

# SCHOOL OF BIORESOURCES AND TECHNOLOGY

## BACKGROUND

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Founded in 1993 in response to the country's transition from a structurally agriculturally-based to an industrially-oriented economy, the school's aim is to produce outstanding and dedicated graduates who are able to conduct research and tackle challenging questions arising from this transition. The school consists of four divisions that address different aspects to these problems such as agricultural-waste utilization and management, manufacturing of value-added agricultural products by means of biotechnology and production of high-value compounds from microbes. We are also a center for basic and applied research on biomolecules, including starch, lipids and oil, proteins, fragrance and flavors.

We address questions to improve overall productivity and quality of agricultural products and logistics. With this, we are pursuing our goal to ensure effective and sustainable management of Thailand's natural bio-resources (including its wild biodiversity) and environment. At present, the school offers advanced courses in Master's and Doctoral degrees in Biotechnology, Biochemical Technology, Postharvest Technology and Natural Resources Management. Also in response to the importance of multi-disciplinary studies, we, in close collaboration with the Department of Information Technology have launched the first in Thailand, Master's degree program in Bioinformatics and Systems Biology in 2003.

### **Leading Research and Innovation**

SBT is a pioneer in the field of Bioresources and Technology in Thailand. Our R&D programs offer advanced training in the areas of Biotechnology, Postharvest Technology, Biochemical Technology and Natural Resource Management with special focus on food, feed, fuel and (bio-) pharmaceuticals. We have developed and transferred new technology to many industrial partners. Many servicescenters are located on our campus, including the Pilot Plants Development and Training Institute (PDTI) and National Biopharmaceutical Facility (NBF), the Excellent Center for Waste Water Utilization and Management (ECoWaste). In 2010, KMUTT was recognized by the Commission of Higher Education, Thailand as one of the nine research universities and, SBT is proud of its contribution to this success.

## **Promising people in the house**

SBT is also a home to several globally recognized faculty members and researchers. Over the years, we have produced a number of qualified graduates, and have published over 500 national and international peer-reviewed papers and filed over 20 patents since our founding. Apart from academic responsibility, it is SBT commitment to serve the local community and to contribute to solve the country's urgent problems.

## **Innovative study program**

Our unique graduate programs are multi-disciplinary, covering a wide range of research interests. Intensive research is conducted in fully equipped laboratories as well as in real workplace settings. We provide students the opportunity to gain career-broadening experiences while working with the industry/community and through training overseas.

## **Scholarship opportunities**

SBT attracts highly qualified local as well as international students each year. We guarantee scholarships to qualified new students upon admission.

## **Learning and living in harmony**

This campus established in 2000, is located in a suburb Bangkhunthian seacoast not far from the downtown of vibrant capital city of Bangkok. Its location is a well-known destination for seafood lovers and other attractions. Bangkhunthian campus is also a green, eco-friendly learning environment. To ensure healthy learning and living, many services such as university housing, high speed internet, transportation, sports complex, health care center and several small restaurants are available on campus.

**Mission:** School of Bioresources and Technology (SBT) is a graduate school that engages in high-quality research to create knowledge that serves the country and society. SBT offers academic service and technology transfer for individuals, corporates, and enterprises. SBT is committed to preserving and enriching cultural heritage as the foundation of society.

**Vision:** We are committed to producing graduates with knowledge, quality, and ethical standing, creating high-quality bio-based research and science and technology management, and being internationally recognized with regards to effective management systems, in order to serve society.

## BOARD OF DIRECTOR AND CHAIRMAN

Position	Name-Surname	E-mail	Telephone No.
<b><u>Board of Director</u></b>			
Dean	Assoc.Prof.BoosyaBunnag	<a href="mailto:boosya.bun@kmutt.ac.th">boosya.bun@kmutt.ac.th</a>	0-2470-7355
Associate Dean for Administration	Assoc. Prof.Dr.Varit Srilaong	<a href="mailto:varit.sri@kmutt.ac.th">varit.sri@kmutt.ac.th</a>	0-2470-7726
Associate Dean for Academic Affairs	Asst.Prof.Dr.SudarutTripetchkul	<a href="mailto:sudarut.tri@kmutt.ac.th">sudarut.tri@kmutt.ac.th</a>	0-2470-7556
Associate Dean for Research	Assoc.Prof.Dr.Werasak Surareungchai	<a href="mailto:werasak.sur@kmutt.ac.th">werasak.sur@kmutt.ac.th</a>	0-2470-7474
Associate Dean for Quality Assurance	Asst. Prof. Dr. Kanokwan Poomputsa	<a href="mailto:kanokwan.poo@kmutt.ac.th">kanokwan.poo@kmutt.ac.th</a>	0-2470-7500
<b><u>Chairman</u></b>			
Biotechnology (BIT)	Asst. Prof. Dr. Kanokwan Poomputsa	<a href="mailto:kanokwan.poo@kmutt.ac.th">kanokwan.poo@kmutt.ac.th</a>	0-2470-7500
Biochemistry Technology (BCT)	Assoc .Prof.Dr.Kornkanok Aryusuk	<a href="mailto:kornkanok.ary@kmutt.ac.th">kornkanok.ary@kmutt.ac.th</a>	0-2470-7758
Postharvest Technology (PHT)	Asst. Prof. Dr. Songsin Photchanachai	<a href="mailto:songsin.pho@kmutt.ac.th">songsin.pho@kmutt.ac.th</a>	0-2470-7752
Natural Resource Management (NRM)	Asst.Prof.Dr.Sudarut Tripetchkul	<a href="mailto:sudarut.tri@kmutt.ac.th">sudarut.tri@kmutt.ac.th</a>	0-2470-7556
Bioinformatics and System Biology (BIF)	Asst.Prof.Dr.Marasri Reungjitchachawalya	<a href="mailto:marasri.rue@kmutt.ac.th">marasri.rue@kmutt.ac.th</a>	0-2470-7481

