

# Explanation of Curriculum

## 1. Organization of Curriculum

The Seoul National University Curriculum is based on Article 9 of university statutes.

The curriculum is classified into undergraduate and graduate curricula, both of which are organized by departments/majors. The undergraduate curriculum consists of general education courses and major courses. Although the graduate program consists of master's and doctoral programs, the two programs are not separated in terms of the curriculum. Therefore, while respective departments/majors may separate courses into master's and doctoral courses, the graduate curriculum does not distinguish them.

## 2. Course Classification

According to their characteristics, courses in the curriculum are classified into general education (GE) courses, major courses, and teaching certification courses, which are counted as major courses. Designated as courses to foster students as university-level intellectuals, GE courses consist of Academic Foundations, Worlds of Knowledge, General Education electives. Major courses are for in-depth and specialized research training required in respective departments/majors. Teaching certification courses are taken to obtain certification in teaching. GE courses and major courses are divided into required and elective courses.

Courses in which students are taking for their double majors, minors, interdisciplinary majors, combined minors, and student-designed minors are respectively called courses for double majors, minors, interdisciplinary majors, combined minors, and student-designed minors.

## 3. Credits Requirements for the Completion of Degree Programs

### A. Undergraduate Program

At least 130 credits, including 36 or more credits in general courses and 39 or more credits in major courses, are required to complete the undergraduate program (60 or more credits in major courses in case of single major). Students seeking double majors or interdisciplinary majors, minors, combined minors, or student-designed minors must earn minimum number of credits required in double majors or interdisciplinary majors (39 or more, each), minors, combined minors, or student-designed minors (21 or more, each) aside from major courses. Students in the teaching certification program must earn at least 22 credits in teaching certification courses aside from major courses. Minimum credit requirements above may vary from college to college.

<Table 1> Minimum Credit Requirements for Undergraduate Program

College		Graduation Requirement	GE	Major		Remarks
				Main Major	Main Major Other Major/Minor	
College of Humanities	Depts other than Philosophy	130	36	60	39	N/A for single major
	Dept. of Philosophy			—		
College of Social Sciences		130	36	60	39	
College of Natural Sciences		130	44	60	39	
College of Nursing		140	36	96	96	
College of Business Administration		130	36	60	39	
College of Engineering	Depts/Majors other than below	130	Dept. of Civil and Environmental Eng.: 45	62	39	
	Dept. of Electrical and Computer Engineering		63	41		
	Dept. of Computer Science and Engineering				62	
	Dept. of Nuclear Engineering, Industrial Engineering		Dept. of Materials Science and Eng.: 43 Dept. of Electrical and Computer Eng.: 44 Dept. of Computer Science and Eng.: 44			

College		Graduation Requirement	GE	Major		Remarks
				Main Major	Main Major Other Major/Minor	
			Dept. of Chemical and Biological Eng.: 44 Dept. of Architecture/ Architectural Eng.: 37 Dept. of Industrial Eng.: 46 Dept. of Naval Architecture and Ocean Eng.: 44 Dept. of Energy Resources Eng.: 40 Dept. of Nuclear Eng.: 44			
	Dept. of Architecture and Architectural Engineering / Architecture Major	160	37	110	110	
College of Agriculture and Life Sciences	Depts other than below	130	36	48		
	Dept. of Landscape Architecture and Rural System Engineering, Dept. of Biosystems and Biomaterials Science and Engineering (Biosystems Engineering Major)	130	36	60	48	
	Dept. of Agricultural Economics and Rural Development/Agricultural & Resource Economics Major				39	
College of Fine Arts	painting, crafts, design	130	36	60	48	
	oriental painting				52	
	sculpture				60	
College of Law		140	36	63	63	
College of Education	Depts other than below	130	36	60	52	
	Dept. of Mathematics Education Dept. of Science-related education		Dept. of Mathematics Education: 37 Dept. of Science-related education: 38			
	Dept. of Social Studies Education		36			
	Dept. of History Education					65
College of Human Ecology		130	Division of Consumer and Child Studies: 42 Dept. of Textiles, Merchandising and Fashion Design: 40 Dept. of Food and Nutrition: 40	60	48 (Dept. of Food and Science: 42)	
College of Veterinary Medicine	Dept. of Preliminary Veterinary Medicine		45			
	Dept. of Veterinary Medicine	148		148		

