

# International Graduate Student Guide

Natural Sciences Campus

#### **NOTICE**

The Graduate Students Handbook for the Natural Sciences Campus Students provides basic information on Sungkyunkwan University (SKKU) graduate programs. As the name of this handbook indicates, the information is mainly for students studying and carrying out research at the Natural Sciences Campus in Suwon. Some colleges/departments may have the additional booklet so as to provide more college/department-specific information, while the other may not. In the former case, a student is advised to contact each college/department office to obtain it. Every effort has been made to ensure the accuracy, preciseness, and timeliness of the information contained at the time of publication. However, some specific details and arrangements may be subject to change in the course of academic year, and therefore it is strongly advised to contact each responsible office for verification of the information as deemed necessary. Provision of this handbook must be interpreted as a means of offering support, not as a contract between students and SKKU.

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## **WELCOME MESSAGE**

Dear international students,

On behalf of Sungkyunkwan University and the Natural Sciences Campus, we would like to welcome all new graduate students for the upcoming academic year. Situated in Suwon, which is one of the largest cities around Seoul, the Natural Sciences Campus has been emerging as a symbolic place where world-wide intelligence and industrial innovation converge with academic study and research.

In the pursuit of becoming a global top-tier university, SKKU and the Natural Science Campus in particular, is here to serve the international students of our university, while broadening its global alliances in a proactive way. We remain committed to all of you, and extend our thanks for the many ways in which you enrich the academic community of SKKU.

SKKU distinguishes itself through its highly relevant and interdisciplinary research and education programs conducted in collaboration with Samsung. In doing so, SKKU is able to offer state-of-the-art facilities and a stimulating academic environment, thus attracting outstanding students like you, faculty members and researchers from around the world.

We operate on the notion that your satisfaction with our services enhances the well-being of our university as a whole. In pursuit of this principal, we are continuously looking for ways to improve the ways in which we assist you, and as such we welcome any feedback you might provide. We also pledge to do our best to meet your needs. While studying with us, you are sure to gain both invaluable experiences and opportunities for achieving your academic goals.

Again, we appreciate your choice of SKKU as the place to continue your study and research, and I am sure you will enjoy your academic career ahead with us.

Executive Vice President

Natural Sciences Campus SKKU Graduate School

Dean

## **Four Cardinal Virtues**

### **Humanity**

Humanity abides in the heart that loves

### Righteousness

Righteousness abides in the heart that knows right from wrong

### **Propriety**

Propriety abides in the heart that knows forbearance

#### Wisdom

Wisdom abides in the heart that perceives

## **OVERVIEW OF SKKU**

Sungkyunkwan University (SKKU) is a world-class center of higher education with over 600 years of history. Since its founding in 1398 at the dawn of Joseon Dynasty (1392-1910), SKKU has demonstrated strong academic leadership. Sungkyunkwan is synonymous with both tradition and innovation in education.

The literal meaning of the University's name is "an institution for building a harmonious society of perfected human beings." This founding philosophy of Sungkyunkwan is relevant today more than ever, in an era of rapid technological advancement.

Contemporary SKKU has embraced globalization and emerged as a leading university in Asia and the world. In fact, in all core disciplines, SKKU actively encourages global research and collaboration through academic exchange of faculty, and students and the development of innovative education and research programs with our global partners.

#### 1. Natural Sciences Campus (Suwon): High Tech R & D

Established in 1978, the ultra-modern Natural Sciences Campus is located 45 km from Seoul on a 250-acre site in the historic city of Suwon. The Suwon campus lies in the heart of Korea's famed high-tech industry, with major industrial complexes, including the Samsung Research Campus, just minutes away. As a result there is intensive interaction between Korea's technology leaders and SKKU with students being exposed to cutting edge teaching, research and career opportunities.

The management of the Natural Sciences Campus is considered a paragon of educational administration in Korea. When the new campus was built, the idea of a dual campus system was revolutionary in Korean higher education; this system remains quite unique in Korea.

#### 2. Humanities and Social Sciences Campus (Seoul):

The Hub of Korean Higher Education with 617-Year History

The history of Seoul and Sungkyunkwan University is deeply intertwined. Founded two years after Seoul became the capital of Korea, SKKU served as the country's leading institution of higher education during the Joseon Dynasty (1392-1910). In 1946 SKKU transformed itself to the comprehensive university in recognition of its pivotal role in Korea's cultural, economic, social and technological development. SKKU's Seoul campus, located on the original 1398 site, survives as a lasting testament to this legacy in the heart of the city.

## **OLD SUNGKYUNKWAN**

The original Sungkyunkwan has played a pivotal role as a higher-education institution producing government officials and scholars since its establishment in 1398. The history of Sungkyunkwan traces back to 372 A.D when the first national university of Korea, the Taehak, was established during the Goguryeo Dynasty. In the early Goryeo Dynasty (992 A.D), which ruled Korean territory prior to Joseon, the Taehak was replaced by Gukjagam, a more advanced higher-education institution. In 1304, this institution was renamed as Sungkyunkwan.

Sungkyunkwan was originally located in Gaeseong, the capital city of the Goryeo Dynasty. After the Joseon Dynasty was founded, Sungkyunkwan moved to the new capital city, Seoul, in 1398. And that was the time when the history of SKKU began. Traditionally, all Old Sungkyunkwan students stayed in dormitories called Dongjae and Seojae (meaning East Hall and West Hall, respectively). Students studied music, archery, horsemanship, mathematics, the Confucian classics, and etiquette. The buildings were home to distinguished students of Confucian Studies.

To the north of Dongjae and Seojae stands Myeongnyundang, the main lecture hall. Early each morning with the sound of the drum signaling the beginning of the day, students used to prostrate themselves once before entering the hall to receive a lecture on Confucian teaching. The largest building on the old campus is Daeseongjeon, where the memorial tablets of Confucius and his followers are enshrined.

Major changes to Sungkyunkwan were introduced in 1946 by Shimsan KIM Changsook, when Sungkyunkwan College was reorganized into a modern higher educational institution, and continued as the institution expanded into a comprehensive university in 1953. At present time, the Old Sungkyunkwan complex is located inside the Humanities and Social Sciences Campus in Seoul.

## **EDUCATIONAL MISSION**

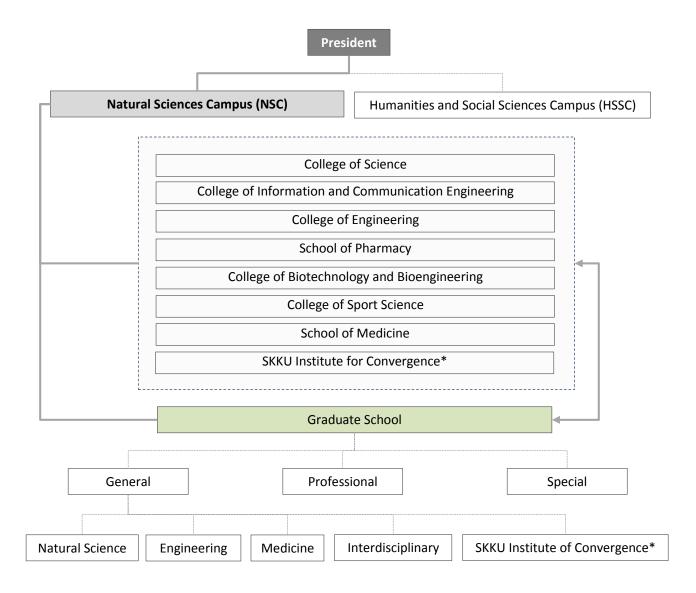
Sungkyunkwan University (SKKU) academic community is committed to nurturing individuals who can contribute to their mother country and the prosperity of humankind through theoretical and educational methodologies and a research based upon Confucian philosophy.

### Thereby, SKKU fosters:

- The cultured and educated with the neo-Confucian four cardinal virtues (humanity, righteousness, propriety, wisdom) and four pivotal requirement for successful career (appearance and posture, articulation, writing skill, ability of judgment)
- Experts who can create new values in the digital era by virtue of creative and innovative thinking and challenging spirits.
- Leaders with global competence who can make contributions to mankind and human achievements as a whole.

## **ORGANIZATION**

### 1. Organizational Chart



- \* Academic units with an asterisk are across two campuses.
- \* Each graduate major is offered and managed by a single college or school, while interdisciplinary programs are organized by multiple departments, but primarily managed by a single college or school office.

## 2. Graduate School Disciplines and Departments at NSC

School	Discipline	Department					
	Natural Sciences	Biological Science / Mathematics / Physics / Chemistry Biotechnology and Bioengineering Pharmacy / Pharmaceutical Industry					
General	Engineering	Electrical and Computer Engineering Chemical Engineering Polymer Science and Engineering Advanced Materials Science and Engineering Mechanical Engineering Architecture Civil, Architectural and Environmental System Engineering Convergence Engineering for Future City Landscape Architecture Industrial Engineering Nano Science and Technology Engineering Management of Technology Mobile Communication and Power Electronics IT Convergence Semiconductor Display Engineering Embedded Software Global Civil Engineering Digital Media Communication Engineering Biomedical Engineering					
	Medicine	Medicine Samsung Advanced Institute for Health Sciences & Technology					
	Interdisciplinary	Bio Engineering Bio Mechatronics Engineering Applied Chemical Materials Engineering Photovoltaic System Engineering Interdisciplinary Program in Crisis, Disaster and Risk Management Energy System Engineering Physics and Chemistry Convergence					
	SKKU Institute for	Energy Science					
	Convergence	Human ICT Convergence					
Professional	Graduate School of M Graduate School of W						
		nformation and Communication					
Special	Graduate School of C						
P	Graduate School of C	·					

## **OFFICE OF INTERNATIONAL AFFAIRS**

The Office of International Affairs (OIA) is here to serve the international community at Sungkyunkwan University. This includes providing support to our international students, scholars and researchers. To all of our international population, the OIA remains committed and extend our thanks for the many ways in which you enrich the SKKU academic community.

To accomplish its mission, we provides a number of services as follows:

- To handle all legal documents required for International students and scholars
- To make provisions for advisory and counseling services related to International matters
- To serve as a liaison to university departments, South Korea and foreign government agencies and the greater community
- To help international students and scholars acclimate into the larger SKKU community
- To contribute to the international community's cross-cultural understanding and appreciation

We believe that the information that you need in order to have successful international experiences may be found at our office or on the website, but if you cannot find what you need here, you may also contact us via email or telephone.

#### 1. OIA Information

Email	intlans@skku.edu						
Phone Number	+82-31-290-5026/5027						
Location	27126, Engineering Building 2						
Working Hour	Monday – Friday / 09:00 –17:30 (Lunch Time 12:00 – 13:00)						

#### 2. Orientation

The OIA organizes one-day orientation programs for international students in the first week of the new semester. Every international student new to Korea and SKKU is required to attend the orientation session. Its programs consist of the introduction to SKKU and the Natural Sciences Campus, immigration regulations, a dormitory and library information session and important academic policies and rules. The schedule and program will be announced through individual emails and on the notice board at the SKKU homepage.

## **IMMIGRATION & VISA**

#### [NOTE]

Information regarding the immigration requirements, visas and status of sojourn may change after the publication of this handbook. Therefore, it is advised to visit the following website for up-to-the-minute information. Please treat this part just as a reference; neither SKKU itself nor any staff of SKKU shall be held responsible for consequences resulting from not providing up to date information.

#### 1. Visa

A valid overseas study visa (D-2) is required for all students who have a non-Korean citizenship. Since it may take anywhere from a few days up to several weeks to obtain a valid student visa, it is very important to inquire as early as possible to the closest embassy, or the consulate of the Republic of Korea in a student's home country for detailed and accurate information.

#### A. Required Documents

- \* The list of required documents may vary depending on place of application or nationality.
  - 1) Passport
  - 2) Application for visa issuance
  - 3) 1 color portrait photo of the applicant (size: 3.5 x 4.5cm)
    - Photo must have been taken within the past 6 months.
    - Printed photographs are not acceptable / bright background is preferred over a dark one.
  - 4) Fee
  - 5) Admission/invitation letter (issued by host institution)
  - 6) Certificate of admission (issued by Ministry of Justice, Korea)
  - 7) Census registry (only applicable to Chinese students all family members must be listed)
  - 8) Certificate of the student's the latest scholastic achievement
  - 9) A bank statement showing bank balance

#### B. Entry without D-2 Visa

A student from the nation that has a visa waiver agreement with Korea may enter Korea without a student visa. However, it is legal requirement that he/she apply for a D-2 visa in Korea upon arrival to acquire eligibility for studying in Korea. The list of those countries is subject to change; please refer to the local Korean embassy (consular section) or the official website below for more detailed information.

#### 2. Immigration Office

The Immigration Office international students should refer to may differ according to the location of their residence. Therefore, students must check if their residence belongs to the right jurisdiction of the Immigration Office. Generally, graduate students studying at the Natural Sciences Campus are advised to visit Suwon Immigration Office.

Suwon	Office	Seoul		
1012-6, Yongtong-dong,	Address	64-1, Seoul Global Center,		
Yeongtong-gu, Suwon City	/ tauress	Seorin-dong Jongno-gu, Seoul		
Exit 1, Yong-tong Station, Bundang Line	Subway	Exit 6, Jonggak Station, Line 1		
Exit 1, Tong tong Station, Bandang Line	Station	EXIT O, JOHESAN Station, Line 1		
http://suwon.immigration.go.kr	Website	http://seoul.immigration.go.kr		
09:00-22:00 / Weekdays	Working	09:00-22:00 / Weekdays		
03.00-22.00 / Weekdays	Hours	03.00-22.00 / Weekdays		
1345 (no nation/area code required)	Hotline	1345 (no nation/area code required)		

#### **■** Making Appointment Online

A student who needs to visit the immigration office is suggested to make a reservation before going there. A prior appointment allows you have a timely meeting with an immigration officer, instead of waiting in the immigration office for a number of hours. You should specify the date and time that you wish to visit the immigration office online. A student who makes a reservation as a registered Hi-Korea member can file his/her application without waiting at the Immigration office. It is also recommended that a student should print out his/her receipt to make sure that all the details of the appointment are in order such as location of office, date and time of appointment, and counter number. Online appointment reservations can be made at the official website of the Korean Immigration Service: http://www.hikorea.go.kr.

#### 3. Foreign/Alien Registration

All new international students who plan to stay in Korea for over 90 days are obligated by the immigration laws to register for a foreign/alien registration card at the Immigration Office. With the application of foreign registration, foreign/alien registration card will be issued to the applicant. It usually takes 2-3 weeks to get the card. A student may apply for another card when he/she loses it.

It is strongly advised to understand the immigration regulations are subject to change without prior notice. Contact the Immigration Office for the up-to-the-minute information regarding foreign/alien registration, or the Office of International Affairs for other sources available.

Registration Period	Within 90 days from entry date					
Registration Place	Immigration Office					
	1) Application form (available on-site or online)					
	2) Passport					
	3) 3.5 $ imes$ 4.5cm portrait photo					
	4) Certificate of Enrollment					
	*This is available at the Registrar's Office					
Required Documents	5) Fee : 30,000 KRW					
	6) Certificate of Residence					
	*This is available at the Dormitory Office					
	7) Certificate of Tuberculosis Clearance					
	* This is only for students from nations with high probability of tuberculosis					
	outbreak.					

## [NOTE 1]

If a student fails to register within the above period, prescribed penalties shall be imposed according to Immigration Act Article 31.

#### [NOTE 2]

Upon termination of stay in Korea, a student must return his/her card to the Immigration Office.

#### 4. Registered Immigration Information Change

Any changes on information registered at the immigration office, e.g. residence address change, university, passport number, etc., must be reported to the immigration office within 14 days from the date when the change occurred. It will assist a student in the required actions during such occasions.

#### 5. Extension of Stay

In case of expiration of permission of stay, an international student can receive permission for an extension of stay from the immigration office, if he/she desires to reside in Korea longer than originally anticipated. A student may apply for an extension within 2 months before the scheduled expiration date. The required documents may vary depending on each's current immigration status at the University. The immigration office will assist a student in the required actions during such occasions.

### 6. Changing Visa

A student may apply for a visa change at the Immigration Office in order to maintain legitimate status in case he/she has plans to engage in other work or obligations besides the activities of which he/she is legally permitted by an overseas study visa. Additionally, a student who enters Korea without a required visa must obtain a D-2 visa or change his/her visa into D-2 before his/her study begins.

