience & Postharvest Track	6	10	-	8	12	36
M.Sc. Conservation Ecology Plan 1	4	-	-	21	12	37
M.Sc. Bioinformatics & Systems Biology Plan A2	18+2*	-	-	6	12	36
M.Sc. Bioinformatics BCG (Thachavit) Plan 1	12	2*	9*	24	-	36

Remark: * Reported as S or U (Satisfactory/Unsatisfactory) with no credit granted toward graduation requirements.

4. The Graduate Student Journey Roadmap

SBT maps out your path to graduation in a systematic 5-stage overview designed to assist students in keeping track of coursework, thesis progression, and legal graduation clearance. Below is a structured matrix of the milestones:

Stage	Phase & Key Focus	Major Tasks / Outputs
Stage 1	Enrollment	• Record historical student data into system
	(Onboarding & Planning)	• Meet with first-year program/academic advisor • Formulate basic coursework study plan
Stage 2	Coursework	• Register and complete required courses

	(Academic Foundation)	• Maintain class attendance • Complete term exams and evaluations (GPA ≥ 3.0)
Stage 3	Prerequisites	• Pass CITI Program (Online Theory)
	(Research Readiness)	• Pass KMUTT Live Workshop (Score $\geq 80\%$) • Pass Qualifying Exam (QE - Ph.D. Only)
Stage 4	Thesis Lifecycle	• Register thesis and submit Form P.1 (First 2 months)
	(Execution & Defense)	• Continuous semester progress evaluations (From PG/3) • Submit DF/ 3 forms (1 month prior) & defense exam
Stage 5	Graduation Clearance	• Obtain Faculty Board Final Approval
	(Clearance & Archiving)	• Complete scholarship clearance • Upload complete volume to Registrar & New ACIS Systems

3. Core Academic and Research Milestones

Milestone 1: Onboarding, Advisor Consultation, and Coursework

Upon joining SBT, students are assigned a cohort of advisors depending on their specific program and academic tracks. During Year 1, master's students should consult their designated First-Year Program Advisors, while doctoral candidates transition directly under an individual Thesis Advisor from day one. Below is the official first-year advisor directory:

Graduate Program / Track	Master's (M.Sc.) Advisor	Doctoral (Ph.D.) Advisor
Integrative Biosciences and Innovation (IBI) • Biochemical Technology • Biotechnology • AgriScience & Postharvest	Asst.Prof.Dr. Ditpon Kotatha Dr.Yaowaluck Maprang Roshorm Assoc.Prof.Dr.Apiradee Uthairatanakij	Individual Thesis Advisor Individual Thesis Advisor Individual Thesis Advisor
Conservation Ecology • All Research Tracks	Assoc.Prof.Dr.Tommaso Savini & Dr.Worata Klinsawat	Individual Thesis Advisor
Bioinformatics and Systems Biology • Regular Curriculum	Asst.Prof.Dr. Saowalak Kalapanulak	Individual Thesis Advisor

Bioinformatics and Systems BiologyAsst.Prof.Dr. Saowalak
Kalapanulak

Individual Thesis Advisor

- Driving Frontier BCG Economy (Sandbox)

Milestone 2: Pre-Thesis Prerequisites & Research Readiness

Before commencing any experimental or laboratory-based research, graduate students must fulfill several prerequisites to ensure compliance with ethical, environmental, and academic safety standards:

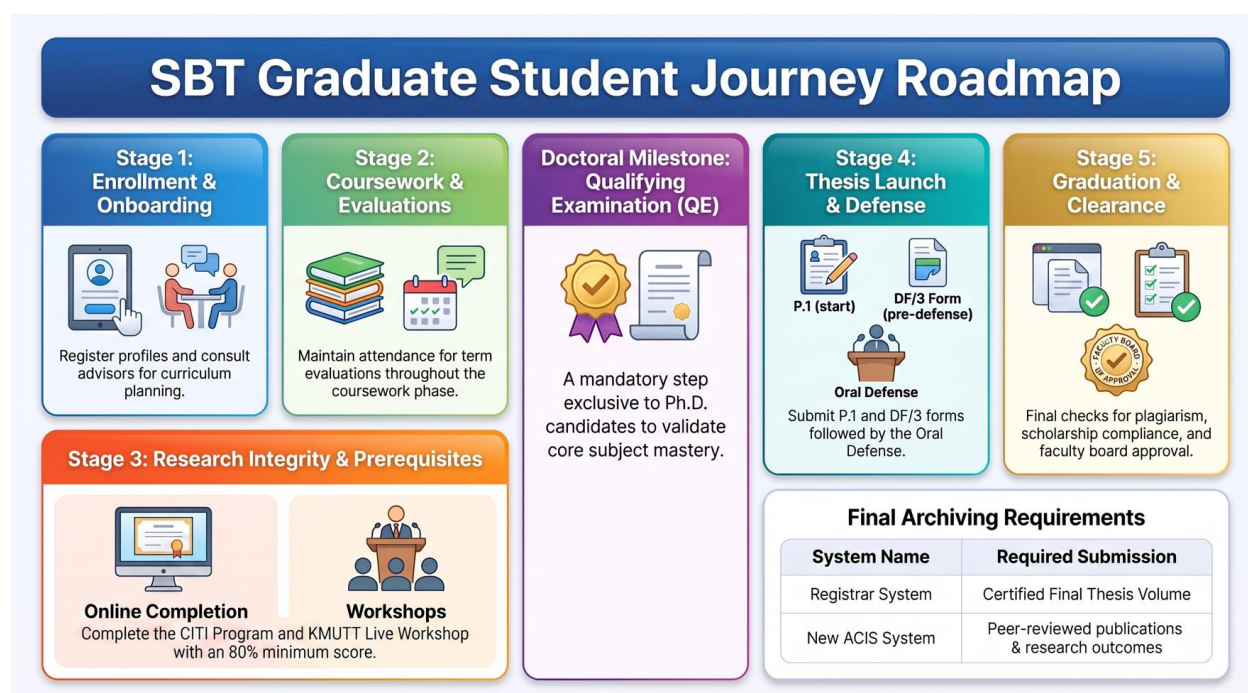
- **Research Integrity & Ethics:** Students must obtain certificates from both the theoretical and practical training streams. The theoretical stream is offered via the online CITI Program (Responsible Conduct of Research). The practical stream requires attending the KMUTT Live Research Ethics Workshop, which requires a passing post-test score of at least 80%.
- **Laboratory Safety (Safety Card):** Before entering any chemical or biological testing laboratory, students must complete the 'Laboratory and Workshop Safety Training Course for International Researchers and Students' online and secure a score of more than 80% to obtain an official Safety Card.
- **Specialized Ethics Committee Licenses:** If the research scope falls under specific regulated fields, separate institutional reviews are strictly mandated:
 - IBC (Biosafety/Biosecurity): Required for research involving GMOs, biohazards, plant materials, animal carcasses, blood, or tissue samples.
 - IRB (Human Ethics): Required for research involving human subjects, questionnaires, focus groups, or behavioral observation.
 - IACUC (Animal Ethics): Required for research involving live animals or animal carcasses.
 All principal investigators must hold a valid license issued by the National Research Council of Thailand (NRCT).
- **Qualifying Examination (QE):** This exam is strictly mandatory exclusively for Doctoral (Ph.D.) candidates to validate core subject mastery and research capability prior to advancing to full dissertation research status.

Milestone 3: Thesis Lifecycle & Graduation Clearance

The active research phase begins with the official registration of credits, followed by strict progress monitoring and administrative archiving upon successful defense:

- **Thesis Launch (Form P.1):** Students must register for thesis credits and submit their formal title proposal and committee nomination (Form P.1) to Educational Services within the first 2 months of the semester.
- **Continuous Progress Evaluations (Form PG/3):** Every semester, students must present their ongoing research progress to an evaluation panel in an oral examination to maintain their candidate status.