College	Graduation Requirement	GE	Major		Remarks	
			Main Major	Main Major Other Major/Minor		
College of Pharmacy	150	37	109	109		
College of Pharmacy (2+4)	140	-	140	140	Since 2011	
College of Music	Dept. of Vocal Music	130	36	72	72	
	Dept. of Composition			58	58	Since 2011
	Dept. of Instrumental Music (Piano)			64	64	
	Dept. of Instrumental Music (String and Wind Music)			74	74	
	Dept. of Korean Music			60	48	
College of Medicine	Dept. of Preliminary Medicine	74	41	23	23	
	Dept. of Medicine	148		148		
College of Liberal Studies	Major selected from SNU's Majors/interdisciplinary Majors	135	36	Credits for Selected Major	Credits for Selected Major + Other Major/Minor	Since 2012
	Major as Student-Designed Major			60	39	Since 2012

<Table 1-1> Entry Requirements for DDS program

College / Graduate School	Entry Requirement	GE	Major		Remarks	
			Main Major	Main Major Other Major/Minor		
School of Dentistry	Dept. of Dentistry	110	40	49		Since 2014

※ Explanation on Credit Requirements

1. Number of credits: Must earn minimum number of credits mentioned in <Table 1>
2. Major Credits:
  - ① Credits for single major: Number of credits required for students with just one major
  - ② Credits for more than one major: Number of credits required for just the main major students are seeking and have selected more than one type of major(according to Article 68, Clause 1 of university regulations) or are concurrently taking courses for teaching certification
3. ' - ' means that there are no credit requirements for the corresponding department/major
4. Further details on regulations regarding major requisite courses are designated by each dept/division and courses needed for earning credits for main major are specified by each department/division as well
5. Students under the Department of Liberal Studies must earn credits following requirements provided for their selected major

**[Interim Measures]**

The above credit requirements for undergraduate program applies to students admitted since 2008 and previous requirements<sup>1)</sup> are applied to students admitted since or before 2007 (students may choose to follow the new requirements if they wish to do so). However, credit requirements for the College of Nursing applies to students admitted since 2010. Credit requirements for the College of Agriculture and Life Sciences applies to students admitted since 2009 and previous requirements are applied to students admitted since or before 2008 (students may choose to follow the new requirements if they wish to do so). Furthermore, previous requirements must be applied to students admitted since or before 2007 under the College of Business Administration.

- 1) Refer to <Table 8> Previous Credit Requirements for Undergraduate Program.

<Table 2> Minimum Credit Requirements for Double Majors and Minors in Undergraduate Program

College		Double Major	Minor	Remarks
Depts/Majors in College of Humanities		39	21	
Depts/Majors in College of Social Sciences		39	21	
College of Natural Sciences		39	21	
College of Nursing		—	—	
Dept. of Business Administration in College of Business Administration		39	21	
College of Engineering	Depts/Majors other than below	39	21	
	Dept. of Naval Architecture and Ocean Engineering		21	
	Dept. of Energy Resources Engineering		23	
	Dept. of Chemical and Biological Engineering, Dept. of Architecture/Architecture Engineering Major, Nuclear Engineering	42	24	
	Dept. of Mechanical Aerospace Engineering, Electrical and Computer Engineering			
	Dept. of Architecture and Architectural Engineering / Architecture Major	110	66	
College of Agriculture and Life Sciences	Depts other than below	48	24	
	Dept. of Agricultural Economics and Rural Development/Agricultural & Resource Economics Major	39	21	
Depts/Majors in College of Fine Arts		48	21	
Dept. of Law in College of Law		-	40	
College of Education	Depts other than below	52	21	
	Dept. of Social Studies Education		30	
	Dept. of History Education	53	36	
Depts/Majors in College of Human Ecology		39	24	
College of Veterinary Medicine		—	—	
College of Pharmacy		—	—	
College of Music	Dept. of Vocal Music	—	—	
	Dept. of Composition (Composition)	50	50	
	Dept. of Composition (Theory)	46	30	
	Dept. of Instrumental Music (Piano)	64		
	Dept. of Instrumental Music (String and Wind Music)	74		
	Dept. of Korean Music	48	32	
College of Medicine		—	—	
College of Liberal Studies		—	—	
School of Dentistry		—	—	

※ Explanation on Credit Requirements

1. Number of credits: Must earn minimum number of credits mentioned in <Table 2>
2. Double Major and/or Minor Credits: Number of credits required for double major and/or minor
3. ‘—’ means that there are no credit requirements for the corresponding department/major
4. Further details on regulations regarding major requisite courses are designated by each dept/division and courses needed for earning credits for double major, and/or minor are specified by each department/division as well

<Table 3> Minimum Credit Requirements for Interdisciplinary Majors and Combined Minors in Undergraduate Program