#### 7. Permission for Activities beyond the Current Status of Stay

An international student may engage in activities, such as part-time jobs or internships, by obtaining special permission for activities beyond what the current visa allows. Please contact the OIA for more information about permission and relevant procedures.

## **INSURANCE AND RISK MANAGEMENT**

#### 1. Insurance Plan

According to the Korean Immigration Regulations, it is mandatory for all SKKU international students to have a valid medical insurance plan during their study in Korea. International students must make sure that their insurance remains valid for the duration of their stay in Korea. They can choose one among the following.

#### A. Group Insurance recommended by SKKU OIA

SKKU OIA can arranges for a group insurance plan for international students. For those who want to purchase an insurance plan through the school, please contact the OIA for the relevant information

#### **B. Korean National Health Insurance**

Korea's National Health Insurance system enables applicants to use medical institutions at a discount by paying a certain amount of money every month according to their income. Eligible foreign nationals can also enroll in National Health Insurance for the same benefits. \*Website: http://www.nhic.or.kr

#### C. Private Insurance Services

This is an insurance plan offered by Korean private insurance companies. It should be arranged by individuals in a timely manner and students must inform the OIA when it is purchased or renewed.

#### 2. Risk Management Plan

According to the SKKU's International Program Risk Management and Crisis Response Plan, if an international student encounters any problems which threaten his/her stay at SKKU such as illness, injury, epidemic, psychological conditions, being accused of committing a crime, being a victim of serious crime, death, abduction, or disappearance, the student concerned, family or colleagues are required to report it to a responsible international officer at the OIA immediately. The problem will be dealt with in accordance with the seriousness of the matter.

## **ADMISSION**

#### 1. Admission Type

There are five different types of graduate program admissions; please refer to the Admissions Office website(http://admission.skku.edu/grad/) for more information about regular, non-regular/special, transfer admission, and each college office's specific procedure for readmission.

Admission	Description
Regular	Scheduled admission
Non-regular	Non-scheduled admission upon needs of SKKU
Special	Tailored admission procedure for international students, foreign residents, the socially/economically disadvantaged, North Korean refugees, students who graduated from vocational high schools or schools in farming and fishing villages.
Transfer	Admission through transfer from a student's previous school to SKKU may be permitted only if a collegiate or departmental quota not yet reached.
Readmission	Readmission is for a student whose study is de-registered by voluntary or involuntary disenrollment, and is to be permitted through document assessment or an interview as requested by each academic department to which a student applies, only if a collegiate or departmental quota not yet reached.

### 2. Admission Requirement

#### A. Regular/Non-regular/Special Admission

Each degree program requires academic qualification for application and admission as follows.

Degree Program	Application/Admission Requirement					
Master	Bachelor's Degree or equivalent from school or institution legally					
Combined Master and PhD	accredited by a government authority.					
PhD	Master's Degree or equivalent from school or institution legally accredited by a government authority.					

#### [NOTE]

In addition to the requirements above, an applicant for the Academia/Research/Industry Collaborative Program mush maintain employment at an institution which has a program agreement with the SKKU Graduate School.

#### **B.** Transfer

A student who wishes to transfer admission is required to have an academically and scholastically identical, or at least similar, background with the department or major that he/she is applying to.

#### C. Readmission

Please refer to [Academic Policy and Regulation] – [Enrollment Status Change]

#### 3. Retraction of Admission

SKKU may retract admission if a freshman is found to have conducted any fraudulent or illegal activity in the course of admission, including but not limited to: application, document evaluation and screening, paper examination, or interview.

# DEGREE PROGRAM

#### 1. Overview and General Information

All of the programs offered by the SKKU Graduate School fall into the following degree program categories.

Degree Program	Description
Master	Program for Bachelors seeking Master's Degree
PhD	Program for Masters seeking Doctor's Degree
Combined Master and PhD (CMP)	Program for Bachelors seeking Doctor's Degree

The degree programs above may fall into either of the following classifications.

Program	Description
Interdisciplinary Program (IDP)	Programs organized and offered collaboratively by multiple
interdiscipinary Program (iDP)	departments.
Academia/Research/Industry	Programs established and offered according to an agreement or
Collaborative Program (ARICP)	contract with research or an industrial institution.

#### 2. Degree Program Change: Master → CMP

A Master's program student may file a petition to change his/her degree program into CMP on the condition that an enrollment quota is the desired PhD program is available. A student is not permitted to change to CMP at other graduate schools or departments; e.g. a Master's program student who is majoring in biological sciences may apply to change a degree program into a CMP program in biological sciences only.

#### [NOTE]

CMPs are considered as a part of PhD programs in a sense that they are programs for PhD degrees as well.

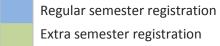
#### 3. Semester Registration Requirements

Each degree program requires prescribed regular years of study for completion as follows. Please refer to [Registration and Fees] for more detailed information about regular and research semester registration and relevant fees.

		Regular Semester	Exemptible	
	Degree Program	Registration	Semesters	
		Required	(Conditional)	
		4	1	
Master	Master Professional Graduate School of Medicine		1	
	Special Graduate School (Evening Program)	5	1	
	PhD	4	1	
	CMP		1-2	

## ■ Example: Semester Registration Requirement Fulfillment Plan

Graduate	Degree		Regular Semester												Note	
School	Program	1	2	3	4	5	6	7	8	9	10	11	12	13	Note	
	Master														-	
Canaral/	PhD														-	
General/ Professional															-	
1101033101141	CMP														*Early Graduation	
															Larry Graduation	
Special	Master															



<sup>\*</sup> This is only for those who did not fulfill the credit requirements within the required regular semesters.

Research semester registration

<sup>\*</sup> The remaining research semester(s) shall be waived if a student is conferred a degree before the last research semester starts.

## **ACADEMIC SCHEDULE AND CALENDAR**

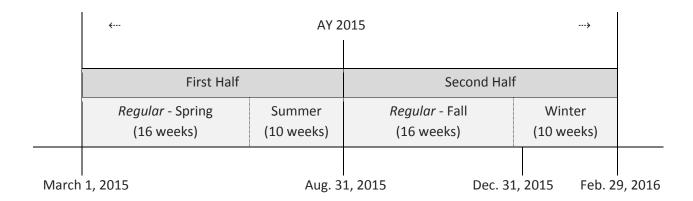
#### 1. Academic Year

SKKU's academic year (hereinafter referred to as AY) starts on March 1 and spans 1 year until the last day of February of the following year: e.g. AY 2015 starts on March 1, 2015 and continues up until the last day of February 2016.

#### 2. Academic Semester

SKKU's academic year is divided into two academic semesters, the first semester (spring and summer) and the second semester (fall and winter). SKKU defines spring and fall semester as the regular semester when regular academic coursework is offered, while summer and winter semesters are often referred to as vacations or breaks where special or customized programs usually become available.

Regular semesters and vacation periods usually last for 16 weeks and 10 weeks, respectively. The diagram below depicts how the semesters work through an academic year.



## 3. University Holidays

Holiday	Date/Period
Summer Vacation	Late June August
Winter Vacation	Late December February
University Foundation Day	September 25
Confucius's Birthday	September 28

## 4. Academic Calendar

The table below shows the academic calendar of AY 2015 with some important dates and periods. SKKU is not likely to significantly change the calendar every year; therefore a reader of this handbook is advised to assume the following year's AY calendar would be similar in terms of period, starting date and due date. However, this does not exempt each individual's responsibility to make efforts to find the latest and correct dates as the calendar is subject to change without prior notice.

Cabadula	Semester		
Schedule	Spring	Fall	
Tuition fee payment (1st round)	Feb. 16–25	Aug.18–22	
Course registration	Late January –	Late February	
First day of semester	March 1	Fall 1	
Instruction begins	March 3	Sep. 1	
Course add & drop	March 3–7	Sep. 1–5	
Early graduation application	March 3–6	March 1–4	
Tuition fee payment (2 <sup>nd</sup> round)	March 3–5	Sep. 11–12	
Qualifying examination application	March 4–7	Sep. 2–5	
Last day for military discharge re-entry	March 21	Sep. 19	
Qualifying examination	Late March – Early April	Late Sep. – Early Oct.	
Degree program change application	April 4–11	Oct. 6–10	
Degree Advancement Scholarship application	April 14–May 28	Oct. 13-Nov. 26	
Mid-term examination	April 21–25	Oct. 20–24	
Dissertation examination/defense application	April 22–30	Oct. 21–29	
Mid-term exam grade posting	April 28–May 2	Oct. 27–31	
Course evaluation	June 2–13	Dec. 1–12	
Final examination	June 16–20	Dec. 15–19	
Last day of semester	June 20	Dec. 19	
Vacation: summer/winter semester	June 21-Aug. 31	Dec. 20–Feb. 28	
Final grade posting	June 27–July 2	Dec. 26 – Jan. 2	
Dissertation examination report submission due	June 27	Dec. 26	
LOA/re-entry/re-admission application	July 7-11	Jan 5–9	
Dissertation submission to College due	July 18	Jan 16	
Commencement	Aug. 25	Feb. 25	
Last day of summer/winter semester	Aug. 28	Feb. 28	

## **REGISTRATION AND FEES**

A graduate student must register for regular or research semesters by paying relevant fees in a timely manner. The table below shows the number of regular and research semesters required for completion and graduation corresponding to each degree program.

Semester	Master	PhD	CMP	Note
Regular	4	4	8	
Research	-	4	4	Once degree is conferred, remaining research semesters shall be exempted; no research semester feel will be invoiced.

#### 1. Regular Semester Registration

The regular semester registration is one of the mandatory requirements for graduation; regular semester indicates spring and fall semesters which normally last for 16 weeks, not including the summer and winter semesters. All degree program students are required to register for the number of regular semesters corresponding their program; e.g. if a student is following the Master Program, he/she has to register for four regular semesters in order to graduate. In order to obtain credits in regular semesters, the regular semester fee payment has to be made on time.

#### What is a Regular Semester?

A regular semester can be considered as a synonym for coursework semesters. During the regular semesters, you are expected to complete coursework and earn credits for that.

#### 2. Extra Regular Semester Registration

In case a student does not fulfill the credit requirements for graduation by the end of a prescribed number of regular semester registrations, he/she may register for extra semesters for further credit acquisition. Tuition fees for extra semesters will be charged in proportion to the number of credits registered, and therefore, the payment period for extra regular semester will differ from that for regular semesters. (Please see [Reduced Tuition Fee] for more information.)

#### 3. Research Semester Registration

The research semester registration is another obligatory, but exemptible, requirement for completion. It can be waived if you meet all of the graduation requirements before finishing the prescribed research semester registration shown in the table above. It is required to pay a research semester registration fee for every research semester and to meet eligibility for dissertation submission.

#### [NOTE]

The research semester registration fees are not tuition, and therefore no financial aid, tuition fee installment program or student loan service will be available for research registration.

#### What is a Research Semester?

A research Semester is a quite unique academic period in SKKU for additional research, dissertation work and thesis defense preparation. A research semester begins after a regular semester period finishes and continues until a student completes the research semesters corresponding to his/her degree program.

#### 4. Fees

A student is required to make a payment for fees charged via an invoice on a semester basis. The following table shows the list of fees some of which will be billed for your academic and research semesters.

Fees		Description	Note
Ad	mission Fee	Required to be paid for admission	Mandatory
	Tuition Fee	Required to be paid for regular semester tuition	Mandatory
Registration	Student Council Fee	Required to be paid for student council activity	Optional
Fee	Research Registration Fee	Required to be paid for research registration	Mandatory
Sundry Fee		Required to be paid for miscellaneous purposes	As requested

#### A. Reduced Tuition Fee

A student who falls under the following conditions will be charged reduced tuition fee according to the credits he/she registered for. The table below the shows the tuition fee reduction ratio corresponding to registered credit(s).

- 1. A student who is registering for an extra regular semester in addition to the years of study required for each degree program: e.g. a Master program student who is registering for the 5th regular semester is subject to reduced tuition fees.
- 2. A student who has officially been recognized as physically/mentally/psychologically challenged by the president of SKKU.

Graduate School	Registered Credits	Invoiced Fee	Condition
General/	3 or less	$^{1}/_{2}$ × Tuition Fee	-Master/PhD: from 5th semester without LOA
Professional	4 or greater	100% × Tuition Fee	-CMP: from 9th semester without LOA
Special	3 or less	$^{1}/_{2}$ × Tuition Fee	-Master: from 6th semester without LOA
Special	4 or greater	100% × Tuition Fee	

#### **B.** Research Semester Registration Fee

A PhD/CMP program student who has completed his/her program and is starting or continuing a research semester is required to pay the research semester registration fee four consecutive times unless otherwise exempted because of graduation.

#### 5. Fee Payment & Refund

Invoiced tuition can be found on GLS. There are several payment methods as follows;

- Bank transfer: the billed tuition fee mat be transferred to a designated virtual bank account which will be printed on their invoice
- Bank visit: a local bank is visited for tuition fee payment
- Credit card: tuition is paid on the Samsung Card Company website\* Only Samsung card is accepted.
- Electronic banking service: online finance services of some local banks may be used

#### A. Tuition Fee Installment Program

The purpose of the tuition fee installment program is to ease an invoiced student's financial burden of paying his/her tuition at once. A student may file a tuition fee installment application on GLS for the sake of paying their tuition fee in multiple installments. Two or four tuition fee installments are available, and applicants will be notified of the exact payment periods for each installment.

#### [NOTE 1]

A student shall be subject to involuntary disenrollment due to overdue tuition fee payment if he/she does not make a payment for each installment fee in a timely manner; in this case, the paid tuition fee is not refundable.

#### [NOTE 2]

A student who falls under one of the following conditions is not permitted to apply for tuition fee installments if:

- A student who is receiving a student loan
- A student who is receiving financial aid (scholarship) covering 50% of the tuition fee or more.
- A student who is invoiced a reduced tuition fee with reduction rate of 50% or for an extra regular semester.
- A student who is invoiced a research registration fee, which is not subject to the tuition fee installment program

#### **B. Payment Period**

A student is required to pay tuition fees according to each payment type and corresponding period. The exact payment periods may vary depending on semester. Thus, a student must contact the College or Finance Office for information about the exact payment periods.

Payment Type		Semes		
		Spring	Fall	Summer/W
		348		inter
Regular Payment		Late Feb Early March	Late Aug Early Sep.	TDA C
Reduced Fee Payment for Extra Regular Semester		Mid-March	Mid-Sep.	TBA for each semester
Installment	2 Times	Early March - Late April	Early Sep Late Oct.	program
instaililent	4 Times	Early March - Late May	Early Sep Late Nov.	P. 29. a

#### C. Tuition Fee Refund

Generally, paid tuition is not refundable. However, a student who falls under the following conditions will have the paid tuition fee refunded in accordance with the table below, if:

- A student who files for withdrawal of studies and surrender SKKU studentship by declaring voluntary disenrollment.
- A student who files for leave of absence, considering himself/herself unable to continue/start studies at SKKU due to personal reasons, such as health problems or family emergencies, or unavoidable occasions, such as natural disaster, death in the family or the like.
- A student who has been newly admitted to the Graduate School, and files for withdrawal of admission.
- A student who fails to file for re-entry in a timely fashion after his/her LOA semester(s) expires.

Need for refund occurs anywhere	Refundable Fee	Note
before semester begins	100% × Registration Fee	Admission Fee included
between 1st and 29th day of semester	$\frac{5}{6}$ × Tuition Fee	
between 30th and 59th day of semester	$^4/_6 \times$ Tuition Fee	Admission Fee NOT included
between 60th and 89th day of semester	$^{3}/_{6} \times \text{Tuition Fee}$	
90th day of semester and after	0%	-

<sup>\*</sup> The table above may apply to summer/winter undergraduate courses and concentrated graduate programs.

<sup>\*</sup> Tuition fee in the context of the tuition fee refund policy denotes the fee paid by student; that is the refund policy is not applicable to fees supported by any internal or external financial aid program.

### **D.** Carry-forward of Tuition

Paid tuition can be carried forward to the semester of re-entry when:

- A registered student's filing for leave of absence (except conscription leave) is accepted within 90 days of the semester of application, in which case no additional fee will be invoiced.
- A registered student's filing for conscription leave is accepted prior to his/her final exams and the student concerned declares abandonment of credits and grades of that semester

## **ACADEMICS**

#### 1. Enrollment Status Change

#### A. Leave of Absence

A student who, during his/her studies, desires a leave of absence (hereinafter referred to as LOA) for a semester/year should apply on GLS or in written form to the Dean of the College/School concerned during the prescribed leave of absence application period. A student who requires a conscription/sick/emergency leave has to present a certificate or other authenticated documentation as proof with the application form.