## ADVISOR FOR FIRST YEAR STUDENTS

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Program	Degree	Name of Advisor
Biotechnology	Ph.D.	Advisor of Thesis
Biotechnology (Research Program)	M.Sc.	Asst.Prof.Dr.Kanokwan Poomputsa
Biotechnology Business and Management	M.Sc.	Assoc.Prof.Dr.Yuwapin Dandusittapunth
Postharvest Technology	Ph.D.	Advisor of Thesis
Postharvest Technology	M.Sc.	Assoc. Prof.Dr.Varit Srilaong
Natural Resource Management	Ph.D. (IBP)	Advisor of Thesis
Natural Resource Management	M.Sc.	Asst.Prof.Dr.Sudarut Tripetchkul (Advisor for first year students)
Biochemical Technology	Ph.D	Advisor of Thesis
Biochemical Technology	M.Sc.	Assoc.Prof.Narumon Jeyashoke (Advisor for first year students)
Bioinformatics and System Biology (BIF)	M.Sc.	Asst.Prof.Dr.Marasri Reungjitchachawalya (Advisor for first year students)
Bioinformatics and System Biology (BIF)	Ph.D	Advisor of Thesis

## PROGRAM IN SCHOOL OF BIORESOURCES AND TECHNOLOGY

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### **Doctoral Degree:**

1. Doctor of Philosophy Program in Biotechnology (International Program)
2. Doctor of Philosophy Program in Biochemical Technology
3. Doctor of Philosophy Program in Postharvest Technology (International Program)
4. Doctor of Philosophy Program in Bioinformatics and Systems Biology (International Program)

### **Master Degree:**

1. Master of Science Biotechnology Program (International Program)
2. Master of Science Program in Postharvest Technology (International Program)
3. Master of Science Program in Biochemical Technology
4. Master of Science / Master of Engineering and Master of Arts Program in Natural Resource Management
5. Master of Science Program in Bioinformatics and Systems Biology (International Program)

### ***Biotechnology Program***

The Biotechnology graduate program at the School of Bioresources and Technology is a leading interdisciplinary and innovative international graduate program in Thailand aiming to provide students seeking comprehensive training in a variety of biotechnology disciplines in response to the dramatic expansion of biotechnology-oriented industries worldwide. The curriculum is specifically designed to nurture research competency, analytical skills as well as professional attributes of the students. The program prepares students for careers in the established and emerging field of biotechnology by offering study plans spanning all the aspects of biotechnology including traditional research, industrial practice, and bio-entrepreneurship. Graduate students will be provided with solid training in core subjects such as molecular biotechnology, bioprocess engineering, environmental sciences, and biotechnology business initiatives. There are three modules offered which students can choose according to their interests. 1. Biotechnology: concentrating on in-depth research under close supervision of qualified researchers/advisors. 2. Biotechnopreneur Biotechnology Business and Management emphasizing integrating basic/advanced theory, biotechnology relevant technologies together with business initiatives to develop novel biotechnology products which will create value. This module is internship-based and problem-

based to meet the needs of the private sector. 3. Biotechnology Practice School: focusing on applying scientific knowledge to solve problem existing in the real factory environments. Students are therefore exposed to working systems the production as well as R&D facilities. This module is problem-based focusing on real problems of the private sector.

### ***Biochemical Technology Program***

The Division of Biochemical Technology (BCT) offers a graduate program leading to a Master of Science and Doctor of Philosophy. Our pioneering program was initiated with the explicit purpose of producing exceptional biochemical technologists capable of conducting research in the field of biochemical technology and working in collaboration with engineers or other personnel to develop new technology for efficient utilization of Thailand's bioresources. An enhanced learning and training environment has been created for students and researchers at all levels here and through our national and international collaborations all around the world. Students are provided with opportunities to explore various aspects of BCT research which focuses on the biochemical processing of biological materials. Present research activities include lipids, enzymes and proteins, flavors and carbohydrates and nucleic acids. Courses are interdisciplinary and customer-oriented, open to both graduate students as well as any interested individuals engaged in research and manufacture of biochemical products. A number of student scholarships are available each year for qualified candidates. Our graduates have moved on to careers in academics, as well as in industry, government agencies and non-governmental organizations.