Interdisciplinary Majors, Combined Minors		Credit Requirements	Remarks
Interdisciplinary Majors	Information and Culture Technology Studies, Technology Management, Global Environmental Management, Computational Sciences, Media Art	39	
Combined Minors	Korean Cultural Studies, Chinese Studies, American Studies, Russian Studies, Language Technology, Literature and Philosophy, Economics and Philosophy, Psychology and Philosophy, Latin American Studies, European Studies, Globalization and Culture, Brain-Mind-Behavior, Financial Economics, Scientific Computing, Financial Mathematics, Information Science, Environmental Sciences, Engineering Biotechnology, Integrated Creative Design	21	

※ Number of credits: Must earn minimum number of credits mentioned in <Table 1>

B. Graduate Program

<Table 4> Minimum Credit Requirements for Graduate Program

Program	Department	Credits
Master's	i) All depts and majors excluding those in ii) iii), iv), v) vi), vii), viii), ix), x) and master's program (division 2) in Graduate School of Public Health	24
	ii) Dept. of Music (excluding Western Musicology Major)	26
	iii) All dept. of college of Fine Arts, all depts in Graduate School of Public Health	30 <sup>1)</sup>
	iv) Graduate School of Public Administration, and Graduate School of Environmental Studies	33
	v) Dept. of International Studies in Graduate School of International Studies and Graduate School of Business <sup>2)</sup> (EMBA)	45
	vi) Dept. of Law in School of Law	90
	vii) Dept. of Dentistry in School of Dentistry	165
	viii) Dept. of Medicine in School of Medicine	148
	ix) Dept. of International Agricultural Technology	39
	x) Interdisciplinary Program in Arts Management	33
Doctoral	i) All depts and majors excluding those in ii) iii), iv), and v)	36
	ii) Dept. of Music (excluding Western Musicology Major)	40
	iii) Dept. of International Studies in Graduate School of International Studies	45
	iv) Dept. of Law in School of Law	24

1) Excluding master's program (division 2 - Evening Program) in Graduate School of Public Health

2) Especially, Graduate School of Business(GMBA/SMBA): 49 credits

4. Undergraduate Course Requirements

A. General Education Courses

(1) General Education Curriculum

General Education (GE) courses are grouped into three categories; they are designed to broaden students' intellectual perspectives as educated members of society and are intended to cultivate the basic abilities needed for university-level study.

(a) Academic Foundations

This category serves as the common foundation for all students and enhances basic skills that will be continuously implemented even after graduation. This category includes courses that develop students' ability to think critically and to express their ideas clearly and effectively through speaking and writing in both their native and foreign languages. It also includes courses that foster the mathematical reasoning skills and rigorous statistical analysis demanded by academic discourse; basic science courses that ensure students improve their scientific knowledge and acquire experimentation methodologies; and courses that help students understand the principles and application methods of computer science and information management.

1) Critical Thinking and Writing

Through speaking and writing, this area emphasizes cultivating the ability to think logically and critically, to read analytically and synthetically, and to create and share knowledge in methods appropriate to each academic field's tradition and form, which is demanded of an educated individual.

2) Foreign Languages

Competence in foreign languages helps students improve the critical thinking skills and the academic fluency needed to handle various academic activities in college and also helps eliminate difficulties in global communication.

3) Mathematical Sciences

Courses in this area help students acquire basic mathematical knowledge, understand and apply its principles, and develop logical and scientific reasoning skills through mathematical expressions, diagrams, and analysis of statistical results.

4) Natural Sciences

Courses in this area help students acquire basic scientific knowledge and cultivate scientific talent that generates creative thinking through scientific thinking and experiment.

5) Computer and Information Science

Courses in this area cultivate the ability to utilize and promote the understanding of the basic principles of computer and information technology and personal information protection generally needed in academic work and daily life.

(b) Worlds of Knowledge

Courses in Worlds of Knowledge seek to cultivate the balanced intellectual scholarship and insight expected of an individual with a liberal arts education in the academic areas which form the basis of human life. This category empowers students with a broad-based university education to acquire diverse knowledge and basic methodology in each academic field. Through active reading and investigation, as well as the process of debate, students will cultivate autonomous thought in order to reflect on and clarify their stance, which will aid in the development of critical and creative abilities. These courses will contribute to students' knowledge of the major issues related to human life, society, and nature, and also to the formation of the capacity to participate in and responsibly judge the world and themselves.

1) Language and Literature

Courses in Language and Literature are aimed at understanding different languages; the characteristics, structure, and context of the literary works; and acquiring diverse academic methodology and knowledge. Thus the courses intend to enhance the capacity for deeper awareness of the world and human life and to understand languages and literary works from an integrated and critical perspective through in-depth readings, presentations and debates, and appreciating the works.

2) Culture and Art

Courses in Culture and Art focus on the humanistic understanding of diverse cultures and obtaining academic knowledge and various perspectives on visual and auditory art works and activities. Thus the courses intend to enhance the capacity for deeper awareness of the world and human life and to understand culture and art from an integrated and critical perspective through in-depth readings, presentations and debates, and appreciating the performances.