LOA	Description	Certifying Document
Regular	Absence for extra-curricular activities, such as a language program abroad,	Not
Negalai	establishing a venture or firm, employment, etc.	Needed
	Certified by a legitimate medical practitioner at a 2nd or 3rd tier medical	
Sick	institution as unable to continue study or attend class longer than 3 weeks	
	due to psychological, physical or emotional discomfort or challenges	
Personal	Duly deemed as unable to continue study or attend class longer than 3	
Emergency	weeks due to a personal emergency or crisis	
	Absence due to conscription, and therefore obligating student to serve	
	military duty	
Conscription	* Conscription LOA may not be applicable to international graduate	Needed
	students, and therefore it is advised to find relevant information at each	
	college/department office in advance if you are obligated to fulfill	
	military duty	

#### [NOTE 1]

A student whose application for the tuition fee installment program is accepted shall be permitted to take a leave of absence after the entire semester tuition fee payment is made.

#### [NOTE 2]

A LOA application shall be accepted by the end of thirteenth week of a semester; LOA applications after the fourteenth week of a semester begins will not be accepted.

### [NOTE 3]

In the case of a LOA application being accepted after registration/tuition fee payment, the paid fee shall not be refunded; in this case, tuition will not be invoiced to a student's re-entry semester.

#### ■ Special Clauses for Conscription Leave

[A] A student on conscription leave whose military duty is deferred or waived is obligated to make an immediate report to the Dean of College/School within 7 days from the date of deferral or waiver; otherwise the student shall be disenrolled. As soon as the military duty is deferred or waived:

- 1. A student who was on a regular leave of absence before conscription leave must file for re-entry for the following semester or extend his/her LOA semester.
- 2. A student who was not on leave before conscription must file for re-entry in the present semester to resume his/her study.

[B] A student who is conscripted during a regular semester attending courses for 13 weeks or longer may choose either acquiring or abandoning credits at his/her discretion.

#### 1. Credit Acquisition

- A student must consult his/her professors about evaluation and grades. The professors will consider cumulative academic performance and achievements in the semester when giving grades and credits.
- A student will get grades and credits for the semester and his/her tuition fee will be invoiced for his/her re-entry semester after discharge.

#### 2. Credit Abandonment

- A student will not receive grades or credits for the semester, and tuition fees will not be invoiced for his/her re-entry semester after discharge.

#### ■ Number of LOA Semesters

Please refer to the following table of the number of semesters permitted for an absence. A student is allowed to apply for up to two LOA semesters at one time

	Degree Program	Maximum LOA Semesters Allowed	Note
		3	
Master	Special Graduate Schools	4	Semester(s) for
	Professional Graduate School of Medicine	6	Conscription Leave
	PhD	3	will not be counted.
	СМР	6	

#### [NOTE]

The LOA semester(s) taken before disenrollment are included in the total number of LOA semesters allowed for each readmitted student.

#### **■** Consideration for the Challenged

The physically/mentally/emotionally challenged are permitted to apply for extra LOA semesters as authorized by the president of SKKU.

#### **B.** Re-entry

Any student who falls under any of the following conditions should apply to the Dean of the College/Dean concerned for re-entry on via GLS or in written form. The student concerned may also consider applying for a LOA extension.

- 1. A student who desires re-entry for continued study
- 2. A student whose LOA semester(s) expires; in this case the student concerned is required to file for reentry within three weeks after expiration.

### ■ Special Clauses for Military Discharge Re-entry

A student whose military duty is served completely and therefore is discharged must complete one of the following; otherwise the student concerned shall be disenrolled.

- 1. File for re-entry application within a year from the beginning date of the semester which includes the certified date of discharge, by presenting the designated application form with a certifying document of discharge.
- 2. File for a LOA type change by presenting the designated application form with a certifying document of discharge to alter a conscription leave into regular leave.

A student must file for re-entry no later than the third week of the semester after discharge. Even if the student is not officially discharged from military duty before the fourth week of the semester, the filing may be accepted if it is certified by authorities that he/she is able to attend the classes for longer than thirteen weeks.

#### [NOTE]

A student who is discharged after April 1st or October 1st is permitted to file for military discharge re-entry in the spring or fall semesters, respectively.

#### C. Disenrollment

The Dean of the College/School may have a student disenrolled if any of the following conditions applies.

Disenrollment		Description
Vo	luntary	A student who wishes to disenroll for his/her own personal reasons
	Overdue Tuition Payment	A student who fails to pay tuition and other compulsory fees to the University Finance Office in a timely manner
Involuntary	LOA Expiration	A student who fails to apply for re-entry within three weeks after the granted LOA semester(s) expires
	Concurrent Registration	A student who registered at multiple universities, including SKKU

Semest Abandonr	A student whose semesters have been abandoned more than three
Unsatisfac Acaden Performa	A student whose academic performance is unsatisfactory according to
Withdrawa CMP	from A student who filed for a withdrawal from CMP
Disciplinary Action	,

#### D. Readmission

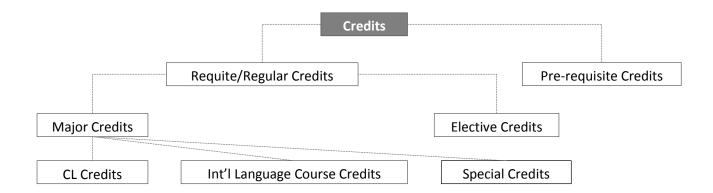
A student who has been disenrolled is permitted to apply for readmission after the date of disenrollment, except for disenrollment by expulsion to which readmission is not applicable. If a student who has been reinstated after disenrollment and is deregistered due to the same reason, he/she is subject to permanent disenrollment, and therefore shall not be permitted to apply for readmission again.

A relevant collegiate or departmental committee will review the readmission application and may accept it under the condition that each department has a remaining enrollment quota. In other words, not all readmission petition will be accepted. Once a student is readmitted, completion requirements may be adjusted according to his/her year of study, earned credits, completed semesters, etc.

Disenrollment		Readmission	A disenrolled student may apply for readmission after ()
Volu	ntary	0	1 year
Overdue Tui	tion Payment	0	1 year
	Regular	0	1 year
LOA	Sick	0	1 year
Expiration	Conscription	0	Not applicable
	Emergency	0	1 year
Concurrent Registration		0	1 year
Semester Al	oandonment	0	1 year
Unsatisfactory Academic Performance		0	1 year
Withdrawal from CMP		0	Not applicable Only if a student is conferred Master Degree
Disciplinary	Deregistration	0	1 year
Action	Expulsion	Х	N/A

#### 2. Courses and Credit

The diagram below depicts how the credit system of SKKU works. It is largely divided into two groups, regular/requisite and pre-requisite credits, while the former contains various sub-categories as follows.



#### A. Requisite/ Regular Courses and Credits

A Requisite or regular credit indicates a type of credit which can be earned by taking credit-bearing academic courses and modules. As it seems natural to obtain credits by completing academic programs, please be informed that is not the case for non-credit courses or modules.

#### **B. Prerequisite Courses and Credits**

A prerequisite credit is a credit given to fist-year graduate students if they are found to be in need of supplementary study along with regular graduate coursework for major/elective credits. Prerequisite credits must be obtained by attending regular credit courses offered in lower degree programs; i.e. a Master program student's prerequisite credits have to be acquired by taking undergraduate modules, while PhD program students' prerequisite credits have to be acquired by taking Master program modules.

At the beginning of a graduate degree program, a student may be given prerequisite credits by the department chair and with the Dean's endorsement, if he/she is considered to need extra coursework after checking their academic background or knowledge which are expected to be achieved in advance.

Up to 24 prerequisite credits can be given are required to be fulfilled before the prescribed regular academic; no later than the second semester for Master/PhD programs and no later than the sixth semester for CMP programs.

#### [NOTE 1]

Governing rules and bylaws on prerequisite credits may differ in each academic unit so please contact your college or department office for more information.

#### [NOTE 2]

Prerequisite credits are not counted in semester-based maximum number of credits allowed, and are not be able to be changed once they are approved.

#### C. Major/Elective Courses and Credits

There are two types of courses in graduate programs: major and elective courses. The former denotes courses offered by a student's major department, while the latter indicates courses offered by a department other than a student's major department.

Credit	Description
Major	Credits given in exchange for completing major courses.
Elective	Credits given in exchange for completing non-major/elective courses offered by other colleges and departments, except for Cross-listed modules.

#### [NOTE]

Cross-listed courses are to be recognized as major courses; for more information CL courses, please see below.

#### **D. Cross-listed Courses and Credits**

Cross-listed, or CL in short, courses offered by department [A] to be recognized as a major course in department [B]; you may obtain major credits by taking a subject not available at your department if it is cross-listed as a major course. Please contact the office of each college/department if you are planning to sign up and attend a course not offered by your department and want to know whether it can be recognized as a major course

E.g. Academic Writing and Research Ethics (Course Code: COV7003) offered at the SKKU Institute for Convergence may be cross-listed as a major module at the Department of Physics, and therefore a physics major students is able to get major credits by taking it..

#### E. International Language Courses and Credits

A SKKU graduate student has international language credit requirements corresponding to their degree program as the table shows below. A Dean of College may exempt the requirement in case this condition is considered and agreed not appropriate to be applied to a particular academic unit.

Requirement	Master	PhD	СМР
International Language Course Credit	3	3	6

#### [NOTE 1]

In SKKU's academic context, international languages mean all languages other than the Korean language; a majority of courses are English-conducted courses.

#### [NOTE 2]

An International language course credit requirements can only be fulfilled through major courses

#### **F. Special Course Credits**

A College/Department may organize a special examination for newly admitted students in order to provide a chance to obtain extra credits. Special credits shall be included in the first semester of a student's graduate program and be added to the maximum credits allowed for a semester.

E.g. if a master's program student obtains three special credits, the total number of credits that the student is able to get for the first semester is 12.

#### **G. Independent Research Courses and Credits**

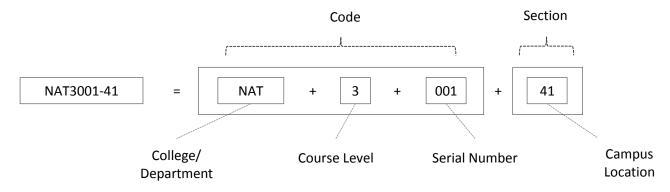
An independent research course is offered to a student who is interested in conducting academic research and studies independently under the guidance of an academic advisor. Each academic unit may have a different policy on independent research modules.

#### **H. Concentrated Courses and Credits**

A College/Department may organize a concentrated course as is deemed necessary to fulfill its educational goals, and give regular credit(s) to a student who completes it successfully.

#### 3. Course Code and Section Number

All academic courses at SKKU can be identified by a unique combination of the course code and section number.



#### A. Course Code

All academic course/module offered by the Graduate School has a unique code for easy identification.

#### Course Level

The first digit of the four numbers proceeded by three or four- alphabetic characters in course codes denotes the expected cohort of attendees of the course, as demonstrated by the table below. Course codes consist of 7 digits with three or four letters and numbers.-

Code	Level of Study	Example
GED 1***	Undergraduate: Liberal Arts/ Elective Course	GEDG001
OO2***	Undergraduate: 2nd-3rd year	BIO2014
○○3***	Undergraduate: 3rd-4th year	NAT3001
OO4***	Undergraduates & Master	MTH4019
OO5***	Graduate: Master & PhD	PHY5043
OO6***	Graduate: Master & PhD	CHY6003
OO7***	Undergraduate & Graduate (Master & PhD)	TRP7001

#### Department

The English letters of each code represents the department where the course is offered.

Code	Department
NAT	College of Science: Natural Science
BIO	Department of Biological Science
MTH	Department of Mathematics
PHY	Department of Physics
CHY	Department of Chemistry
IPC	Interdisciplinary Course of Physics and Chemistry
COV	SKKU Institute of Convergence
GED	University College: General Education

<sup>\*</sup> Courses offered by other academic units have different combinations of English letters.

#### **B. Section Number**

There can be multiple classes under the same course code and each of these classes can be identified by section number.

Section Number	Department		
01, 02, 03	A section of a course offered on the Humanities and Social Sciences Campus		
41, 42, 43	A section of a course offered on the Natural Sciences Campus		
11 12 12	A section of a course offered on the i-Campus		
l1, l2, l3	(i-Campus is an virtual platform where online courses are uploaded)		

#### 4. e+ Virtual Courses

The e+ Virtual Courses are internet-based modules designed to provide a better and ubiquitous teaching and learning environment to both instructors and students. Advanced technological lecture devices, such as electronic podiums with internet connection, motion-detecting cameras, automatic video recorders, and distance televising system are applied in the following categories of courses.

Туре	Description
Online Virtual	Courses with online class times only; no offline class time components engaged
Blended Learning	Courses with both offline and online class times
Simultaneously Televised	Courses conducted in an offline classroom at one campus and simultaneously televised to a classroom at the other campus, enabling class registrants to attend the course without moving between the campuses
Video Recorded	Courses conducted in offline settings but video recorded, enabling class registrants to review the class online

## [NOTE]

As online virtual courses have no physical class time and place to conduct exams, classroom or online (i-Campus or CYAN) notices will be made to attending students regarding offline mid-term and final exam schedules.

## 5. Credit Hours

One SKKU credit requires students to fulfill one class hour and two self-study hours per week. For example, in case of two SKKU credit courses, it requires two class hours and four self-study hours per week which make 32 contact hours and 64 self-study hours in a semester.

SKKU Credit	Class/Contact hours per semester	Self-study hours per semester
1	15 hours or greater	30 hours or greater
2	30 hours or greater	60 hours or greater
3	45 hours or greater	90 hours or greater

4	60 hours or greater	120 hours or greater
5	75 hours or greater	150 hours or greater
6	90 hours or greater	180 hours or greater

## 6. Semester Maximum Credits

Each degree program has a maximum amount of credits allowed per a semester; in other words, a student is not able to register for more than the stipulated maximum credits. However, he/she is permitted to take some extra credits if the student is are pursuing a PhD program as follows. A student who desires to take extra credits should contact his/her college office prior to course sign-up for maximum credit adjustment.

## A. General Graduate School

Dograo	Maximum	Extra Credits Allowed		
Degree	Credits	First Semester	Second Semester	
MS	9	-	-	
PhD	9	+3 (Max: 12)	+3 (Max: 12)	
CMP	9	+3 (Max: 12)	-	

## **B. Professional/Special Graduate School**

Graduate Program	Track	Max Credits	Note 1	Note 2
Academic Professional		9	Three extra credits (12 credits in total) will be allowed in any two semesters	Maximum Credits may differ in each academic
Professional	Professional	18	-	unit, as is stipulated by
	Medicine	27	-	its respective bylaws
Special		6	Three extra credits (9 credits in total) will be allowed in any two semesters	-

## 7. Grading

## A. Examination/Test

An instructor may, however is not obligated to, carry out an exam during the regular midterm or final exam period designated by the Office of Academic Affairs. Therefore, a particular course may require registrants to take the exam not during the regular examination/test period, as deemed necessary.

## **B. Grade Point Average**

Grade Point Average (GPA) is calculated according to the formula below and is printed on the transcripts based on the grade values. A numerical score given to a graduate student is to be converted into the corresponding letter grade and grade point value for semester-based evaluation by GPA.

Letter Grade	Grade Point Value	Numerical Scale of Score	Note 1	Note 2	
A+	4.5	95 - 100	-	-	
А	4	90 - 94	-	-	
B+	3.5	85 - 89	-	-	
В	3	80 - 84	-	-	
C+	2.5	75 - 79	-	-	
С	2	70 - 74	-	-	
D+	1.5	65 - 70	-	-	
D	1	60 - 64	-	-	
F	0	0 - 59	Not counted in GPA formula	Credits Failed	
Р	-	-	Not counted in GPA formula	-	
	[I] stands for	"Incomplete", a te	ntative letter grade which indicates that a	an instructor has not	
1	given a grade because the work is of passing quality but is incomplete. If [I] does not duly				
	change into a regular letter grade, it will revert into an [F] automatically. This applies only to				
	courses withou	ut undergraduate	registrants.		