### ***Postharvest Technology Program***

Developing countries in the tropics face common problems in regard to postharvest losses of agricultural produce. Loses in product quality and quantity occur at all stages in the postharvest chain, from harvesting handling, storage, and marketing to the final delivery to consumers. Although highly specific to commodity, location, and growing season, about one-half of the total production of agricultural produce is wasted after harvest. The reduction of postharvest losses of agricultural produce is a major strategy to achieve food security and economic prosperity. In response to this need, KMUTT established the postharvest technology program in 1994. The program institutes a more focused and relevant graduate education to develop competent and active manpower resources in postharvest technology. It also conducts vigorous and responsive research and development, with the ultimate goal of applying developing and existing technologies to solve problems of postharvest losses and ensure a stable supply of high quality and safe agricultural products.

### ***Natural Resource Management***

Southeast Asia is a region which still retains an abundance of biological as well as agricultural resources however all of these resources are under intense pressure from an expanding human population. The NRM graduate program focuses on research and development that promotes biodiversity conservation and management as well as efficient use of soil, water, and other agricultural resources. We also recognize the importance of natural resource development to regional countries and the need to create an education and research program that enables interdisciplinary study. Due to differences in regional needs, learning and exchanging knowledge through research in collaboration with local people is encouraged. The program also emphasizes the application of scientific concepts and technologies for problem solving and decision making through the use of case studies as well as training in the real world.

### ***Bioinformatics and System Biology***

Bioinformatics and Systems Biology is a relatively new scientific discipline that is concerned with the study of biological information, ranging from the vast and rapidly accumulating genetic information/databases to patterns of protein expression and their links to disease states. Bioinformatics is very much the scientific and technical foundation of the human genome project, and promises to be a central life science of this century. The international Bioinformatics and Systems Biology course at KMUTT is designed for students who desire focused training in the elements of computer science, biology and biochemistry needed for successful careers in this exciting new discipline. Students in our program will receive comprehensive training in genomics, algorithms for sequence analysis, database design and management, software engineering and programming (including web-based development). Each student will apply their skills to a practical project, where they will design and implement a solution to a real-world problem under the guidance of an experienced mentor from industry or academia. The degree program requires a total of 38 credits (for students who have a strong background in both biological and computer sciences). In order to receive a Master's degree, students must demonstrate mastery of the core subject matter (expected to maintain a minimum grade of "B" in all core courses) and reach a minimum TOEFL test score of 500 (paper) or 173 (computer) prior to or on completion of the course. In 24 months students are expected to gain the knowledge and skills

necessary to enter a career in industry or in research as a bioinformatics or bio-computing specialists.

### NUMBER OF CREDITS REQUIRED

Degree	Number of Credits Required						
	Compulsory	Seminar	Elective	Thesis	Internship	Research Study	Total
<b>Master Degree</b>							
<b>1. Master of Science Biotechnology Program (International Program)</b>							
Plan A.2/1 Biotechnology(Thesis 12 Credits)	11		13	12			36
Plan A.2/1 Biopharmaceutical Biotechnology (Thesis 12 Credits)	17		7	12			36
Plan A.2/2 (Thesis 24 Credits)	11		1	24			36
Plan B.Biotechnopreneur	18		15			6	39
Plan B.Biotechnology Business and Management	19		12			6	37
<b>2.Master of Science Program in Postharvest Technology (International Program)</b>							
A.2/1 (Thesis 36 Credits)				36			36
A.2/2 (Thesis 12 Credits)	14		12	12			38
B (Special Project Study 6 Credits)	17		15	6			38
<b>3.Master of Science Program in Biochemical Technology</b>							
A.2/1 (Thesis 36 Credits)				36			36
A.2/2 (Thesis 12 Credits)	9		16	12			37
<b>4.Master of Science / Master of Engineering and Master of Arts Program in Natural Resource Management</b>							
A.2/1 (Thesis 36 Credits)	5		21	12			36
A.2/2 (Thesis 38 Credits)	5		27			6	38
<b>5.Master of Science Program in Bioinformatics and Systems Biology (International Program)</b>							
A. (Thesis 38 Credits)	15	2	9	12			38
B (Thesis 38 Credits)	5	2	9		6	6	38



Degree	Number of Credits Required						
	Compulsory	Seminar	Elective	Thesis	Internship	Research Study	Total
<b>Doctoral Degree</b>							
<b>1. Doctor of Philosophy Program in Biotechnology (International Program)</b>							
- M.Sc. Background	3		9	36			48
- B.Sc. Background	4		24	48			76
<b>2. Doctor of Philosophy Program in Postharvest Technology (International Program)</b>							
- M.Sc. Background				48			48
- M.Sc. Background	6		6	36			48
- B.Sc. Background	16		9	48			74
<b>2. Doctor of Philosophy Program in Biochemical Technology</b>							
- M.Sc. Background		3**		48			48
- B.Sc. Background	10		16	48			74