- **Thesis Defense (Form DF/3):** At least one month prior to the planned defense date, students must submit the DF3 forms to Educational Services. The oral defense and final evaluation must be fully completed and graded before the last day of the academic semester.
- **Faculty Board Final Approval:** Following a successful defense, students must submit the final corrected thesis, a plagiarism report, and the approved abstract to Educational Services for Faculty Board clearance. Any required formatting revisions must be fully corrected within the specified deadline.
- **Digital Archiving & Uploads:** Graduating candidates are strictly required to upload their digital files to two distinct university systems:
 - Registrar System: Upload the certified, complete, and signed final thesis volume directly into the Office of the Registrar network.
 - New ACIS System: Upload all peer-reviewed research outcomes, journal publications, and conference records.



4. GRADUATION REQUIREMENTS

The graduation rules at KMUTT are highly rigorous and require students to meet both academic coursework standards and stringent publication thresholds, which vary based on enrollment plans and scholarship tracks.

Master's Degree (M.Sc.) Graduation Criteria

- **Plan 1.1 (Thesis Only):** Requires up to 36 thesis credits and zero coursework. Must present the thesis, pass an oral defense examination, and publish/disseminate at least 1 research article.
- **Plan 1.2 (Coursework + Thesis):** Requires at least 12 thesis credits and coursework with a cumulative GPA of 3.00 or higher. Must present the thesis, pass an oral defense examination, and publish/disseminate at least 1 research article.

- **Plan 2 (Professional Type):** Must complete all coursework with a GPA of 3.00 or higher, pass the comprehensive exam (written and/or oral), present an independent research report, and pass a final oral exam.

Doctoral Degree (Ph.D.) Graduation Criteria

- **Plan 1 (Research-Based):** Exclusively dedicated to dissertation research (72 credits for B.Sc. entrants; 48 credits for M.Sc. entrants). Requires passing the QE, passing the final oral defense, and meeting publication requirements.
- **Plan 2 (Coursework + Thesis):** Combines coursework and research (48 credits for B.Sc. entrants; 36 credits for M.Sc. entrants) with a cumulative GPA of 3.00 or higher. Requires passing the QE, passing the final oral defense, and meeting publication requirements.

Ph.D. Publication Paths (Standard / Non-Scholarship)

- **Path A:** Publish at least 2 research articles in a quality international peer-reviewed journal.
- **Path B:** Publish at least 1 research article in a quality international journal AND hold or apply for at least 1 patent/applied innovation with clear commercial or social benefits (evaluated by 3 external experts).
- **Path C:** Follow specific publication criteria as formally prescribed and approved by the academic program committee.

Petchra Pra Jom Klao Scholarship Special Requirements

- **Master's Scholarship:** Must complete advanced coursework with a cumulative GPA of 3.25 or higher, pass the oral exam, and publish at least 1 research article as first or corresponding author in an international peer-reviewed journal indexed in Web of Science (WoS) or Scopus.
- **Doctoral Scholarship:** Must pass the QE, complete coursework with a cumulative GPA of 3.50 or higher, pass the oral exam, and publish at least 2 research articles as first or corresponding author in international journals indexed exclusively in the Web of Science (WoS) database.

6. Student Health & Wellness Benefits and Campus Life

Student Health & Wellness Benefits

KMUTT provides comprehensive health, wellness, and medical support across all three campuses (Bangmod, Bang Khun Thian, and Ratchaburi) to ensure students maintain excellent physical and mental well-being:

- **Primary Medical Care:** Students can access free primary medical checkups, general practitioner services, and basic medications at the on-campus KMUTT Health Care Unit (located on the 1st floor of the SBT Building at Bang Khun Thian Campus, open Mon-Fri 9.00 a.m. – 5.00 p.m.). Specialist clinics are available on scheduled hours (Doctor on-site: Tue 10.00 a.m. – 13.00 p.m. and Thu 9.00 a.m. – 11.00 a.m.). Seasonal influenza vaccines are provided at special student rates.