#### ■ Course Failure

A student falling under the following conditions shall fail the courses he/she is attending.

- Receiving a disciplinary action heavier than suspension
- Not attending classes more than 3/16 of the required coursework
- Committing misconduct or other illegitimate behaviors in acquitting credits and grades.

## **C.** Grading Policy

SKKU uses either a letter grading system (A, B, C, D and F) or percentile scale (0-100). Principally, all graduate programs employee the latter with an absolute grading policy. Instructors have the right to assign a grade based on any method that is professionally acceptable and applied equally. Instructors have the responsibility to provide careful evaluation and timely assignment of appropriate grades. SKKU Graduate School presumes that the judgment of the instructor of record is authoritative, and the final grades assigned are correct.

For regular semesters, absence of more than 3/16 out of all class time required for a semester shall result in automatic failure; e.g. if a student misses a class for 4 weeks, he/she shall receive a grade F for that particular course, regardless of an instructor's judgment and evaluation.

## D. Grade Reporting and Posting

A student's grades will be reported to the Office of Academic Affairs and posted on each individual's GLS two weeks after a semester ends.

## E. Grade Appeal and Change

A student may appeal his/her semester grades during the designated grade posting period on GLS.

A grade appeal is not confined to charges of unfair action toward an individual student and may not involve a challenge of an instructor's grading standard. The grade appeal considers whether a grade was determined in a fair and appropriate manner; it does not attempt to grade or re-grade individual assignments or projects. In a grade appeal, only unfairness such as prejudice, arbitrariness, and/or error will be considered as legitimate grounds for an appeal.

The appeal procedure provides an instructor with the opportunity to change a grade for a course or project on his or her own initiative. An instructor may request a grade change in one of two ways; by putting the grades changes online by the given due date or submitting a petition to the College Dean to change the grade at any time prior to the student's graduation.

## F. Grade Correction

Once grades are finalized after the grade appeal period, they shall not be corrected unless an instructor files a grade change petition for giving wrong grades by negligence.

#### 8. Course Evaluation

SKKU's academic policy requires a student to do an evaluation of the courses they attended two times; around the mid-term exam and before the final exam. The obvious purpose of course evaluation is to provide student feedback on each instructor's methodology, curriculum, readiness or classroom environment as a whole, and other factors to the teaching faculty members in an organized, quantitative and comprehensive manner for future improvement.

A student's comments and evaluations will not be released publicly. An instructor is able to review students' feedback but he/she is never allowed to have or ask for an access to a student's information for identification purposes. There are two course evaluation periods in a semester, and each student should finish the evaluation for each course that he/she is attending on GLS.

## [NOTE]

Mid-term course evaluation is not applicable to graduate program students.

## 9. Credit Transfer and Recognition

#### A. Credit Transfer from Sister Universities

A student can transfer credits they acquired at other domestic or foreign universities during their academic career through participating in student exchange programs at the universities with a valid student exchange program agreement or contract with SKKU.

## **■** Domestic Exchange Program

A student who is permitted by the Vice President of Academic Affairs to attend courses at a domestic sister university in a particular semester(s) may transfer the earned credits and grades to SKKU credits and grades. In order to take part in the domestic exchange program, he/she has to be advised by the department chair prior to application.

## ■ International Exchange Program

A student who is permitted by the Vice President of International Affairs to attend courses at a foreign sister university in a particular semester(s) may transfer the earned credits and grades to SKKU credits and grades. In order to take part in the international exchange program, each student must meet with the department chair prior to application.

#### B. Credit/Semester Transfer from a Previous University

A new graduate student can have credits obtained at his/her previous university recognized and transferred. The governing rule varies depending on a student's type of admission; transfer or otherwise.

#### ■ Transfer Admission Credit/Semester Transfer

A chairperson of each department reserves the right to make judgment on credit transfer from a student's academic records at the previous university. With the final approval of a College Dean, credits acquired at a previous university can be transferred to the SKKU Graduate School. The number of recognizable semesters and transferrable credits shall not exceed the number of semesters completed and credits acquired at the student's former university.

E.g. A student who earned 15 credits in 2 semesters at the previous university is allowed to apply for semester recognition and credit transfer of up to 2 semesters and 15 credits, respectively.

#### ■ Regular/Non-regular/Special Admission Credits/Semester Transfer

A student who is admitted can have his/her credits earned at a previous school recognized according to the following table. Exact number of transferrable credits vary depending on which graduate school the student is attending.

Graduate School	General	Professional	Special
Maximum Credits Transferrable	9	15	6

## C. Semester Recognition through Advance Credit Acquisition

A student who acquired credits shown in the table below, or greater, corresponding to his/her degree program by one of the following conditions is able to apply for semester registration exemption for the first semester.

- Completing special credit courses
- Transferring previous school's credits and semesters
- Earning credits by completing graduate courses though the Linked Undergraduate and Graduate Program and having them recognized at the Graduate School they are enrolling in.

Graduate School	General	Professional	Special
Credits	6	12	6

## 10. Credit Requirement for Completion and Graduation

Please see [Completion and Graduation].

## **SPECIAL PROGRAM**

## 1. Linked Undergraduate and Graduate Program (LUGP)

The Linked Undergraduate and Graduate Program provides an undergraduate student with a chance to attend up to six-credit (e.g. two three-credit modules or three two-credit modules) graduate modules during his/her undergraduate years. A graduate module in this context refers to courses with code 5 or above; e.g. MAT5001, NAT6001, TRP7001, including Team Research Project (course code: TRP\*\*\*\*) credits.

Provided the department chair endorses it, A LUGP student may transfer graduate course credits taken in an undergraduate program to a graduate program. In this case the credits of the graduate course(s) completed are recognized both in undergraduate and graduate programs, and the student's regular semester registration requirement will be reduced by one semester, given he/she acquires six graduate module credits or more recognized by a graduate school.

The LUGP enables an undergraduate student to proceed to a graduate program without going through the regular admission procedure. The student's thesis requirement for graduation may be waived if the department chair of the sending undergraduate program approves.

## [NOTE]

No financial aid/scholarship element is included in the LUGP.

## 2. Team Research Project (TRP)

The Team Research Project is a course specifically designed for the departments at the Natural Sciences Campus. This team-based independent research module consists of an advising faculty member, and graduate and undergraduate students. Its purpose is to carry out in-depth research throughout over a year i.e. two consecutive semesters.

Principally, both undergraduate and graduate students are able to acquire three credits for each semester, and therefore each student may earn up to six credits by completing the module. For application and eligibility, other strings may be attached so please contact the respective college/department office for more information.

#### [NOTE]

Not all departments are eligible for TRP; professors/students at departments which won either the Global Top 10 or Brain Korea 21 Plus Grant Program are eligible for application to the program.

## **ONLINE PLATFORM AND COURSE SIGN-UP**

## 1. Online Service Platform

Platform	Description
	http://www.skku.edu/eng ⇒ [Kingo Portal] at upper right hand side of page
Kingo Portal	The Kingo Portal is the gateway online platform through which a student can log on to the SKKU online system and access the GLS. There is no direct link to the portal website, so a student should access the homepage of SKKU to log on to the Kingo Portal. It provides a free e-mail, online notice board (CYAN), Q & A bulletin, etc.
	http://www.skku.edu/eng ⇒ [Kingo Portal] ⇒ [GLS]
GLS	The Golden Lawn Square (GLS) enables student users to access personal information, such as enrollment status, year of study, registered name, and academic information such as course catalog, professor's office and contact.
Sugang	http://sugang.skku.edu
Webpage	The Sugang website is an online platform where a student can sign up for courses.  (* Sugang means course attendance or sign-up in Korean language)
	http://www.icampus.ac.kr
i-Campus	The i-Campus is a virtual online campus for internet-based education, mainly e+ Virtual Classes, where students can access relevant course materials, such as weekly schedules, handouts, and video lectures. Instructors also have access to the same webpage to upload class materials, make notices and announcements. All courses, including e+ Virtual Courses, can make use of the i-Campus for better learning and teaching.
	http://socw.skku.edu
SOCW	The SOCW (SKKU Open Course Ware) webpage is reserved for a number of free lecture s presented by SKKU faculty members as a part of the university's commitment to knowledge and information sharing. SKKU students and general public can access the webpage to watch the video lectures and make use of other resources for free.
	http://safety.skku.edu
Safety Information Web	The Safety Information Web is designed for managing on-campus matters regarding safety management, crisis response guidelines, and other useful resources about safety issues. It also provides electronic contents for safety education; a student must complete safety education on this webpage as required by their department

## 2. Sungkyun ID and Password

A SKKU student must make an ID and corresponding password in order to log onto the various online platforms offering useful resources. The ID will be identical with email account; e.g. if a student's SKKU online system ID is *skku1398*, his/her SKKU email address will be *skku1398@skku.edu*.

## 3. Course sign-up/registration

SKKU employees an online course registration system; no course sign-up using paper is acceptable, unless otherwise specified or permitted. Additionally, neither faculty members/advisors nor administrative officers are permitted to assist a student's course sign-up by using his/her personal ID and password. Each student is subject to full liability on his/her course registration procedure and results.

A student should first refer to the academic year's course catalogue on the GLS system and sign up on the Sugang website (http://sugang.skku.edu).

## [NOTE]

It is not possible to sign up for courses on GLS or i-Campus (http://www.icampus.edu); the Sugang webpage is the only place where course registration can be carried out.

## 4. Accessibility and Compatibility of SKKU Online System

As the SKKU website is optimized for Internet Explorer, it might not work properly on other kinds of web browsers, such as Firefox, Chrome, Safari and Opera. It is therefore definitely required for international students who use one of these browsers to install multi-browsing software called Wizvera. It will automatically set-up on the computer when clicking the [Kingo Portal] button at http://www.skku.edu/eng. It will enable students to access the SKKU website through web browser other than Internet Explorer.

## [NOTE]

SKKU online system is optimized for Microsoft Windows OS; it may not work on Macintosh.

## **COMPLETION AND GRADUATION**

## [NOTE]

<u>Each college/department may have different bylaws with regard to the dissertation submission qualifying examinations and dissertation examination/defense; please refer to each college/department office or information booklet for more details.</u>

## 1. Completion

The degree program is completed by fulfilling all of the following conditions:

- Registering for all academic regular semesters required
- Fulfilling all requirements of requisite and prerequisite course credits
- Achieving a grade point average greater than the one stipulated by respective college/department

#### 2. Graduation

Graduation is another word for degree conferral. A degree will be conferred to a student who fulfills a set of completion requirements and the following conditions:

- Finishing required safety education required
- Passing or becoming exempt from the dissertation submission qualifying examination
- Successfully defending dissertation examination; preliminary defense may be required

## 3. Credit Requirements for Completion and Graduation

## A. General Graduate School

Degree Program/ Discipline			Major (A)	Elective (B)	Sum (A+B)
			+ or greater	+ or lesser	+ or greater
	Master		12	12	24
	PhD			18	36
	Science / Engineering /	30	21	51	
СМР	Medicine	Class of 2012 or after	30	27	57
	Sports Science		30	27	57

## **B. Professional/Special Graduate School**

Graduate	Discipline / Degree Program			Major (A)	Elective (B)	Sum (A+B)
Program				+ or greater	+ or lesser	+ or greater
	Medicine	Medicine Master		173	-	173
	Ma Water	Master	Academic	24	6	30
Professional		Master	Professional	24	9	33
	Resources	PhD		24	12	36
			СМР		18	54
	Information and Communication		12	12	24	
Special	Clinical Pharmacy		24	-	24	
	Clinical Nursing		24	-	24	

## 4. Early Completion of Credit Requirement

## A. CMP: Early Acquisition of Credits

A CMP student who acquired credits required for completion before his/her last semester is eligible for application for early completion.

E.g. a CMP student who acquired 51 credits or greater as of his/her sixth semester can apply for 2 semester early completion; in this case the student can complete the program two semesters earlier than regular completion which typically requires 8 semesters.

Program	CI	MΡ
Semester of Credit Requirement Fulfillment	6th 7th	
Exemptible Semesters	2	1

## B. Master/PhD: Concentrated Course Credit Acquisition

A Master/PhD student who earned credits required for completion by participating in a concentrated course(s) before his/her last semester is eligible for application for one semester early completion; in this case, the student concerned completes the course 1 semester earlier than regular completion which requires 4 semester registrations.

## 5. Degree

SKKU confers a degree corresponding to your degree program upon graduation at the end of each academic semester (late August for the first half semester, late February for the second half semester) if aforementioned and college/department-specific requirements are satisfied.

	Master	PhD	СМР
	Master		PhD in 🔾
Degree	of	PhD	Master of Science in OOO
Degree	Science	in OOO	(*Only for a student who cancelled the CMP studentship but fulfilled
	in $\bigcirc\bigcirc\bigcirc$		the Master program graduation requirements)

## A. Dissertation Release Obligation

A student who is conferred a PhD degree is obligated to release his/her dissertation in accordance with the governing act stipulated by the Ministry of Education.

## **B. Degree Cancellation**

SKKU Graduate School has the right to cancel a degree conferred to a student if any of the following conditions are met:

- A part of a whole academic activity a student did during studies is found to be based upon social, cultural and academic illegitimacy which infringes the academic integrity of the University, including but not limited to, falsified research or study outcome, data manipulation, plagiarism, abuse of data, improper ascription of authorship.
- An illegal or socially unacceptable activity is conducted and consequently cripples SKKU's social reputation and academic integrity, even if after graduation and degree conferment.

## **DISSERTATION/THESIS**

Dissertation is a scholarly contribution to knowledge in a student's area of specialization. The student is expected to demonstrate a high level of knowledge and the academic capability to function as an independent scholar. SKKU does not distinguish dissertations from theses. Therefore, in the academic context of SKKU, dissertation and thesis are synonymous.

## [NOTE]

Each academic unit (i.e. college and department) has its own policy, procedure and requirements as far as dissertation and dissertation examinations/defenses are concerned. Therefore, it is strongly recommended to refer to the office of your college or department or further specifics.

## 1. Academic/Dissertation Advisor

A graduate student is expected to be advised by a full-time faculty member of his/her department throughout his/her academic career in pursuit of a degree. A department chair, or other faculty members, shall consult with a student in arranging an academic advisor. A set of considerations, including but not limited to, the student's field of interest, research plan and the appropriate number of advisee allocated to each professor will be taken into account.

In case no suitable full-time faculty member is arranged in the student's department, non-full-time faculty, such as emeritus professor and visiting faculty, or a full-time faculty of another university may be assigned. Policies pertaining to procedure and timeline of advisor arrangement may vary depending on each academic unit and it shall be stipulated by its bylaws.

## [NOTE]

An academic/dissertation advisor of a student must naturally be one of the dissertation examination committee members for the student concerned.

## 2. Dissertation Submission Qualifying Exam

A degree candidate's ability to pursue the research project proposed and work on dissertation is tested by a dissertation submission qualifying examination(s) (QE). A qualifying examination shall consist of one or more invigilated written examination subjects; generally a set of major subjects and a foreign language.

Each academic unit may have its own policy on QEs, such as eligibility, waiver options, examination subjects, and evaluation and passing criteria.

## 3. Preliminary Dissertation Examination/Defense

For a preliminary dissertation examination defense, a student must organize the dissertation examination committee with the guidance of an advisor. In all degree programs, the committee is required to be composed of more than three internal full-time faculty members, including the academic advisor.

A College Dean may waive the preliminary dissertation examination for Master Programs, if deemed academically and legitimately necessary. Policies pertaining to procedure, timeline, structure, evaluation method and criteria of preliminary dissertation examination/defense may vary depending on each academic unit as stipulated by its bylaws.

Degree Program	Number of Committee Members	Note	
Master / PhD / CMP	3 or greater	Required to be inclusive of academic/dissertation advisor	

## 4. Ph.D. Specialization

A student in PhD program, including CMP, must choose a *specialization* which is a field of study and research in which he/she is specifically specialized. Specialization is to be recommended by a student's academic advisor and approved by the department chair and the Dean of the College/School. Bylaws of the respective College/School stipulate conditions, requirements and procedures of PhD Specializations and relevant procedures.

## 5. Dissertation Submission Requirements

A student is required to satisfy the following requirement of each graduate school program for submitting his/her dissertation to the examination committee. In addition to the common requirement below, other policies pertaining to procedure, timeline, structure, evaluation method and criteria of dissertation examination/defense may vary depending on each academic unit as stipulated by its bylaws.