## ACADEMIC CALENDAR 2015

ACTIVITIES BEFORE THE FIRST SEMESTER	
<b>July 2016</b>	- Students consult with advisors for registration.
Wed 6 – Thu 7	
Fri 8	- Last day to submit for maintaining student status for the first semester.
Mon 11 – Sat 16	- Days for registration and tuition payment processing via internet; “New ACIS”.
	- Days to maintain student status under approval, processing via internet; “New ACIS”.
Fri 22	- Last day for registration payment.
THE FIRST SEMESTER ( 3 AUGUST - 8 DECEMBER 2015)	
<b>August 2016</b>	
Mon 1	- Classes begin.
Mon 1 - Fri 5	- Days for late registration processing via internet; “New ACIS”. (Start paying penalty fee with an amount of 50 baht per day including holidays since Mon 1 August 2016).
Mon 1 – Mon 15	- Days to add and change sessions and/or subjects, processing via internet; “New ACIS”. - Days to request for registration with examination time conflict. (For senior undergraduate students).
Mon 1 Aug – Tue 30	- Days for late maintain student status. (Start paying penalty fee with an amount of 50 baht per day including holidays since Mon 1 August 2016)
Mon 1 Aug – Fri 16 Sep	- Days to drop, processing via internet; “New ACIS”.
Mon 8 Aug – Mon 16 Sep	- Days for late registration approved by Head of Department, processing via internet; “New ACIS”. (Start paying penalty fee with an amount of 50 baht per day including holidays since Mon 1 August 2016).
Tue 11	Wai Khru Day, (Classed closed – only undergraduates.)
Mon 15	- Last day to request to transfer courses/credits.
Sat 20	- Compensation classes: Wai Khru Day (Tue 11 August 2016).
Sat 27	- Compensation classes: Her Majesty the Queen’s Birthday (Fri 12 August 2016).
<b>September 2016</b>	
Mon 5	-First day for students to evaluate lecturers’ and advisors’ performance (See more details in the New ACIS)
Wed 14	- Last day for late maintain student status approved by Dean. (Start paying penal August 2016).
Mon 19 - Tue 27	- Mid-term examination period.
Mon 28 – Tue 1 Nov	- Days for withdrawal with W standing.
<b>October 2016</b>	
Mon 3 - Fri 14	- Days to submit a graduation request.
Mon 10 Oct - Fri 11 Nov	- Period for students to evaluate lecturers’ & advisors’ performance via internet; “New ACIS”.
Tue 25	- Last day for registration reimbursement.
Sat 30	- Compensation classes: King Chulalongkorn Memorial Day (Mon 24 October 2016).
<b>November 2016</b>	
Mon 7	- Last day to submit the request to maintain student status.
Wed 23 Nov – Fri 2 Dec	- Final examination period.
<b>December 2016</b>	
Tue 6	- Classes end.
ACTIVITIES AFTER THE FIRST SEMESTER & BEFORE THE SECOND SEMESTER	
<b>December 2016</b>	

Wed 14	- Last day to submit theory, lab, project and thesis examination results.
Tue 15 – Wed 21	- New graduate students of semester 2 consult with advisors for registration.
Sat 17	- Examination results announcement.
Sun 18	-Orientation Day for new graduate students
*Mon 19	- Announcement of lecturers' & advisors' performance evaluations. Lecturers and advisors can check the results via the intranet system.
Mon 19 – Fri 23	- Students consult with advisors for registration.
Tue 20 - Sun 25	- Days for registration and tuition payment processing via internet "New ACIS". - Days to maintain student status under approval, processing via internet
Mon 26	- Last day for registration payment.
<b>THE SECOND SEMESTER (4 JANUARY - 22 MAY 2017)</b>	
<b>January 2017</b>	
Wed 4	- Classes begin.
Mon 4 – Tue 10	- Days for late registration processing via internet; "New ACIS". (Start paying penalty fee with an amount of 50 baht per day including holidays since Wed 4 January 2017).
Wed 4 – Tue 17	- Days to add and change sessions and/or subjects, processing via internet; "New ACIS". - Days to request for registration with examination time conflict. (For undergraduate students)
Wed 4 Jan – Thu 2 Feb	- Days for late maintain student status. (Start paying penalty fee with an amount of 50 baht per day including holidays since Wed 4 January 2017)
Wed 4 Jan – Wed 22 Feb	- Days to drop, processing via internet; "New ACIS".
Wed 11 Jan – Wed 15 Feb	- Days for late registration approved by Head of Department, processing via internet; "New ACIS". (Start paying penalty fee with an amount of 50 baht per day including holidays since Wed 4 January 2017)
Wed 18	- Last day to request to transfer courses/credits.
Mon 23	- Last day to submit examination results of semester 1.
Mon 30 Jan – Wed 8 Feb	- Students inform to attend classes in special semester processing via internet; "New ACIS".
<b>February 2017</b>	
Sat 4	Compensation Classes : Makha Bucha Day
Mon 6	- First day for students to evaluate lecturers' & advisors' performance. (See more details in the New ACIS).
Fri 17	- Last day for late maintain student status <sup>1</sup> approved by Dean. (Start paying penalty fee with an amount of 50 baht per day including holidays since Wed 4 January 2017).
Tue 23 Feb - Fri 3 Mar	- Mid-term examination period.
<b>March 2017</b>	
Mon 6 – Fri 31	- Days for withdrawal with W standing via internet; "New ACIS".
Mon 6 – Fri 17	- Days to submit a graduation request.
Mon 13 Mar - Fri 22 Apr	- Period for students to evaluate lecturers' & advisors' performance via internet; "New ACIS".
Fri 31	-Last day for registration reimbursement
<b>April 2017</b>	
Sat 1	-Compensation Classes : Chakri Memorial Day( Tue 6 April 2017)
Mon 10–Wed 12	- Special Vacations.
Sat 29	-Compensation Classes : Coronation Day ( Fri 5 May 2017)
<b>May 2017</b>	
Mon 8 - Fri 19	- Final examination period.
Mon 22	- Classes end.
<b>ACTIVITIES AFTER THE SECOND SEMESTER &amp; BEFORE SPECIAL SEMESTER</b>	
<b>May 2017</b>	