- **Mental Health Support (Motivation Clinic):** Free, confidential psychological and psychiatric counseling is offered via the KMUTT Motivation Clinic. Services are conducted by clinical psychologists and psychiatrists. Advance online booking is strictly required before using the services.
- **Student Group Accident & Health Insurance (Academic Year 2026)**
 - 1. Insurance Coverage Details**
 - Group Accident Insurance (via Roojai):
 - Covers all students 24/7 worldwide.
 - Medical expense coverage up to 40,000 THB per accident.
 - No upfront payment required at network hospitals.
 - *(Exclusions: Injuries resulting from alcohol consumption, fights, or extreme sports).*
 - Inpatient Health Insurance (IPD via Dhipaya):
 - Covers room & board, ICU, and general medical expenses.
 - Mandatory for international students | Optional for Thai students.
 - 2. Fee Summary**

Student Category	Enrollment Term	Fee Breakdown	Total Amount Due
Thai Students	1st Semester	Accident Coverage & Health Services Fee	1,000 THB / year
	2nd Semester	Accident Coverage & Health Services Fee	666 THB
International Students	1st Semester	Health Insurance Premium (1,800 THB) + Accident & Health Services (1,000 THB)	2,800 THB / year
	2nd Semester	Health Insurance Premium (1,199 THB) + Accident & Health Services (666 THB)	1,865 THB

Important Policy Notes

- **Fee Waiver for International Students:** International students who already hold valid personal health insurance that meets or exceeds the university's coverage standard may apply for a fee waiver at the Student Affairs Office.
- **Optional Coverage for Thai Students:** Thai students who wish to purchase the inpatient (IPD) health insurance plan can do so voluntarily for an additional cost of approximately 1,800 THB/year (payment due by August 2026).

7. SBT Laboratories Directory

Program / Specialized Laboratory	Head of Laboratory	Contact E-mail	Telephone No.
Algal Biotechnology (Biotech)	Dr.Wipawan Siangdung	wipawan.sia@kmutt.ac.th	0-2470-7486
Animal Cell Culture (Biotech)	Asst.Prof.Dr.Kanokwan Poomputsa	kanokwan.poo@kmutt.ac.th	0-2470-7500
Remediation (Biotech)	Assoc.Prof.Dr. ChairatTreesubuntorn	chairat.tre@kmutt.ac.th	0-2470-7598
Sensors Technology (Biotech)	Dr.Patsamon Rijiravanich	patsamon.rij@kmutt.ac.th	0-2470-7475
Waste Utilization & Management	Assoc.Prof.Dr.Pawinee Chaiprasert	pawinee.cha@kmutt.ac.th	0-2470-7525
Biodiversity (Biotech)	Asst.Prof.Dr.Lakha Salaipetch	lakha.sal@kmutt.ac.th	0-2470-7558
Biointerface and Device Lab	Asst.Prof.Dr. Sarawut Cheunkar	sarawut.che@kmutt.ac.th	0-2470-7431
Community Resources Management	Asst.Prof.Dr.Sudarut Tripetchkul	sudarut.tri@kmutt.ac.th	0-2470-7556
Conservation Ecology (CE)	Assoc.Prof.Dr.George A. Gale	george.and@kmutt.ac.th	0-2470-7555
Postharvest Biochem. & Mol. Bio	Assoc.Prof.Dr.Chalermchai Wongs-Aree	chalermchai.won@kmutt.ac.th	0-2470-7725
Postharvest Pathology	Assoc.Prof.Dr.Pongphen Jitareerat	pongphen.jit@kmutt.ac.th	0-2470-7722
Postharvest Physiology	Assoc.Prof.Dr.Apiradee Uthairatanakij	apiradee.uth@kmutt.ac.th	0-2470-7724
Postharvest Quality and Logistics	Assoc.Prof.Dr.Varit Srilaong	varit.sri@kmutt.ac.th	0-2470-7726
Carbohydrate Technology	Asst.Prof.Dr. Yuree Wandee	yuree.wan@kmutt.ac.th	0-2470-7761
Enzyme Technology	Assoc.Prof.Dr.Chakrit Tachaapaikoon	chakrit.tac@kmutt.ac.th	0-2470-7757
Phytobioactive and Flavor Lab	Assoc.Prof.Dr.Natta Laohakunjit	nutta.lao@kmutt.ac.th	0-2470-7752
Lipid Technology Research Group	Assoc.Prof.Dr.Kornkanok Aryusuk	kornkanok.ary@kmutt.ac.th	0-2470-7758
Yeast Innovation Res. Lab	Assoc.Prof.Dr.Nitnipa Soontorngun	nitnipa.soo@kmutt.ac.th	0-2470-7753
Lignin Technology Research Group	Asst.Prof.Dr.Paripok Phitsuwan	paripok.phi@kmutt.ac.th	0-2470-7751
Systems Biology & Bioinf. (SBI)	Assoc.Prof.Dr. Treenut Saithong	treenut.sai@kmutt.ac.th	0-2470-7714
Systems Biomedicine	Assoc.Prof.Dr.Teeraphan Laomettachit	teeraphan.lao@kmutt.ac.th	0-2470-7572