## A. General Graduate School

Requirement	Master	PhD	CMP
Regular Semester Registration (including transferred/exempted semester, if any)	4	4	8
Prerequisite Credits (only for those who are given prerequisite credits)	0	0	0
Requisite Credits	24	33	51

Qualifying Examination	0	0	0
Preliminary Dissertation Examination/Defense	0	0	0
Grade Point Average	3.0	3.0	3.0
Safety Education	0	0	0
Publication in Journal*	Х	1 or more	1 or more

## [NOTE]

A student paper is required to be published in an academic journal acknowledged by each department; joint publication will also be accepted.

## **B. Professional Graduate School**

Requirement	Master	PhD	CMP
Regular Semester Registration	4	4	8
(including transferred/exempted semester, if any)	_		0
Prerequisite Credits	0	0	0
(only for those who are given prerequisite credits)		O	U
Requisite Credits	stipulated by bylaws		
Qualifying Examination	0 0 0		
Preliminary Dissertation Examination	0 0 0		
Grade Point Average	3.0 3.0 3.0		
Safety Education	0	0	0
Journal Publication	Х	0	0

## C. Special Graduate School

Requirement	Master
Regular Semester Registration (including transferred/exempted semester, if any)	4
Prerequisite Credits (only for those who are given prerequisite credits)	0
Requisite Credits	stipulated by bylaws
Qualifying Examination	0
Preliminary Dissertation Examination	0
Grade Point Average	3.0
Safety Education	0

In special graduate schools, the dissertation submission requirements may be waived for special graduate students by either of the two ways below:

- Acquiring 6 extra credits in addition to the credits required for completion
- Passing college-specific examination(s) prescribed by the respective bylaws

## 6. Final Dissertation Examination/Defense

For the final dissertation examination/defense, a student has to organize the dissertation examination committee with the guidance of an advisor. The committee is required to be structured in accordance with the table below and it is obligated to include the preliminary dissertation examination committee members, unless otherwise justified.

	Degree	Number of	Note 1	Note 2
	Program	Committee Members	Note 1	Note 2
	Master	3 or greater	-	Required to be inclusive of
ſ	PhD	C or greater	$\frac{2}{5}$ of committee members must be	preliminary dissertation
	СМР	5 or greater	selected from external institution	examination committee

Policies pertaining to procedure, timeline, structure, evaluation method and criteria of final dissertation examination/defense may vary depending on each academic unit as stipulated by its bylaws.

## [NOTE]

It is not permitted to apply for the preliminary and final dissertation examination/defense in one semester; preliminary defense is required to be fulfilled in order to be eligible for the final dissertation examination.

## 7. Post-Completion Dissertation Submission Period

In order to receive a degree, a student has to submit his/her dissertation to the examination committee within a prescribed period after completion. A student shall file for the dissertation examination no later when the period passes; otherwise a student shall not be able to earn a degree. The period may vary depending on each college or department. Please refer to your college or department office for more information.

## **DISCIPLINARY ACTION**

A Disciplinary Committee shall be organized, comprising the president, executive vice president, or dean in order to impose disciplinary action on a student who falls under any of the following conditions.

- A student who committed offences which cause disorder or turmoil on campus.
- A student whose behavior and personality are generally perceived not appropriate to the academic and student community of SKKU, and is found to have no sign of regret or improvement.
- A student who injured the university's integrity or reputation.
- A student who cheated or carried out any other fraudulent activities in examinations.

There are four different types of disciplinary actions as follows, and the committee will impose one of them depending on the gravity of the offence, or it may decide to take some other measures as deemed appropriate and necessary. The committee may consider exempting or attenuating it by obligating a student concerned to fulfill social services.

- Probation
- Suspension: terminable/interminable
- Deregistration: readmission may be allowed
- **Expulsion:** readmission is NOT allowed

## **SAFETY EDUCATION**

Safety Education is an instructional and training module for graduate students who are naturally or engaged in laboratory experiments, laboratory research, etc., throughout their academic career. Safety education is one of the requirements for degree conferral and graduation, and has to be fulfilled online in every regular semester a student is attending. There are various contents relevant to safety and clearance issues, such as industrial hygiene, occupational safety, treatment of hazardous substances, maintenance of dangerous equipment, etc.

The safety education module is a 100% online lecture and does not required to be signed up for by a student and will be registered automatically on GLS system before a semester begins. A student can access the Safety Information Web (http://safety.skku.edu) to find the modules available. She/he is also able to print a certificate after completing each module to satisfy the semester-based requirement.

## ■ In-Class/In-Laboratory Safety Education

In case a student attended any forms of training or educational session about safety issues arranged in class or laboratory for six hours or longer, his/her semester-based online safety education requirement will be considered fulfilled; a class/laboratory assistant or professor in charge shall petition for the replacement by submitting a designated confirmation form to the College or Department Office.

## **ACADEMIC WRITING AND RESEARCH ETHICS**

A college or a department may require a graduate student to take Academic Writing and Research Ethics as either credit-bearing/regular module or non-credit/pre-requisite course. The course not only teaches norms and ethics upon which a student must do research, but also some fundamental knowledge and skills that a researcher is advised to understand when writing a dissertation.

An international graduate student is strongly advised to contact his/her college or department office to know how this module is organized and what is required to finish the module. Some departments may require this course for graduation, whilst the others may only consider it as regular coursework or a prerequisite.

## FINANCIAL AID

SKKU offers various scholarship programs to support international students financially at four levels; university, college, department, and professor. In addition to general financial aid program available for all international graduate students, each college and department may have college/department specific financial support programs. A student is advised to contact his/her college or department or enquire to an academic advisor personally.

## 1. STEM Scholarship for International Graduate Student

SKKU has created a scholarship program for newly admitted international graduate students who apply for majors in Science/Technology/Engineering/Mathematics (STEM) fields. The Scholarship Program is available for incoming graduate program students enrolling in one of STEM-field departments.

## A. Initial/First Semester: administered by Admissions/International Affairs

#### Conditional

An international student who satisfies one of the conditions below will be granted the scholarship of 100% of tuition and admission fee in the first semester. (Approximately 10 million KRW)

	Conditions
1.	Academic Excellence
1.1.	Graduated from a university in top 500 of the QS World University Ranking
1.2.	Graduated from a department of a university in top 300 of QS World University Ranking by Subject
1.3.	Graduated from a university in top 100 of the QS Asian University Ranking
1.4.	Graduated from a university in top 50 of the Chinese University Alumni Association University
1.4.	Ranking
2.	Research Excellence
2.1.	Published more than one research paper on a SCI Journal as a main writer.
2.2.	Published more than two research papers on a SCI Journal as a co-writer.
3.	Professor's Recommendation
	Recommended by one of the full-time faculty members of the department the student is applying
	for

#### Unconditional

An international student accepted to a graduate program in a STEM field department will be granted the scholarship of 50% of tuition and admission fee in the first semester. (Approximately 5 million KRW)

## B. Continuing Semester: administered by College/Department

A student who received a STEM scholarship may apply for continued support in the ensuing semesters. A student in receipt of a STEM Scholarship for International Graduate Students is strongly recommended to meet the relevant conditions in order to maintain financial aid. Each academic unit may adopts different criteria for the financial aid continuation, and thus a scholarship student should contact his/her college or department office for more information.

## 2. Teaching Assistant Subsidy

A graduate student may receive financial subsidy by playing a role as a teaching/research assistant. There are various types of TA subsidies which vary depending on course type and the number of enrolled students. The table shows an overview of the TA subsidy options, and some other strings may be attached so please contact the college/department office for details.

Course Type	TA Subsidy (Unit: KRW)	Criteria
Online Virtual	500,000 - 6,500,000	Depending on the number of enrolled students
Blended Learning 500,000 -		-
Simultaneously Televised	1,000,000	-
Int'l Language	4-500,000	Depending on the type of int'l language course
Large-size 350,000 - 900,000		Depending on the number of enrolled students

#### [NOTE]

A student receiving the degree advancement scholarship is not eligible for the TA subsidy, even if he/she is appointed as a teaching assistant and the corresponding criteria is met.

## 3. Korean Government Scholarship Program: Brain Korea 21 Plus Project

A graduate student may financially benefit from government scholarship program, such as the Brain Korea 21 Plus, if his/her department has been granted the fund. As of December 2014, a master and Ph.D. program student participating in the BK21 Plus Project is able to receive a monthly research scholarship of 600,000 KRW and 1,000,000 KRW, respectively.

## 4. Degree Advancement Scholarship Program

The Degree Advancement Scholarship Program (DASP) is to selectively support academically excellent Bachelor or Master Program students when advancing to upper-level degree programs as follows. A graduate program application must be recommended by a faculty member at the receiving department for eligibility.

Advancement Mode		t Mode	Schol	Scholarship		
From	From To Graduation		Type A (is inclusive of)	Type B (is inclusive of)		
			100% of Last Bachelor Semester	100% of Last Bachelor Semester		
		Early	Tuition Fee	Tuition Fee		
Bachelor	CNAD	Early	6 Million KRW × 6 Semesters	50% of Tuition × 6 Semesters		
Bacrieior	CMP		o Million Kivw × o Semesters	Admission Fee		
		Regular	6 Million KRW × 6 Semesters	50% of Tuition × 6 Semesters		
		Regulai	6 Million KKW × 6 Semesters	Admission Fee		
	r Master		100% of Last Bachelor Semester	100% of Last Bachelor Semester		
		Early	Tuition Fee	Tuition Fee		
Dachalar		Early	3.6 Million KRW × 4 Semesters	50% of Tuition × 4 Semesters		
Bachelor			3.0 Million Kivw × 4 Semesters	Admission Fee		
			3.6 Million KRW × 4 Semesters	50% of Tuition × 4 Semesters		
		Regular	5.0 Willion KRW × 4 Semesters	Admission Fee		
			100% of Last Master Semester	100% of Last Master Semester		
		Farly	Tuition Fee	Tuition Fee		
Master	Dh D	Early	6 Million KRW × 4 Semesters	50% of Tuition × 4 Semesters		
Master	Ph.D.		o Million Kivw × 4 Semesters	Admission Fee		
		Pogular	6 Million KRW × 4 Semesters	50% of Tuition × 4 Semesters		
		Regular	o iviiiion knvv × 4 semesters	Admission Fee		

## 5. Others

## A. Sponsored Student Scholarship

Sponsored students are duly able to receive the designated financial aid from a sponsoring entity, such as government sector entities including but not limited to the Ministry of Education, private companies, foundations, and other charity institutes. Either the Korean or foreign government/institutions can be the financial sponsor, or each scholarship program is usually administered in partnership with a host institution; in this case SKKU will provide useful information and service needed for beneficiaries

#### B. Professor's Aid

An individual professor may offer financial aid on his/her own to support a graduate student's study. Possible sources are government-initiated research projects, research funds granted by private sectors such as companies, self-sustained research institutes, charities etc.

## C. Student Contribution Scholarship

SKKU may give the student contribution scholarship to a student who has made remarkable contribution to reputation and development of SKKU.

## D. Shim-san Scholarship

The Shim-san Scholarship Program was established to provide financial aid to both Korean and international graduate students with excellent research performance and research capability. Named after Shim-san KIM Changsook who is a founder of the modern Sungkyunkwan in 1946, each department is entitled to administer the scholarship allocated fund to benefit its graduate students.

## **RESEARCH SUPPORT PROGRAM**

The Research Promotion Team, Academic-Industrial Business Team and other resources and services provide research support programs to graduate students, including but not limited to English paper editing services, financial incentives for prominent paper publications The paragraphs below shows what programs are available and graduate students are highly encouraged to contact the relevant office for more information by referring to the [On-campus Resources].

## 1. Research Promotion Team's Offerings

#### A. Journal Publication Incentive

A student who is a main author of a research paper published in internationally recognized academic journal (SCI-Core) may apply for financial incentive of 300,000 KRW as of December 2014 for his/her outstanding achievement.

## B. Paper Language (English) Editing Service

A researcher who is submitting a research paper to the in internationally recognized academic journals (SCI-Core, SCI-Expanded) may request for an English editing service, which will be outsourced and financially arranged by the research promotion team.

## [NOTE]

A student may not sign up for English editing for his/her dissertation or reference work. This service is only applicable to international paper publication for academic journals.

## C. On-campus Research Support for Post-doctorate Researcher

A researcher with a doctorate degree conferred within five years from the date of application and is furthering studies at on-campus research institutes may apply for a yearly based subsidy of 18 million KRW as of December 2014. An applying researcher must have either a paper published in a SCI-Core/SCI-Expanded journal or an international patent for eligibility.

## D. Foreign Research Support for Post-doctorate Researcher

A researcher with a SKKU doctorate degree conferred within five years from the date of application and is furthering studies in a foreign research institute may apply for year-based subsidy of 25 million KRW as of December 2014. An applying researcher must have either a paper published in a SCI-Core/SCI-Expanded journal or an international patent for eligibility.

## E. Encouragement Program for Participation in International Academic Conferences

A researcher who is planning to partake in an international academic conference may apply for financial aid ranging from 400,000 to 600,000 KRW depending on the regional location of the nation he/she is visiting. An applicant shall be recommended by an academic advisor and the purpose of the attendance should be paper presentation; attendance without a specific aim will not be supported.

## F. Government Scholarship Application Support Program

SKKU supports graduate students' applications for government scholarship and grant programs. Information sessions for the programs available will be organized, and an applicant will be advised about what he/she needs to prepare for a successful bid and provide on-time and need-based support available at each step of application procedure.

## 2. Academic-Industrial Business Team's Offerings

## **G. Intellectual Property Support**

A student who is applying for a patent may fill out a request for financial aid, such as patent application and registration fees. Incentive programs for technology transfers are also available.

## **LIBRARY**

Each of SKKU Campuses has a library, The Samsung Digital Library at the Natural Sciences Campus and The Central Library at the Humanities and Social Sciences Campus.

As it is not quite often for international graduate students to make use of information service available at the Central Library, this handbook will mostly provide the information about the resources at the Samsung Digital Library. A student may refer to the Useful Contact to find the contact information of the Central Library, if he/she needs to use the recourses at the other campus.

The Samsung Digital Library is recognized as one of the most prestigious libraries in Korea for its state-of-art facilities, abundant book and journal collections, and many other useful resources that students and researchers can access and refer to for their study and research. A student can use the services available, including but not limited to book and journal borrowing, on/off-campus interlibrary loan, student space, article express, free computer and internet, etc.

## 1. Samsung Digital Library Opening Hours

Type	Regular Semester			Vacation		
Archive	Weekdays	Saturday	Sunday/Holiday	Weekdays	Saturday	Sunday/Holiday
Archive	08:00-21:40	10:00-17:00	Closed	09:00-17:30	10:00-17:00	Closed
Reading Room	06:00 am – 01:00 am of following day			07:00 am – 24:00 pm		

## 2. Services

#### A. Online Search

The SKKU Library established comprehensive collection of online resources at its website at http://lib.skku.edu. A student can access the webpage to locate the materials he/she needs, to make a reservation for seminar and reading room, and to use academic web database such as Scopus, Web of Science, JCR Web, etc. for comprehensive finding and search.

## **B.** Borrow and Return

A student can borrow books, journals, and other resources on collection at the Library with a student identification card. If a student is not able to make a return in time, he/she may make a request for extended

borrowing online, unless the lent recourses are reserved. A student can borrow up to twenty books for up to thirty days.

## C. Book and Article Express

This service allows a student to acquire journals, articles, dissertations, or a part of books which are not available at the SKKU University Libraries as a copy. The Library will find the requested materials not only at domestic libraries but also at foreign libraries, and bring them to a student. This makes the time and efforts needed for locating and using much lesser than otherwise required.

#### D. General Reference

A student conducting researches may request for general references as necessary and ask for support from librarians who will be happy to meet with you by appointment to discuss your research. A student is encouraged to find a subject specialist or send in a general inquiry for an appointment a librarian will contact you.

## E. Inter-library Loan

The Samsung Library provides interlibrary loan service which interlibrary Loan provides academic materials not available at the Library in the Natural Sciences Campus. The Library will find the requested resources from the Central Library or from more than 300 off-campus libraries in Korea. This service is available to any member of the University community who needs material for an academic research project or course-related assignment.

#### F. Request for Purchase/Subscription

A student can make a request for purchase or subscription on what he/she wants to read or refer to at the Library. The Library will consider each request based on its general or academic necessity; therefore not all of the requests may be accepted.