Mon 22 – Fri 26	- Students consult with advisors for registration. - Days for registration and tuition payment processing via internet; “New ACIS”.
Mon 29	- Last day for registration payment.
Wed 31	- Last day to submit theory, lab, project and thesis examination results.
<b>June 2017</b>	
Sat 3	- Examination results announcement.
*Mon 5	- Announcement of lectures’ & advisors’s performance evaluates. Lectures and advisors can check the results via the intranet system.
<b>SPECIAL SEMESTER (5 June – 28 July, 2017)</b>	
<b>June 2017</b>	
Thu 1 Jun – Fri 28 Jul	- Practical training period, (not less than 40 working days).
Mon 5	- Classes begin
Mon 5 - Fri 9	- Days for late registration approved by Head of Department, processing via internet; “New ACIS”. (Start paying penalty fee with an amount of 50 baht per day including holidays since Mon 5 June 2017)
Mon 5 - Fri 16	- Days to add, drop and change session and /or subjects, processing via internet; “New ACIS” -Days for withdrawal with W standing via internet;”New ACIS”
Mon 12 - Fri 16	-Days to submit a graduation request.
Fri 16	- Last day to submit examination results of semester 2.
Mon 19 - Fri 30	-Period for students to evaluate lectures’ & advisors’ performance via internet “New ACIS”
Fri 23	- Last day for registration reimbursement.
<b>July 2017</b>	
Fri 28	- Classes end.
<b>ACTIVITIES AFTER SPECIAL SEMESTER</b>	
<b>August 2017</b>	
Fri 4	- Last day to submit theory, lab, project and thesis examination results.
Tue 8	- Examination results announcement.
Thu 10	- Announcement of lecturers’ & advisors’ performance evaluations. Lecturers and advisors can check the results via the intranet system.
Thu 24	- Last day to submit examination results of special semester S/2016 -Last day to submit practical training results.

### **Remarks :**

1. Students must register, add, change, drop and withdraw via internet; “New ACIS”.
2. Students who owe tuition fees cannot register in the subsequent semester.
3. Probation students in semester 2/2016 must consult with their advisors about registration during the specified period. Without doing so, they will not allow to register in semester 1/2016
4. Probation students in semester 1/2016 must consult with their advisors about registration during the specified period. Without doing so, they will not allow to register in semester 2/2016
5. Students must pay tuition fees before add, change and drop courses.
6. Students who want to take leave in the next semester have to ask for the faculty’s approval and submit a request in order to be able to maintain student status via internet.
7. Students who do not register or maintain student status by identified date must pay penalty fee with an amount of 50 baht per day including holidays.  
-The first semester, start paying penalty fee from Monday 1 August 2016.

- The second semester, start paying penalty fee from Wednesday 4 January 2017.
- 8. Students who want to transfer courses or credits must request during the specified period
  - The first semester, until Friday 15 August 2016.
  - The second semester, until Wednesday 18 January 2017.
- 9. Students who want to reimburse for tuition fees must request during the specified period.
  - The first semester, until Tuesday 25 October 2016.
  - The second semester, until Friday 23 June 2017.

## **SBT's Activities**

<b>Activities</b>	<b>Date</b>
1. Wai Khru Ceremony	25 August
2. Student's Club	Monthly (Date to be announced)
3. New Year Party & Sports Day	December – January

## EDUCATION FEES

1.1 Education fees to be collected in each academic year;

1.1.1 Health and life insurance 2,000 THB

1.2 Education fees to be collected in each semester;

1.2.1 Education Service Fee

Regular semester 30,000 THB per semester

Summer Session 15,000 THB per session

1.2.2 Credit fees for coursework/independent study/thesis

Social and Humanities

Regular semester 3,000 THB per credit

Summer session 6,000 THB per credit

1.2.3 Credit fees for coursework/independent study/thesis

Social and Humanities

Regular semester 4,000 THB per credit

Summer session 8,000 THB per credit

1.2.4 If credit fees for coursework/independent study/thesis for full fee programs are higher than the credit fees as in item 1.2.2 and 1.2.3, the rates of full fee programs shall be paid.