8. Administrative Staff Directory & Contacts

The Office of the Dean supports graduate students with registrations, facilities booking, research scholarships, and general academic services. Please find the relevant contact persons below:

Staff Name	Room / Sec.	Telephone	Core Responsibilities
Mr. Apinan Waiyasilpa	A3-204 Dean's	0-2470-7702	Information, News and activities to be announced
Mrs. Thunyasiri Junnim Mr. Pornchai Cheysaniam	A3-204 Service	0-2470-7703	Booking classroom and meeting rooms
Mr. Pongthorn Chukam	A3-204 Facility	0-2470-7704	Classroom and meeting facilities (LCD, Visualizer, computer, Notebook, Sound equipment), request for Building Keycard, request for use of rooms after working hours, request for Car Sticker
Ms. Kamonwan Chinnawong	A3-205 Research	0-2470-7706	Research support, apply for Post Doctoral Degree scholarship
Ms. Rungarun Waisayawan Ms. Waraporn Katepradit Ms. Pakpinun Thaninsukpisan	A3-205 Academic	0-2470-7705 0-2470-7709	All academic-relevant help: Student request forms (delayed registration, postpone tuition fee payment, dropping off), academic information, proposal examination, thesis progress examination, thesis defense examination, seminar, scholarships application
Ms. Waraporn Boontook	A3-206 Financial	0-2470-7707	Accounting and Financial services
Ms. Nattarin Sadakorn	A3-206 Procurement	0-2470-7711	Purchasing and lending office supplies and equipment
Policy & Planning Office	A3-206 Planning	0-2470-7719	Policy and planning affairs

9. Official Resources & Student Support Channels

If you encounter academic registration difficulties, need to submit official student requests, or require clarification on university regulations and language development policies, please refer to the official channels and regulatory policies below:

Official Contact Directories & Policy Links

- **Prospective Students:** <https://sbt.kmutt.ac.th/en/prospective-students-downloads/>
(Includes Application Forms for SBT scholarships, non-regular research internship programs, exchange student manuals).
- **Current Students:** <https://sbt.kmutt.ac.th/en/current-students-downloads/>
(Includes Student Handbook, Internet Registration Manual, form and request forms,

Qualifying and Comprehensive Exam forms, Thesis manual, Ph.D. dissertation format guides).

- **KMUTT Educational Services Division (EDS):** <https://eds.kmutt.ac.th/graduate-students/> (Official portal for central KMUTT graduate educational rules, regulations, announcements, and forms).
Contact Support (Educational Services Division):
 educational_services@university.ac.th | Phone: 02-470-8334
- **Academic Regulations Website:** <https://eds.kmutt.ac.th/en/graduate-students/>
- **KMUTT Graduate Studies Regulations B.E. 2568 (2025):** <https://kmutt.me/Gc484LT>
- **English Language Development Policy (Doctoral Students):**
<https://kmutt.me/pyaJvin>
- **English Language Development Policy (All Graduate Students):**
<https://kmutt.me/UXgz3K8>
- **Emergency Security Offices:**
 - School of Bioresources and Technology Building Security: 02-470-7700
 - Central Security Office (KMUTT BKT Campus): 02-470-7384
 - University Emergency Main Line (24/7): 02-470-7399