#### **G. Student Space and Facility**

There are a variety of useful spaces and facilities in the Samsung Digital Library, including but not limited to reading rooms, computer and internet service, multimedia room, group study room, studio. More information, please refer to the floor plan of the library below.

## 3. Floor Plan

Floor	Facility	Description
B1F	Service Center	Borrow and return
DIL	Reading Room: A – D	-
1F	Reading Room: E	-
11	Com-net: internet commons	Free computer and internet
	Media Archive	Electronic materials; DVD, CD, MP3, etc.
	PC Lab	Only for education purpose
2F	Presentation Room	-
<u>Ζ</u> Γ	Cinema	-
	Studio	For producing multimedia materials
	Photo Zone	-
	Help Desk	For general inquiry
3F	Collection and Archive	-
	Natural Science Information Service	-
4F	Reading Room: F – G	-
5F	Free Community Zone	Cafeteria, rest place
JF	Exhibition Area	-
7F	Creative Learning Room	For seminar, meeting, presentation, etc.
2F~4F	Group Study Room	Advance reservation required

## **DORMITORY**

## 1. Application Eligibility

All new and current SKKU students are eligible for dormitory application. Some applicants may be requested to present the tuberculosis test result carried out by a legitimate medical institutions. A student whose cumulative SKKU dormitory penalty points reached the maximum which is permitted for the particular period of times. Please contact the dormitory office (dorm@skku.edu) or visit its website (http://dorm.skku.edu) for more information.

## 2. Dormitory Overview

Five housing facilities are located on the Natural Sciences Campus; In-gwan, Ui-gwan, Ye-gwan, Ji-gwan, Shin-gwan. Each of them has different facilities and amenities and some of them are exclusively reserved for undergraduate students.

Dormitory		In-gwan	Ui-gwan	Ye-gwan	Ji-gwan	Shin-gwan			
Shared by		1	2	2	2	2	4	4	6
(unit: persons)		4					4	(4 rooms)	(3 rooms)
# of Rooms		106	100	171	463	544	35	97	52
Eligibility	Male	Х	0	Х	Х	0	0	0	0
	Female	Х	0	X	X	0	0	0	0

## 3. Cafeteria and Meal Plan

The dormitory cafeterias are located in Ui-gwan, Ji-gwan and Shin-gwan, and all have the same menu. When applying to the dormitory on GLS, a student may purchase a meal plan. Meal tickets will be given according to an individual's desired meal plan. The more tickets are purchased, the lower rates apply.

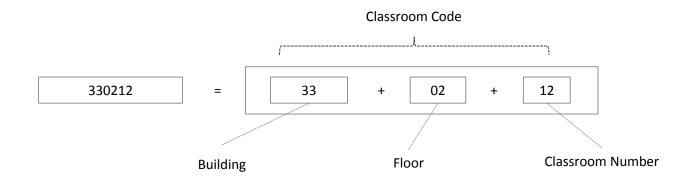
Options	meal price on average (unit: KRW)	Number of tickets per semester
2.5 meals / day	2,500	278
2 meals / day	2,600	222
1.5 meals / day	2,850	167
1 meal / day	3,100	111
On-site purchase	3,300	-

#### [NOTE]

Unused meal tickets will not be refunded, and changing or cancelling meal plan is not permitted once a semester starts; meal plan is subject to change every contract term.

## **BUILDING AND CLASSROOM IDENTIFICATION**

Classrooms of SKKU have their own identification number, which consists of a five-digit combination of numbers and roman alphabets. The first two digits of the classroom number are the building identification number; the third (or sometimes third and fourth) digit indicates the floor; the last two digits is the classroom number. E.g. the following code shows that classroom 330212 is located on the 2<sup>nd</sup> floor at the Chemistry Building.



Building	ID Number
Student Center	30
Science Building 1	31
Science Building 2	32
Chemistry Building	33
Semiconductor Building	40
General Studies Building	51
School of Pharmacy Building	53
Life Science & Technology Building	62
Medical Building	71
Research Complex 1	81
Research Complex 2	83
Drug Delivery Technology Research Center (DRC Building)	30
Engineering Building 1	21-23
Engineering Building 2	25-27

# OTHER RESOURCE AND CONTACT

## 1. On-campus Offices

## A. Headquarter Offices

Department	Phone	Email/Webpage
International Affairs	+82-31-290-5025	intlans@skku.edu
Admissions Affairs	+82-2-760-1000	admissions@skku.edu
Academic Affairs	+82-2-760-1057	jennychoi@skku.edu
Student Affairs	+82-31-290-5036	studentaid@skku.edu
Dormitory Office	+82-31-290-5181	dorm@skku.edu
Finance Team	+82-31-290-5071	mrjuni@skku.edu

## **B.** College Offices

College	Phone	Email/Webpage
College of Science	+82-31-290-5802	cscience@skku.edu
College of Information and Communication Engineering (CICE)	+82-31-290-5824	cice@skku.edu (jinsu3462@skku.edu)
College of Engineering	+82-31-290-5841	enzine@skku.edu
School of Pharmacy	+82-31-290-5874	pharmskku@skku.edu
College of Biotechnology and Bioengineering	+82-31-290-5876	dhbong@skku.edu
College of Sport Science	+82-31-290-5876	dhbong@skku.edu
School of Medicine	+82-31-299-6021	iliganji@skku.edu
SKKU Institute for Convergence	+82-31-290-5703	spike30@skku.edu

## C. Research and Academic Support/Services

Department	Phone	Email/Webpage
Research Promotion Team	+82-31-290-5567	jhkim83@skku.edu
Academic-Industrial Business Team	+82-31-290-5082	happyyw@skku.edu
Academic Information Support Team	+82-31-4028	
Natural Science Information Service	+82-31-5151	
Humanities and Social Science Info Service	+82-2-1201	http://lib.skku.edu
Samsung Digital Library (@ NSC)	+82-31-290-5151	
Central Library (@ HSSC)	+82-2-760-1190	

## D. Emergency & Other Services

Department	Phone
Health Care Center	+82-31-290-5250
Campus Security	+82-31-290-5119
Instructional Support	+82-31-290-6999
IT Support	+82-31-290-6119
Operator	+82-31-290-5114

## 2. Useful Website

Category	Title	URL
Korea	Korean Culture and Information Service	http://www.korea.net
	Incheon International Airport	http://www.airport.kr
Transportation	Metropolitan Rapid Transit Corporation	http://www.smrt.co.kr
Transportation	Seoul Metro	http://www.seoulsubway.co.kr
	Korean National Railroad	http://www.korail.com
Daily Life	Gyeonggi-do	http://english.gg.go.kr
Daily Life	Korea Meteorological Administration	http://www.kma.go.kr
Language	Before Babel Brigade, Korea	http://www.bbbkorea.org
Language Support	Korean Language Study	http://www.kosnet.go.kr
Зарроге	An Introduction to Korea	http://langintro.com/kintro
Tourism	Korea Tourism Organization	http://www.visitkorea.or.kr
Tourism	Gyeonggi Tourism Organization	http://www.ggtour.or.kr
	The Korea Herald	http://www.koreaherald.co.kr
Media	The Korea Times	http://www.koratimes.co.kr
IVICUIA	Arirang TV / Radio	http://www.arirang.co.kr
	TBS	http://www.tbs.seoul.kr/eng
	Woori Bank	http://www.wooribank.com
	Korean Exchange Bank	http://www.keb.co.kr
Bank	Standard Chartered Bank	http://www.standardchartered.co.kr
&	Citi Bank	http://www.citibank.co.kr
Postal Service	Korea Post	http://www.epost.go.kr
	FEDEX	http://www.fedex.com/kr_english/
	DHL	http://www.dhl.co.kr/en.html
	National Health Insurance Corporation	http://www.nhic.or.kr
Insurance	Samsung Life Insurance	http://www.samsunglife.com
	AIG	http://www.aig.co.kr/eng/

Medical Center	Ajou University Hospital	http://global.ajoumc.or.kr/Eng
Wiedical Center	Saint Vincent Hospital	http://www.cmcvincent.or.kr

## 3. Useful Contact

Category	Number	Note	
Fire Station / Emergency	119		
Police Station	112	Araa aada is	
Gyeonggi-do Call Center	120	Area code is not needed	
Information/Emergency Call Center for foreigners	1339	not needed	
Immigration Office	1345		

Reader's comment is more than welcomed. Please send your valuable idea to us via email to enable us to improve the content, structure and design of this handbook. Your participation will make our program better.



# International Graduate Student Guide

College of Science

## **NOTICE**

The Graduate Students Handbook for the College of Science Students provides basic information on Sungkyunkwan University (SKKU) graduate programs offered by the College of Science.

This booklet is supposed to be used as a supplement of the *Graduate Student Handbook - Natural Sciences Campus*, which provides rather general information about the graduate programs, for more detailed information about the graduate programs of the College of Science.

You will see [@R] under each section title; it tells you which part of the *Graduate Student Handbook*- *Natural Sciences Campus* you are advised to refer to for general information regarding the section
you are reading.

Every effort has been made to ensure the accuracy, preciseness, and timeliness of the information contained at the time of publication.

However, some specific details and arrangements may be subject to change in the course of academic year, and therefore it is strongly advised to contact each responsible office for verification of the information as deemed necessary.

Provision of this handbook must be interpreted as a means of offering support, not as a contract between students and the College of Science.

College of Science
Sungkyunkwan University

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## **WELCOME MESSAGE**

Welcome to the College of Science!

Founded in the year of 1398, Sungkyunkwan University (SKKU) has a proud historical background as the first higher educational institution in Korea. Over the last centuries, we have been well-known for lasting educational commitment to nurture outstanding individuals with high degree of morality, wisdom, knowledge and intelligence. In other words, SKKU was the place to not only teach old literature and calligraphy, but also educate basic sciences, humanities and arts.

Contemporarily speaking, among the fast growing Korean universities SKKU was ranked at the top for its rapid growth in terms of research capacity, alumni network, globalization, national customer/student satisfaction index and global reputation in higher education society worldwide for decades. With the strong collaboration with SAMSUNG, SKKU is now stepping up to become one of the most prestigious universities in the world.

In line with the University's solid and robust progress, the College of Science has also been recognized by international society for its fast as well as continuing academic development. We have adopted creative teaching methods to foster excellent scientists, and provided outstanding education and research programs to produce world class researchers in the field of basic science.

In addition, the College of Science has remarkably been successful in winning the Brain Korea 21 (BK21) Project, which is one of the largest government-driven research support programs. We were also able to host the Nanostructure Physics Research Center of the Institute for Basic Science (IBS) which receives annual research fund of 10 billion KRW from the government. And these are just a part of our achievements demonstrating the rising status of the SKKU College of Science.

It is our belief that basic science will play a major role as a driving forces to lead not only the nation but global society at the very forefront in the days to come as it did in the past historically. We take pride in making the basic sciences in Korea the globally recognized standard.

What we create here will become the new beginning.

Dean
College of Science

## **OVERVIEW OF DEPARTMENTS**

The College of Science (CS) graduate programs consist of five departments, including four academic pillars of natural sciences (biological sciences, mathematics, physics, chemistry) and one interdisciplinary program (interdisciplinary course of physics and chemistry).

Program	Department	Degree Course	Typical Duration
	- Biological Sciences - Mathematics	Master	2 years
Graduate	- Physics	Ph.D.	2 years
	- Chemistry - Interdisciplinary Course of Physics and Chemistry (ICPC)	СМР	3 - 4 years

#### [NOTE]

The ICPC only is offered as CMP program.

## **STUDENT SUPPORT OFFICES**

In the CS has 6 administration offices as follows; the CS Office provides general and collegiate support to international students and scholars, while the department offices help their students and faculty members with more department-specific issues.

Office	Location at NSC	Email	Phone
College of Science	32212, 2F, Science Building 2	cscience@skku.edu	+82-31-290-5802
Biological Sciences	32267, 2F, Science Building 2	dhkwon@skku.edu	+82-31-290-7000
Mathematics	31356, 3F, Science Building 1	math@skku.edu	+82-31-290-7020
Physics	31206, 2F, Science Building 1	koko1977@skku.edu	+82-31-290-7040
Chemistry	330210, 2F, Chemistry Building,	babkeng@skku.edu	+82-31-290-7060
ICPC	32354A, 3F, Science Building 2	seon@skku.edu	+82-31-290-5262

#### [NOTE]

NSC's address: 2066, Seobu-ro, Jangan-gu, Suwon, Gyeonggi-do, 440-746 Republic of Korea

## **ACADEMIC/DISSERTATION ADVISOR**

#### @R: [Dissertation/Thesis] - [Academic/Dissertation Advisor]

A graduate student of the CS is required to arrange an academic advisor by the end of the second semester of the graduate program by writing a research plan and proposal and acquiring a department chair's approval. The department chair may appoint multiple advisors if it is considered academically necessary for a graduate student to have more than one advisor.

The CS restricts the number of advisees for a faculty member for efficient research: the total number of Master and PhD program students under the guidance of one faculty member is 10 and 5, respectively. Generally, it is not permitted to change an advisor in the middle of program. However, a student may file for a petition for advisor change as deemed necessary.

#### **CREDIT**

@R: [Academics] – [Course and Credit]

@R: [Completion and Graduation] – [Credit Requirement for Completion and Graduation]

#### 1. Credit Requirement

Basically, the CS adopts the university's credit requirement for completion and graduation. However, it is advised to note the table below for the maximum independent research course credits which specifically applies to the CS graduate programs.

Degree		Sum (Min.)			
Degree		Major Course (Min.)	Int'l Language Course (Min.)	Independent Research Course (Max.)	Prerequisite
Master	24	12	3	6	<b>A</b>
PhD	36	18	3	9	As assigned (24 Max.)
CMP	51	30	6	12	(24 IVIAX.)

#### [NOTE]

A student are not permitted to take more than two independent research course in a semester.

#### 2. Prerequisite Credits

At the beginning of a graduate degree program, a student may be given prerequisite credits by the department chair and with the Dean's endorsement, in case he/she is considered to need extra coursework after assessing their academic background or knowledge which are expected to be achieved before advancing to the program the student is currently following.

Up to 24 prerequisite credits can be given and the given credits are required to be fulfilled before the prescribed regular academic; no later than the third semester for Master/PhD programs and no later than the sixth semester for CMP programs. A student are not permitted to take more than 12 prerequisite credits in a semester.

### **DISSERTATION SUBMISSION QUALIFYING EXAMINATION**

#### @R: [Dissertation/Thesis] – [Dissertation Submission Qualifying Examination]

The CS requires a graduate student to take two types of dissertation submission qualifying examination (QE); major subjects and foreign language. Each department has different requirements for the QE; hence, it is recommended for all international students to peruse the following and contact each department office for more details and support as needed. A student may retake the QE subject in which he/she fails in the following semesters.

Item		Foreign Language	Major Subject
Annlication David	Spring	Early I	March
Application Period	Fall	Early September	
How to Apply	QE	Via GLS	
How to Apply	QE Waiver	Via GLS	At department office
Exam Period	Spring	Late March	
Exam Period	Fall	Late September	
Passing S	core	70 or greater / 100	

#### 1. Foreign Language

#### A. Eligibility

- A student who is registered in the semester in which he/she is applying for the QE
- A student who completed the program and is following research semester
- A student who is on a LOA is not permitted to apply for the QE

## B. Subject: English

- A department may test a student's ability in a language other than English as deemed necessary

# C. Waiver Option

Option		Details	
	TOEFL	550 or greater in PBT / 213 or greater in CBT / 79 or greater in iBT	
Certified English	TOEIC	700 or greater	
Language Test	TEPS	700 or greater	
	G-TELP	60 or greater of level 2 / 80 or greater of level 3	
Coursework		A Master's Degree candidate who completes a special language program offered at the Sungkyun Language Institute	
Degree of English-speaking Country		A student who obtained a bachelor or master's degree in one of the English-speaking countries  *Please contact your department to see if your home country is listed.	