1.3 Education fees to be collected on variable occasions;

1.3.1 The registration for a thesis examination or its equivalent paper

From 6 credits to not over 12 credits 10,000 THB

From 12 credits to not over 36 credits 15,000 THB

Over 36 credits 20,000 THB

Education fees and credit fees for coursework/independent study/thesis as in the above mentioned rate have been enacted for international students who study non-degree courses, except for exchange students under a cooperative agreement with the university.

Students, who must study fundamental courses as required by the university, must pay education fees based on this regulation.

Students who complete all coursework as the program requires, but still work on experiments for a thesis or equivalent paper in the next regular semester or summer session, must pay credit fees for the thesis or equivalent paper – including education fees based on items 1.1-1.2 of this regulation.

Students must pay education fees within the period set by the University. The University will not remit money except when courses are cancelled by the University.

Rules and regulations according to this regulation are based on an announcement by the University.

The President shall govern the provisions of this regulation. The judgment of the President is considered final.

## **RULES AND REGULATIONS**

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### **Enrollment**

Students accepted to study under an announcement of the university must indicate their intent to enroll and submit in full enrollment documents by a specific date and time. If not, students will be assumed to have declined the study.

### **Registration**

#### 1.1 Registration and study periods

1.1.1 The registration for coursework in graduate studies and/or thesis is for not less than 6 credits and not more than 15 credits in each semester, except students who have less than 6 credits remaining for registration based on the program structure and are, therefore, allowed to register for less than 6 credits. For summer semesters, students can register for coursework and/or thesis of not more than 6 credits.

1.1.2 Students who do not follow the registration schedule cannot register in that semester, except if they have sufficient reasons and are specially approved by the faculty to register or to maintain student status.

1.1.3 The study periods of each program are as follows;

- Graduate diploma programs take not more than 3 academic years
- Master's degree programs take not more than 5 academic years
- Doctoral degree programs take not more than 8 academic years for bachelor degree holders and 5 academic years for master's degree holders

#### 1.2 Registration offered by other institutions

1.2.1 Students may register for coursework offered by other institutions under the consent of the department and the approval of the faculty under the following conditions;

- (1) The coursework required by the program is not offered by the university in that semester or that academic year for whatever reasons.
- (2) The coursework offered in other institutions must be comparable to the areas of coursework offered in the program.
- (3) The coursework has to be advantageous to the study or thesis work or independent study of the students.



1.2.2 Credits and grade results can be transferred to students' grade accumulation in the program.

### **Adding, changing, dropping or withdrawing coursework**

Approval from advisors must be obtained prior to adding, changing or dropping. Approval from advisors and instructors must be obtained prior to withdrawing under the following conditions;

1.1 Adding and changing can be done during the first two weeks from the start of each semester.

1.2 Dropping can be done during the first three weeks from the start of each semester.

1.3 Withdrawing can be done until three weeks before the final examination of that course. A "W" will appear on the student's transcript for that course.

1.4 Adding, changing, dropping or withdrawing cannot be done in summer semesters.

### **Student absence**

1.1 Students will be allowed to take leave under one of the following conditions;

1.1.1 Military recruitment

1.1.2 Other sufficient reasons for which student gain approval to take leave.

1.2 Students can make one leave request per semester and for not longer than two semesters consecutively or one academic year, except with special approval.

1.4 Study absence must be approved by the faculty.

1.5 Education fee payment

1.5.1 Students who take leave before registration are exempt from paying education fees, but they must pay fee for maintaining their student status.

1.5.2 The university will not remit to students who have already registered, but want to take leave at a later date.

1.5.3 For permission for study absence, students who have requested installments of education fee payment must pay the education fee as well.

### **Termination of student status**

Student status will come to an end based on the following conditions;

### 1. Non-registration and/or payment of education fees

Student status will be ended if students do not register and/or pay education fees during the first six weeks of instruction based on an announcement by the university.

### 2. Passing due study periods

Student status will be ended for those who cannot finish the study within the indicated study periods of each program

Doctoral degree students Plan 1 or Plan 2 who completed earned coursework with a GPA of not less than 3.25, but have passed the due date for study periods with uncompleted thesis and/or academic publication process, can submit a request for study extension per semester under the conditions that not less than 80 percent of thesis must be evaluated, pass the consent of the faculty committee, and be approved by the Academic Council of the university.

### 3. GPA under criteria

#### 3.1 Student status of regular students will be terminated under the following conditions;

Doctoral degree students have a GPA of less than 2.75 in the first semester

Master's degree and graduate diploma degree students have a GPA of less than 2.50 in the first semester

#### 3.2 In any semesters, regular students will be on probation under the following conditions;

Doctoral degree students have a GPA of less than 3.25.

Master's degree and graduate diploma degree students have a GPA of less than 3.00

Student status will be ended during probation if doctoral degree students have a GPAX of less than 3.25, and master's degree and graduate diploma degree students have a GPAX of less than 3.00.