# 2. Major Subjects

### A. Eligibility

Eligibility	Master	PhD	CMP		
Credits	15 or greater	27 or greater	39 or greater		
GPA	3.0 or greater	3.0 or greater	3.0 or greater		
Safety Education	Completed	Completed	Completed		
Enrollment Status	<ul> <li>A student who is registered in the semester in which he/she is applying for the QE</li> <li>A student who completed the program and is following research semester</li> <li>A student who is on a LOA is not permitted to apply for the QE</li> </ul>				

### B. Subject

#### ■ Master

Department	Time Slot	Subject Code	Subject	Note
		BIO4001	Molecular Cell Biology	
		BIO4002	Advanced Biochemistry	
Biological	1.2	BIO4003	Advanced Genetics	Select
Sciences	1-3	BIO4007	Plant Systematics	3
	BIO4011 Advan	Advanced Animal Physiology		
		BIO4021	Neurobiology	

		BIO4024	Advanced Ecology	
		BIO4031	Plant Molecular biology	
E		BIO4032	Microbial physiology	
		BIO4034	Glycomics	
		BIO4038	Plant Hormones	
		BIO5001	Advanced Molecular Biology	
		BIO5003	Advanced Virology	
		BIO5048	Immunophysiology	
		BIO5078	Advanced Plant Taxonomy	
		BIO5103	Topics in Protein Interactions	
		BIO5105	Experimental Medical Sciences	
		BIO5109	Topics in Molecular Neurogenetics	
		BIO4019	Advanced Evolution	
	1	MTH4025	Real Analysis 1	Select 1
	1	MTH4030	Advanced Algebra	Select 1
		MTH4003	Theory of Numerical Analysis	
	2	MTH4005	Advanced Differential Geometry	Select 1
Mathematics		MTH4020	Financial Mathematics	
		MTH4022	Topology	
		MTH4023	Applications of Partial Differential Equations	
		MTH4024	Probability and Statistics	
		MTH4028	Introduction to Mathematical Modeling	
	1	PHY4001	Classical Mechanics	Select 1
Dhysics	2	PHY4009	Electromagnetism	Select 1
Physics	3	PHY4002	Quantum Mechanics 1	Select 1
	4	PHY4004	Statistical Mechanics	Select 1
		CHY4001	Advanced Physical Chemistry 1	
		CHY4002	Advanced Organic Chemistry 1	
Chemistry	1 2	CHY4003	Advanced Inorganic Chemistry	Salact 2
	1-2	CHY4004	Advanced Analytical Chemistry 1	Select 2
		CHY4009	Advanced Biological Chemistry	
		CHY5067	Special Topics in Polymer Chemistry 1	
		IPC5001	Special Topics on Nano Physics and Chemistry 1	
ICPC	1-2	IPC5002	Special Topics on Nano Physics and Chemistry 2	Select 2
ICPC	1-2	IPC5003	Special Topics on Nano Physics and Chemistry 3	Select 2
		IPC5004	Special Topics on Nano Physics and Chemistry 4	

### ■ PhD/CMP

Department	Time Slot	Subject Code	Subject	Note
		BIO5010	Advanced Plant Genetic Engineering	
Biological	ological	BIO5017	Endocrinology	Coloct 2
Sciences 1-3	1-3	BIO5026	Plant Biosystematics	Select 3
		BIO5032	Marine Ecology	

		BIO5045	Molecular Reproductive Biology	
		BIO5073	Functional Genomics	
BI		BIO5074	Proteomics	
		BIO5081	Special Topics in cellular Immunology	
		BIO5082	Regulation of Microbial Gene Expression	
		BIO5088	Glyco signaling	
		BIO5089	Viral pathology	
		BIO5107	Special Topics In Structural Biology	
		BIO5108	Advances In Molecular Medicine	
		BIO5110	Development of Bioactive Molecules	
		MTH5095	Advanced Partial Differential Equations	
		MTH5114	Topics in Applied Mathematics	
		MTH5117	Functional Analysis	
		MTH5098	Seminar in Geometry	
	1-2	MTH5104	Algebra Seminar	Select 2
Mathematics		MTH5110	Mathematical Modeling	
		MTH5121	Probability and Statistics Seminar	
		MTH5073	Analysis Seminar	
		MTH5097	Seminar in Mathematical Finance and Insurance	
		MTH5101	Seminar in algebraic and geometric modelling	
		PHY5146	Solid State Physics I	
	1	PHY9006	Nuclear Physics 1/ Particle Physics 1	*See
Physics		PHY5110	Fundamentals of Acoustics	note
	2	PHY4009	Electromagnetism	below
	3	PHY4002	Quantum Mechanics 1	
		CHY5001	Advanced Physical Chemistry 2	
Chemistry		CHY5028	Organic Reactions 1	
	1-2	CHY5055	Advanced Inorganic Chemistry 1	Select 2
		CHY5064	Advanced Instrumental Analysis	
		CHY5047	Bioorganic Chemistry	
		IPC5001	Special Topics on Nano Physics and Chemistry 1	
1606	4.2	IPC5002	Special Topics on Nano Physics and Chemistry 2	6.1
ICPC	1-2	IPC5003	Special Topics on Nano Physics and Chemistry 3	Select 2
		IPC5004	Special Topics on Nano Physics and Chemistry 4	

### [NOTE]

- A PhD/CMP student in Physics Department must take 3 subjects; 1 subject from each exam time slot.
- A PhD student who graduated from SKKU must take 1 subject from any of the exam time slots.

### C. QE Waiver Policy

Department	Master	PhD/CMP
Biological Sciences	Not ap	plicable

Mathematics	[Class of 2013 and before] A student who passed one of the QE subjects with grade A+ during regular semesters; this applies to one subject only.	Not applicable			
Physics	<ul> <li>[Class of 2013 and before]</li> <li>1. A student who passed the QE subjects with grade A or above and within 1/3 from the top in terms of final grading or score.</li> <li>2. A student who passes the a special test organized by the department</li> </ul>	<ul> <li>[Class of 2013 and before]</li> <li>1. A student who obtained grade A or above in PHY4009/PHY4002 during master's program.</li> <li>2. A student who submits academic transcript of master's program and receives a permission from the department committee; this rule applies to up to two subject.</li> </ul>			
	[Class of 2014 and after] A student whose research article/paper is accepted in SCI journal as a main writer. (1 article/paper or more)	[Class of 2014 and after] A student whose research article/paper is accepted in SCI journal as a main writer. (2 article/paper or more)			
Chemistry	Not applicable				
ICPC	Not applicable				

## **DISSERTATION EXAMINATION COMMITTEE**

@R: [Dissertation/Thesis] – [Preliminary Dissertation Examination/Defense]

@R: [Dissertation/Thesis] – [Final Dissertation Examination/Defense]

# **DISSERTATION EXAMINATION/DEFENSE**

@R: [Dissertation/Thesis] - [Preliminary Dissertation Examination/Defense]

@R: [Dissertation/Thesis] – [Final Dissertation Examination/Defense]

### 1. Eligibility

#### A. Preliminary Dissertation Examination

Degree	Application Eligibility		How to Apply
Master	Not applicable: no prelimir	ninary examination is required for Master's program	
PhD	27 credits or greater	GPA 3.0	Submit the designated application
CMP	39 credits or greater	or greater	form to the CS/Department Office

<sup>\*</sup>Preliminary dissertation examination fee: 100,000 KRW

#### **B. Final Dissertation Examination**

Degree		Application Eligibility		
Master		3 credits or 1. A student who passed preliminary 2.	1. GPA 3.0 or	Submit the following
PhD	33 credits or greater		greater  2. A student who passed QE	to the CS/Department Office 1.Designated
СМР	51 credits or greater	2. A student submitted more than 2 research article/journal to SCI journal as a main or co-writer. (1 article/journal for mathematics dept.)	3. A student who completed safety education	application 2. Research Ethics Statement 3. Certificate of safety education

<sup>\*</sup>Final dissertation examination fee: 510,000 KRW

### 2. Examination Method and Passing Criteria

#### A. Preliminary Dissertation Examination

Degree	Examination Method	Passing Criteria
Master	Not applicable: no preliminary examination is required for Master's program	
PhD/CMP	<ol> <li>Public presentation</li> <li>Dissertation examination</li> </ol>	Approval of more than 2/3 of the committee members

#### **B. Final Dissertation Examination**

Degree	Examination Method	Passing Criteria
Master	<ol> <li>Public presentation</li> <li>Including briefing in English (longer than 5 minutes)</li> <li>Dissertation examination</li> </ol>	Approval of more than 2/3 of the committee members
PhD/CMP	<ol> <li>Public presentation in English</li> <li>Dissertation examination</li> </ol>	Approval of more than 4/5 of the committee members

#### [NOTE]

It is not permitted to apply for the preliminary dissertation examination and the final dissertation examination simultaneously. A student must pass the preliminary first in order to be eligible for the final examination in the ensuing semester(s).

<sup>\*</sup>All application eligibility has to be satisfied at the time of application.

## **PHD SPECIALIZATION**

### @R: [Dissertation/Thesis] - [PhD Specialization]

A PhD degree candidate will be required to select one of the following specializations at the time when he/she advances to dissertation examination/defense at the last stage of his/her academic trajectory. An academic and dissertation advisor will consult with a student and advise on which specialization is academically adequate for the degree candidate.

Department	Specialization		
	Animal Physiology	Molecular Biology	
	Biochemistry	Molecular Cell Biology	
	Biodiversity and Conservation Ecology	Molecular Genetics	
D'alastas!	Cell Signal Transduction	Neuroscience	
Biological Sciences	Evolutionary Genomics	Plant Phylogenetic Systematics	
Sciences	Immunology	Plant Physiology	
	Microbiology	Structural Biology	
	Molecular and Cellular Glycobiology	Virology	
	Molecular and Environmental Biology	-	
Mathematics	Analytics	Statistics/Applied Mathematics	
Mathematics	Algebra	Geometry/Topology	
Dhysics	Condensed/Statistical Physics	Nuclear/Particle Physics	
Physics	Nano Physics	Physical Acoustics	
	Analytical Chemistry	Organic Chemistry	
Chemistry	Biochemistry	Physical Chemistry	
	Inorganic Chemistry		
ICPC		-	

# THE CS'S STEM SCHOLARSHIP PROGRAM

@R: [Financial Aid] – [STEM Scholarship for International Graduate Students]

#### 1. Initial/First Semester (Administered by Admissions/International Affairs)

#### A. Freshman Scholarship

All international students accepted to the graduate programs in the STEM field department of the CS will be granted the scholarship of 50% of tuition and admission fee in the first semester. (Approximately 3.5 million KRW)

#### **B. Conditional Scholarship**

A student who satisfy one of the conditions below will be granted the scholarship of 100% of tuition and admission fee in the first semester. (Approximately 8 million KRW)

	Conditions				
1. Academ	1. Academic Excellence				
1.1.	Graduated from the University in top 500 of QS World University Ranking				
1.2.	Graduated from the Department of University in top 300 of QS World University Ranking by Subject				
1.3.	Graduated from the University in top 100 of QS Asian University Ranking				
1.4.	Graduated from the University in top 50 of Chinese University Alumni Association University Ranking				
2. Researc	h Excellence				
2.1.	Published more than one research paper on SCI Journal as a main writer.				
2.2.	Published more than two research papers on SCI Journal as a co-writer.				
3. Profess	3. Professor's Recommendation				
	Recommended by one of the full-time faculty members of the department the student is applying for				

#### 2. Continuing/Following Semesters (Administered by the College of Science)

A student who received the scholarship are able to continue receiving scholarship according to the conditions below in the ensuing semesters. A student in receipt of STEM Scholarship for International Graduate Students is strongly advised to meet the relevant condition in order to maintain the financial aid.

#### [NOTE]

A scholarship awardee selected by the condition 1, 2 or 3 in the first semester must satisfy the condition 1, 2 or 3 below, respectively, in the following semester(s) to maintain the financial aid.

Conditions				
1. Academ	ic Excellence			
1.1. ~ 1.4.	Previous Semester's Grade Point Average (GPA)  • 4.2 or above: 100% of tuition waived  • 3.8 ~ 4.2: 70% of tuition waived			
2. Researc	h Excellence			
2.1.	Main writer: 100% of tuition waived in every semester until the completion of program			
2.2.	Co-writer: 70% of tuition waived in the following semester			
3. Professor's Recommendation				

Previous Semester's Grade Point Average (GPA)

• 3.5 or above: 100% of tuition waived

 $\bullet$  3.0  $\sim$  3.5: 70% of tuition waived

• Lower than 3.0: 30% tuition waived

#### [NOTE]

- A student who obtained a lower-than-3.5 GPA in the first semester is able to receive full scholarship in the second semester unconditionally; this is not applicable to the third semester and thereafter.
- A student who obtained a lower-than-3.5 GPA is able to receive full scholarship whose outstanding research capability or outcome is well demonstrated.
- The scholarship program is not applicable after completion of program; therefore, a graduate student is not able to continue his/her STEM scholarship during research semesters.

### **CURRICULUM**

@R: [Academics] - [Course and Credit]

@R: [Academics] – [Course Code and Section Number]

Please note that the tables below only shows the packet of each department of courses, which we define here as curriculum. The exact list of course offerings in any given year may vary so please see the course catalogue of each academic year to find which of the following in each department are available.

#### \*Abbreviations

BM	MP	ВМР	FE	IR	TH
Bachelor/Master	Master/PhD	Bachelor/Master/PhD	Field Experience	Independent Research	Theory

#### 1. Interdisciplinary Course of Physics and Chemistry

Code	Course	Designed for	Туре	Credit
IPC5001	Special Topics on Nano Physics and Chemistry 1	MP	TH	3
IPC5002	Special Topics on Nano Physics and Chemistry 2	MP	TH	3
IPC5003	Special Topics on Nano Physics and Chemistry 3	MP	TH	3
IPC5004	Special Topics on Nano Physics and Chemistry 4	MP	TH	3
IPC5005	Thesis Research 1	MP	IR	3
IPC5006	Thesis Research 2	MP	IR	3
IPC5007	Thesis Research 3	MP	IR	3
IPC5008	Thesis Research 4	MP	IR	3
IPC5009	Thesis Research 5	MP	IR	3
IPC5010	Thesis Research 6	MP	IR	3

# 2. Department of Biological Sciences

Code	Course	Designed for	Type	Credit
BIO4001	Molecular Cell Biology	ВМ	TH	3
BIO4003	Advanced Genetics	BM	TH	3
BIO4004	Molecular Genetics	ВМ	TH	3
BIO4007	Plant Systematics	BM	TH	3
BIO4011	Advanced Animal Physiology	BM	TH	3
BIO4012	Advanced Animal Development	BM	TH	3
BIO4021	Neurobiology	BM	TH	3
BIO4024	Advanced Ecology	BM	TH	3
BIO4027	Bioscience Field Training and Job Practice I	BM	FE	1
BIO4028	Bioscience Field Training and Job Practice II	BM	FE	2
BIO4029	Bioscience Field Training and Job Practice III	BM	FE	3
BIO4030	Bioscience Field Training and Job Practice IV	BM	FE	4
BIO4031	Plant Molecular biology	BM	TH	3
BIO4032	Microbial physiology	ВМ	TH	3
BIO4033	Microbial Genetics	ВМ	TH	3
BIO4034	Glycomics	ВМ	TH	3
BIO4035	Molecular Glycobiology	ВМ	TH	3
BIO4037	Immunophysiology	ВМ	TH	3
BIO4038	Plant Hormones	ВМ	TH	3
BIO4039	Current Issues in Biology	ВМ	TH	3
BIO4040	Special topic on Neurobiochemistry	ВМ	TH	3
BIO5001	Advanced Molecular Biology	MP	TH	3
BIO5003	Advanced Virology	MP	TH	3
BIO5011	Techniques in Molecular Biology	MP	TH	3
BIO5017	Endocrinology	MP	TH	3
BIO5020	Palynology	MP	TH	3
BIO5025	Plant Phylogenetics	MP	TH	3
BIO5026	Plant Biosystematics	MP	TH	3
BIO5029	Plant Molecular Biology	MP	TH	3
BIO5032	Marine Ecology	MP	TH	3
BIO5039	Advanced Conservation Biology	MP	TH	3
BIO5041	Population Ecology	MP	TH	3
BIO5042	Community Ecology	MP	TH	3
BIO5044	Techniques in Molecular Cell Biology	MP	TH	3
BIO5045	Molecular Reproductive Biology	MP	TH	3
BIO5049	Immunological Methods	MP	TH	3
BIO5050	Biology Signal Transduction	MP	TH	3
BIO5054	Enzymology	MP	TH	3
BIO5057	Metabolic Engineering Of Microorganisms	MP	TH	3
BIO5060	Microbial Molecular Genetics	MP	TH	3
BIO5063	Applied Genetics	MP	TH	3

Code	Course	Designed for	Туре	Credit
BIO5067	Methodology in Environmental Monitoring	MP	TH	3
BIO5069	Protein Structure	MP	TH	3
BIO5070	Special Topics on Biochemistry	MP	TH	3
BIO5073	Functional Genomics	MP	TH	3
BIO5074	Proteomics	MP	TH	3
BIO5079	Directed Study for MS Thesis I	MP	IR	3
BIO5080	Directed Study for MS Thesis 2	MP	IR	3
BIO5081	Special Topics in cellular Immunology	MP	TH	3
BIO5082	Regulation of Microbial Gene Expression	MP	TH	3
BIO5083	Microbial Metabolic Regulation and Engineering	MP	TH	3
BIO5085	Protein Biochemistry	MP	TH	3
BIO5086	Glycomics	MP	TH	3
BIO5087	Glyco-cell Differentitation	MP	TH	3
BIO5088	Glyco signaling	MP	TH	3
BIO5089	Viral pathology	MP	TH	3
BIO5090	Viral oncology	MP	TH	3
BIO5091	Retrovirology and AIDS	MP	TH	3
BIO5092	Stress Immunology	MP	TH	3
BIO5093	Expressional control of plant genes	MP	TH	3
BIO5094	Basic Approach for cell and Tissues control 1	MP	TH	3
BIO5095	Basic Approach for cell and Tissue control 2	MP	TH	3
BIO5096	Cellular Application1	MP	TH	3
BIO5097	Cellular Application2	MP	TH	3
BIO5098	Molecular Cancer Biology	MP	TH	3
BIO5100	Marine Microbiology	MP	TH	3
BIO5101	Research Design and Analysis	MP	TH	3
BIO5103	Topics in Protein Interactions	MP	TH	3
BIO5105	Experimental Medical Sciences	MP	TH	3
BIO5107	Special Topics In Structural Biology	MP	TH	3
BIO5108	Advances In Molecular Medicine	MP	TH	3
BIO5109	Topics in Molecular Neurogenetics	MP	TH	3
BIO5110	Development of Bioactive Molecules	MP	TH	3
BIO5111	Advanced Evolutionary Biology	MP	TH	3
BIO5112	Plant Growth and Development	MP	TH	3
BIO5113	Dendritic Cell Biology	MP	TH	3
BIO5114	Advances in Molecular and Environmental Biology	MP	TH	3
BIO5115	Advanced Phycology	MP	TH	3
BIO6032	Directed Study for PhD Thesis I	PhD	IR	3
BIO6033	Directed Study for PhD Thesis 2	PhD	IR	3
BIO6034	Directed Study for PhD Thesis 3	PhD	IR	3

# 3. Department of Mathematics

Code	Course	Designed for	Type	Credit
MTH4003	Theory of Numerical Analysis	BM	TH	3
MTH4005	Advanced Differential Geometry	BM	TH	3
MTH4010	Numerical Linear Algebra	BM	TH	3
MTH4016	Math Co-op I	BM	FE	1
MTH4017	Math Co-op II	BM	FE	2
MTH4018	Math Co-op III	BM	FE	3
MTH4019	Math Co-op IV	BM	FE	4
MTH4020	Financial Mathematics	BM	TH	3
MTH4021	Mathematical Fluid Mechanics	BM	TH	3
MTH4023	Applications of Partial Differential Equations	BM	TH	3
MTH4024	Probability and Statistics	BM	TH	3
MTH4025	Real Analysis 1	BM	TH	3
MTH4026	Real Analysis 2	BM	TH	3
MTH4028	Introduction to Mathematical Modeling	BM	TH	3
MTH4029	Actuarial Mathematics	BM	TH	3
MTH4030	Advanced Algebra	BM	TH	3
MTH4031	Topics in Advanced Algebra	BM	TH	3
MTH4032	Advanced Topology	BM	TH	3
MTH5001	Research Course I	MP	IR	3
MTH5002	Research Course II	MP	IR	3
MTH5003	Research Course III	MP	IR	3
MTH5004	Research Course IV	MP	IR	3
MTH5017	Morse Theory	MP	TH	3
MTH5018	Differentiable Manifolds	MP	TH	3
MTH5024	Finite Element Methods	MP	TH	3
MTH5026	Operator Theory	MP	TH	3
MTH5028	Combinatorial Matrix Theory	MP	TH	3
MTH5036	Homological Algebra	MP	TH	3
MTH5045	Algebraic Topology	MP	TH	3
MTH5047	Coding Theory	MP	TH	3
MTH5053	Lie Groups and Lie Algebra	MP	TH	3
MTH5056	Harmonic Analysis	MP	TH	3
MTH5057	Several Complex Variables	MP	TH	3
MTH5060	Nonlinear Functional Analysis	MP	TH	3
MTH5073	Analysis Seminar	MP	TH	3
MTH5082	Metric Geometry	MP	TH	3
MTH5092	Commutative Algebra	MP	TH	3
MTH5094	Advanced Applied Mathematics	MP	TH	3
MTH5095	Advanced Partial Differential Equations	MP	TH	3
MTH5096	Topics in Advanced Analysis	MP	TH	3
MTH5097	Seminar in Mathematical Finance and Insurance	MP	TH	3

Code	Course	Designed for	Туре	Credit
MTH5098	Seminar in Geometry	MP	TH	3
MTH5099	Topics in Geometry	MP	TH	3
MTH5101	Seminar in algebraic and geometric modelling	MP	TH	3
MTH5103	Algebraic Graph Theory	MP	TH	3
MTH5104	Algebra Seminar	MP	TH	3
MTH5105	Theory of Riemannian manifolds	MP	TH	3
MTH5107	Nonlinear Analysis Modelling Seminar	MP	TH	3
MTH5109	Numerical Stochastic Optimization	MP	TH	3
MTH5110	Mathematical Modeling	MP	TH	3
MTH5112	Spectral Geometry	MP	TH	3
MTH5113	Theory of Foliations	MP	TH	3
MTH5114	Topics in Applied Mathematics	MP	TH	3
MTH5115	Applied Statistics	MP	TH	3
MTH5116	Statistical Inference	MP	TH	3
MTH5117	Functional Analysis	MP	TH	3
MTH5119	Stochastic Processes	MP	TH	3
MTH5121	Probability and Statistics Seminar	MP	TH	3
MTH5122	Ring and Modules	MP	TH	3
MTH5123	Advanced Applied Numerical Analysis	MP	TH	3
MTH5124	Advanced Cryptography	MP	TH	3
MTH5125	Algebraic Geometry	MP	TH	3
MTH5126	Advanced Financial Mathematics	MP	TH	3
MTH5127	Topics in Financial Mathematics	MP	TH	3
MTH5128	Dynamical System	MP	TH	3
MTH5129	Representation Theory of Groups	MP	TH	3
MTH5130	Machine Learning for Big Data	MP	TH	3
MTH5131	Data Mining	MP	TH	3
MTH5132	Combinatorial Optimization	MP	TH	3
MTH5133	Matrix Analysis	MP	TH	3

# 4. Department of Physics

Code	Course	Designed for	Type	Credit
PHY4005	Physics Co-op 1	BM	FE	1
PHY4006	Physics Co-op 2	BM	FE	2
PHY4007	Physics Co-op 3	BM	FE	3
PHY4008	Physics Co-op 4	BM	FE	4
PHY4011	Seminar in Physics 1	BM	TH	1
PHY4012	Seminar in Physics 2	ВМ	TH	1
PHY4014	Applied Physics	BM	TH	3
PHY5001	Quantum Mechanics 2	MP	TH	3
PHY5007	Quantum Field Theory 1	MP	TH	3
PHY5008	Quantum Field Theory 2	MP	TH	3
PHY5015	Many-particle Theory	MP	TH	3
PHY5017	Phase Transition and Critical Phenomena	MP	TH	3
PHY5027	Cosmology	MP	TH	3
PHY5042	Nuclear Structure	MP	TH	3
PHY5043	Nuclear Reactions	MP	TH	3
PHY5055	Theory of Solid State Electronic Structures	MP	TH	3
PHY5066	Surface Physics	MP	TH	3
PHY5081	Solid State Spectroscopy	MP	TH	3
PHY5110	Fundamentals of Acoustics	MP	TH	3
PHY5113	Underwater Acoustics	MP	TH	3
PHY5115	Nonlinear Acoustics	MP	TH	3
PHY5116	Medical Acoustics	MP	TH	3
PHY5118	Theoretical Acoustics	MP	TH	3
PHY5119	Acoustic Spectrum Analysis	MP	TH	3
PHY5120	Acoustic Signal Processing	MP	TH	3
PHY5142	Research I	MP	IR	3
PHY5143	Research II	MP	IR	3
PHY5144	Relativistic Quantum Mechanics	MP	TH	3
PHY5145	Advanced Mathematical Physics	MP	TH	3
PHY5146	Solid State Physics I	MP	TH	3
PHY5147	Solid State Physics II	MP	TH	3
PHY5148	Superconductivity	MP	TH	3
PHY5149	Semiconductor Physics	MP	TH	3
PHY5150	Magnetism	MP	TH	3
PHY5151	Physical Acoustics	MP	TH	3
PHY5152	Particle Physics I	MP	TH	3
PHY5153	Particle Physics II	MP	TH	3
PHY5154	Nuclear Physics I	MP	TH	3
PHY5155	Nuclear Physics II	MP	TH	3
PHY5156	Elementary Particle and Nuclear Physics Experiment 1	MP	TH	3
PHY5157	Elementary Particle and Nuclear Physics Experiment 2	MP	TH	3

Code	Course	Designed for	Type	Credit
PHY5159	Low-Temperature Physics	MP	TH	3
PHY5160	Computational physics	MP	TH	3
PHY5162	Patent/English Paper Writing	MP	TH	3
PHY5163	Advanced Technology and Industry	MP	TH	3
PHY5164	String Theory	MP	TH	3
PHY5165	General Relativity	MP	TH	3
PHY5166	Astrophysics	MP	TH	3
PHY5170	Biophysics	MP	TH	3
PHY5171	Seminar on Advanced Physics I	MP	TH	3
PHY5172	Seminar on Advanced Physics II	MP	TH	3
PHY5173	Seminar on Advanced Physics III	MP	TH	3
PHY5174	Seminar on Advanced Physics IV	MP	TH	3
PHY5175	Seminar on Advanced Physics V	MP	TH	3
PHY5177	Special Topics on Advanced Physics I	MP	TH	3
PHY5178	Special Topics on Advanced Physics II	MP	TH	3
PHY5179	Special Topics on Advanced Physics III	MP	TH	3
PHY5180	Special Topics on Advanced Physics IV	MP	TH	3
PHY5181	Special Topics on Advanced Physics V	MP	TH	3
PHY5182	Special Topics on Advanced Physics VI	MP	TH	3
PHY5183	Electromagnetism 2	MP	TH	3
PHY6001	Research I	PhD	IR	3
PHY6002	Research II	PhD	IR	3
PHY6003	Research III	PhD	IR	3
PHY7001	Classical Mechanics	ВМР	TH	3
PHY7002	Quantum Mechanics	ВМР	TH	3
PHY7003	Electromagnetism	ВМР	TH	3
PHY7004	Statistical Mechanics	ВМР	TH	3

# 5. Department of Chemistry

Code	Course	Designed for	Туре	Credit
CHY4001	Advanced Physical Chemistry 1	BM	TH	3
CHY4002	Advanced Organic Chemistry 1	BM	TH	3
CHY4003	Advanced Inorganic Chemistry	BM	TH	3
CHY4004	Advanced Analytical Chemistry 1	BM	TH	3
CHY4005	Field Studies in Chemistry 1	BM	FE	1
CHY4006	Field Studies in Chemistry 2	BM	FE	2
CHY4007	Field Studies in Chemistry 3	BM	FE	3
CHY4008	Field Studies in Chemistry 4	BM	FE	4
CHY5001	Advanced Physical Chemistry 2	MP	TH	3
CHY5002	Chemical Thermodynamics	MP	TH	3
CHY5003	Chemical Kinetics	MP	TH	3
CHY5004	Chemical Reaction Dynamics	MP	TH	3
CHY5007	Statistical Thermodynamics 1	MP	TH	3
CHY5010	Advanced Quantum Chemistry	MP	TH	3
CHY5011	Molecular Spectroscopy	MP	TH	3
CHY5014	Computer Aided Molecular Design	MP	TH	3
CHY5017	Surface and Interface Chemistry	MP	TH	3
CHY5018	Semiconductor Chemistry	MP	TH	3
CHY5019	Surface Physical Chemistry	MP	TH	3
CHY5024	Thin Film Materials Chemistry	MP	TH	3
CHY5027	Advanced Organic Chemistry 2	MP	TH	3
CHY5028	Organic Reactions 1	MP	TH	3
CHY5029	Organic Reactions 2	MP	TH	3
CHY5030	Studies in Organic Reactions 1	MP	TH	3
CHY5031	Studies in Organic Reactions 2	MP	TH	3
CHY5032	Studies in Organic Synthesis 1	MP	TH	3
CHY5034	Methods in Organic Synthesis 1	MP	TH	3
CHY5035	Methods in Organic Synthesis 2	MP	TH	3
CHY5036	Studies in Bioorganic Chemistry 1	MP	TH	3
CHY5040	Synthetic Medicinal Chemistry	MP	TH	3
CHY5041	Transition Metal-Catalyzed Organic Reactions	MP	TH	3
CHY5042	Catalysis in Organic Reactions	MP	TH	3
CHY5043	Organic Spectroscopy	MP	TH	3
CHY5044	Organic Stereo Chemistry	MP	TH	3
CHY5047	Bioorganic Chemistry	MP	TH	3
CHY5048	Organic Reaction Mechanism	MP	TH	3
CHY5049	Asymmetric Organic Synthesis	MP	TH	3
CHY5050	Homogeneous Catalysis	MP	TH	3
CHY5051	Solid Chemistry 1	MP	TH	3
CHY5052	Solid Chemistry 1	MP	TH	3
CHY5053	Organometallic Chemistry 1	MP	TH	3

Code	Course	Designed for	Туре	Credit
CHY5054	Organometallic Chemistry 2	MP	TH	3
CHY5055	Advanced Inorganic Chemistry 1	MP	TH	3
CHY5056	Advanced Inorganic Chemistry 2	MP	TH	3
CHY5057	Materials Chemistry 1	MP	TH	3
CHY5058	Materials Chemistry 2	MP	TH	3
CHY5059	Crystallography 1	MP	TH	3
CHY5060	Crystallography 2	MP	TH	3
CHY5062	Advanced Analytical Chemistry 2	MP	TH	3
CHY5063	Advanced Electrochemistry	MP	TH	3
CHY5064	Advanced Instrumental Analysis	MP	TH	3
CHY5066	Advanced Environmental Chemistry	MP	TH	3
CHY5067	Special Topics in Polymer Chemistry 1	MP	TH	3
CHY5069	Separation Analysis	MP	TH	3
CHY5072	Spectroelectrochemistry	MP	TH	3
CHY5073	Chemical Instrumentation	MP	TH	3
CHY5074	Scientific Writing of Chemistry Paper in English	MP	TH	3
CHY5077	Thesis Research 1	MP	IR	3
CHY5078	Thesis Research 2	MP	IR	3
CHY5080	Studies in Physical Organic Chemistry	MP	TH	3
CHY5081	Nucleic Acids Biochemistry	MP	TH	3
CHY5082	Protein Biochemistry	MP	TH	3
CHY5083	Current Topics in Biological Chemistry 1	MP	TH	3
CHY5084	Current Topics in Biological Chemistry 2	MP	TH	3
CHY5085	Nanocatalysis	MP	TH	3
CHY5086	Polymer Physical Chemistry	MP	TH	3
CHY5087	Advanced Polymer Chemistry 1	MP	TH	3
CHY5088	Advanced Polymer Chemistry 2	MP	TH	3
CHY5089	Advanced Biological Chemistry	MP	TH	3
CHY5090	Organic Electronic Materials Chemistry	MP	TH	3
CHY5091	Modern Physical Chemistry	MP	TH	3
CHY5092	Convergence Physical Chemistry	MP	TH	3
CHY5093	Computer Simulation	MP	TH	3
CHY5094	Plasmonics	MP	TH	3
CHY6001	Thesis Research III	PhD	IR	3
CHY6002	Thesis Research IV	PhD	IR	3
CHY6003	Thesis Research V	PhD	IR	3
CHY6004	Thesis Research VI	PhD	IR	3