## **Steps for completing thesis**

### **Conduct of thesis**

1. Students must receive approval from advisors to register thesis under the following conditions;

1.1 Master's degree students Plan A (2) and doctoral degree students Plan 2 with a bachelor degree can register thesis after being regular students for at least one semester. In addition, they must have passed registered courses of not less than 6 credits and have a GPA of not less than 3.00 for a master's degree and 3.25 for a doctoral degree. In other cases, the registration for thesis is subject to the consent of the thesis advisor.

1.2 Students can divide the number of credits for thesis registration with the consent of their thesis advisor

1.3 Students who completely register for all coursework as per the program requirements, but do not finish their thesis, which has to be continued, and is also expected to be finished in the summer session, must register a thesis for that summer; otherwise the faculty will not approve the study results, and the return for registration will not be allowed.

2. Thesis proposal presentation

2.1 After students register their thesis, they must present their thesis proposal to thesis advisors for editing, and to the department for approval.

2.2 The department will present the thesis proposal including a list of thesis committee members to the faculty to ask for the approval of the thesis title and appointment to the thesis committee.

3. Defense for thesis proposal and thesis evaluation

3.1 Students must pass the defense for thesis proposal, and submit the thesis progress report to the thesis committee every semester.

3.2 The thesis committee will evaluate a conduct of thesis based on the number of credits that students register in each semester. An "S" grade will be given for the credits of research performance which is considered to be satisfactory. A "U" grade will be given for research performance which has no progress. Students who completely defend and submit their thesis will be given an "S" grade based on the credits of thesis registration.

3.3 Students who register their thesis, but do not consistently work on the thesis for two consecutive semesters will be given a “U” grade. The thesis committee may propose to the department to end student status from that current thesis with the approval of the faculty.

#### 4. Changes of thesis title and the number of credits for thesis

4.1 In case of academic problems or emergency, the changes of thesis title and/or the number of credits for thesis can be made with the consent of the thesis committee. Students must submit a request for change of thesis title enclosing a new thesis proposal. This must pass through the discretion of the thesis committee and gain the consent of the department to ask for approval from the faculty.

4.2 Students who change thesis proposal must renew registration and payment for that new thesis.

### **Thesis defense examination**

1. Students will be qualified to take a thesis defense examination as follows;

1.1 Be approved by thesis committee to take the thesis defense examination

1.2 Submit thesis books to thesis examination committee for reading at least two weeks before the date of thesis defense examination

2. The chairman of the thesis committee will propose a list to the thesis examination committee with an examination schedule to ask for approval and an appointment with the faculty.

3. The thesis examination committee has responsibility for an examination. An “S” grade will be given for an examination performance which is considered to be satisfactory. A re-examination on the date set by the thesis examination committee will be given for any examination performance which is considered to be unsatisfactory.

4. Students must submit the complete thesis book which is produced in line with the Thesis Manual of the university plus an electronic version of the thesis based on an announcement by the university within 30 days of passing the examination. If minor contents have to be corrected and the student will miss the deadline, the thesis examination committee may consider allowing the thesis book to be sent after 30 days of passing the examination, but it must be sent within 60 days; otherwise, the thesis defense examination must be renewed.

5. Thesis books of a doctoral degree should be written in English unless it has been approved to be written in other languages by the thesis examination committee.
6. The copyright of the thesis belongs to the university.

### **Graduation**

Students will receive a certificate or a degree from the university if they fulfill the following requirements;

#### 1. Graduate diploma degree students

Students must complete all coursework as per the program requirements with a GPA of not lower than 3.00.

#### 2. Master's degree students

2.1 Students Plan A: A (1) must present a thesis and pass an oral examination. At least one full paper must be accepted for publication in an international journal.

2.2 Students Plan A: A (2) must complete all coursework as per the program requirements with a GPA of not lower than 3.00. They must present a thesis, pass an oral examination, and have other publications which are not in the thesis paper.

2.3 Students Plan B must complete all coursework as per the program requirements with a GPA of not lower than 3.00 plus;

(A) Present an independent study and pass a comprehensive examination or

(B) Present an independent study and pass an oral examination

2.4 Students must meet the English language proficiency requirements. A department may consider foreign language certificates from other institutions as being acceptable for this requirement. For master's degree students in the field of Applied Linguistics, the department will consider the conditions of passing of foreign language assessment.

#### 3. Doctoral degree students

3.1 Students in Plan B must complete all coursework as per the program requirements with a GPA of not lower than 3.25.

3.2 Students pass a qualifying examination as follows;

(1) Bachelor degree holders must pass a qualifying examination within 4 semesters after the first enrollment.

(2) Master's degree holders must pass a qualifying examination within 3 semesters after the first enrollment.

(3) Two attempts for a qualifying examination within the set date of items 3.2(1) 3.2(2) can be made.

3.3 Students must present a thesis which expresses a new discovery, new idea, creative ideas or critique with original ideas with the following conditions;

(1) Not less than two pieces of Full Paper must be accepted for publication in an international journal where its standard database with referee can be searched, or

(2) Not less than one piece of Full Paper must be accepted for publication in an international journal where its standard database with referee can be searched, and

A. Not less than two pieces of Full Paper must be accepted for publication in a regional journal or a national journal with referee, or

B. Not less than two pieces of paper must be accepted for presenting in an international conference with oral presentation and full publication in proceedings

C. Not less than one piece of Full Paper must be accepted for publication in a regional journal or a national journal with referee, and not less than one piece of paper must be accepted for presenting in an international conference with oral presentation and full publication in proceedings, or

(3) Other equivalent performance such as goods with patent, innovations, creative designs or a masterpiece which can be used for business or non-business purposes

3.4 Students must pass an oral presentation based on their thesis as in item 3.3

3.5 Students must meet the foreign language proficiency requirements.

Doctoral degree students must have a good command of a foreign language by passing one foreign language exam. Other additional foreign languages may be required under the discretion of each field of study. The above required language proficiency will not be counted in credits.

## **SCHOLARSHIP FOR INTERNATIONAL STUDENTS**

- Greater Mekong Sub-region: GMS
- ASEA –UNINET (ASEAN-European Academic University Network)
- Sahapunya scholarship (For students from Cambodia, Laos, Myanmar and Vietnam)

For more information, please download at <http://web.kmutt.ac.th/sbt/scholarship.php>

## **GENERAL FORMS FOR EDUCATION**

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Please download at <http://web.kmutt.ac.th/sbt/download.php>

## LABORATORY IN SCHOOL OF BIORESOURCES AND TECHNOLOGY

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Our School of Bioresources and Technology have 21 Laboratories:

### **Biotechnology Program**

1. Algal Biotechnology
2. Animal Cell Culture
3. Solid State Fermentation and Bioprocess Engineering
4. Microbial Fermentation Technology
5. Remediation
6. Sensors Technology
7. Fungal Biotechnology
8. Waste Utilization and Management
9. Biodiversity

### **Natural Resource Management Program**

10. Community Resources Management
11. Conservation Ecology

### **Postharvest Technology Program**

12. Postharvest Biochemistry and Molecular Biology
13. Postharvest Physiology and Pathology
14. Postharvest Quality and Logistic
15. Seed and Grain Technology

### **Biochemical Technology Program**

16. Carbohydrate Technology
17. Enzyme Technology
18. Phytochemicals and Flavor
19. Lipid Technology
20. Gene Technology

### **Bioinformatics and System Biology Program**

21. System Biology and Bioinformatics



## OFFICE OF DEAN, EMERGENCY CALL & FACILITIES

Name – Surname	Position	Room	Telephone	Responsibilities
Mrs.Nutrada Keawgramloy	Personal	BT 246	7702	<ul style="list-style-type: none"> <li>• Information, News and activities to be announced</li> </ul>
Ms.Thunyasiri Junnim Mr.Pornchai Cheysanium	Service	BT 246	7703	<ul style="list-style-type: none"> <li>• Booking classroom and meeting</li> </ul>
Mr.Pongthorn Chukam	Building and Ground	BT 246	7704	<ul style="list-style-type: none"> <li>• Class room and meeting facilities (LCD, Visualizer, computer, Notebook, Sound equipments)</li> <li>• Request for Building Keycard</li> <li>• Request for room using after working hours</li> <li>• Request for Car Sticker</li> </ul>
Ms. Aroon Kakhun	Research Support	BT 247	7706	<ul style="list-style-type: none"> <li>• Outsource Scholarships, e.g., King Mongkut's Diamond Scholarship, The Royal Bangkok Sports Club (RBSC) Scholarship, The Shell Centenary Scholarship Fund (TSCSF)</li> <li>• Thesis borrowing</li> <li>• Announcing and informing about Academic service, Research</li> </ul>
Ms. Rungarun Waisayawan	Academic Service	BT 247	7705	<ul style="list-style-type: none"> <li>• All academic-relevant helps</li> <li>• Student request forms, e.g., delayed registration, postpone the tuition fee payment, dropping off; Academic information; Proposal examination ;Thesis progression; Thesis defense; Seminar;scholarships</li> </ul>
Ms. Pakpinun Thaninsukpisan	Financial	BT 249	7707	<ul style="list-style-type: none"> <li>• Financial service</li> </ul>

**In case of emergency, call 7399**

- Call 7700 for School of Bioresources and Technology Building
- Call 7384 for Central security

**Health Service Section (Bangkhunthian) 1<sup>st</sup> Floor, SBT Building**

- Opening hours: Monday - Friday, 9.00 a.m. to 5.00 p.m.
- Treatment by doctors: Monday Wednesday and Friday, 13.00 to15.00 p.m. /  
Tuesday 10.30a.m. to13.30 p.m. / Thursday 12.30a.m. to14.30 p.m.

**Library(Bangkhunthian) 2<sup>nd</sup> School of Architecture and Design**

- Opening hours:Monday- Friday, 9.00 a.m. to 5.00 p.m. Saturday, 9.30 a.m. to 4.00 p.m.