3) History and Philosophy

Courses in History and Philosophy focus on cultivating cultural communication as a global citizen and acquiring a basic knowledge of ancient thought through the teachings of humanity's spiritual-cultural heritage, the histories of diverse societies from the East and West, and Eastern and Western philosophical, religious, and aesthetic value systems (truth, goodness, beauty). In addition, the courses actively encourage going beyond uni-dimensional thinking to gain perspective of specific academic disciplines, which makes possible integrative and convergent thinking.

4) Politics and Economy

Courses in Politics and Economy focus on the academic understanding of changing normative, political, and economic behaviors as well as the interactions between individuals and corporations, and between national and international societies. Through methodological analysis and debating diverse values, and by building the capacity and thought processes that enable students to interpret phenomena from various perspectives, students can cultivate the capacity to independently participate and to understand and form an opinion about the normative, political and economic situations that could arise later in life.

5) Humans and Society

Courses in Humans and Society encourage the understanding of diverse academic knowledge and approaches to various patterns and characteristics through the participation of the individual and group, society and humanity in social, cultural, psychological, and educational activities. By learning about the important issues, various analytical approaches, and diverse frames of understanding used in each academic field, these courses intend to help students develop analytical and critical thinking skills in understanding diverse phenomena from various perspectives. They also seek to cultivate the ability to form perspectives on judgment and understanding of important social and individual situations.

6) Nature and Technology

Courses in Nature and Technology aim to understand the link between science and technology and to cultivate scientific thinking and acquisition of the basic science knowledge as an educated person in modern society. Accordingly, these courses help students understand nature and the role of technology in modern society. The courses strive to strike a proper balance between demonstrations/experiments and theoretical education taking students' various academic background into consideration.

7) Life and Environment

Courses in Life and Environment, which greatly influence the lifestyle and survival of humanity, aim at cultivating the ability and perspective to connect an understanding of basic scientific knowledge related to life and environment to various areas of human activity and diverse fields of study. Accordingly, the courses intend to help students understand the influence that the development of biology and rapid environmental change have on human life and modern society and teach basic knowledge of life, earth and environmental science. The courses strive to strike a proper balance between demonstrations/experiments and theoretical education, while including abundant examples to help students grow through educational experience.

(c) General Education Electives

General Education Electives may freely be chosen to meet the student's individual curiosity and interests. Through the planning of intellectual experiences and activities in diverse areas, these courses provide the foundation for developing and pioneering one's own career and character through self-development and the adventure of thought. These courses also help freshmen gain a better understanding of college life and academics and develop leadership skills; provide art and physical education; give interdisciplinary insight into the complexity of modern society and integrative knowledge; cultivate students' creativity and autonomous research ability; and GE Courses in English assist to understand basic features of Korean history and culture.

1) Physical Education

Courses in Physical Education consist of physical activities with the aim of cultivating skills in collective cooperation, sportsmanship and healthy physical exercise. They foster harmonious individuals with sound bodies and minds during their university life and beyond.

2) Art Practice

Courses in Art Practice intend to cultivate students' abilities in creating, appreciating, and evaluating art works through visual, auditory, synesthetic, and artistic experiences.

3) College Life and Leadership

Courses in College Life and Leadership help freshmen adjust to the university and successfully perform academic work. They also encourage students to cultivate appropriate values and character as members of the human race, and to develop leadership skills that accompany collective responsibility and an attitude of service through practice.

4) Creativity and Convergence

Courses in Creativity and Convergence area assist in cultivating students' independent research capabilities through "Independent research" and "Independent group seminar". Also they are designed to enhance their creative talents by providing the opportunity to integrate, analyze, compare, and analyze diverse topics from various academic perspectives and contexts through interdisciplinary courses

5) Korea in the World (Courses in English)

Courses in Korea in the World are conducted in English (foreign language), and this area aims to provide the opportunity to understand politics, economics, culture, and history of Korean society from diverse academic perspectives. These courses could be particularly helpful to foreign students in understanding Korean society.

(2) Implementation Principles

- General education courses should be offered balanced among the different academic fields and disciplines.
- General Education requirements for each college (designation of required courses or other requirements) will be formed through the collaboration between Faculty of Liberal Education and each College and be determined by the standing committees of Faculty of Liberal Education and General Education of SNU.

(3) General Education Requirements

(a) General Education Requirements by college/department

Specific General Education requirements for each college/department can be found in <Table 5> below.

<Table 5> General Education Requirements by College/Department

College of Humanities

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] College Writing: Process & Structure(3)	3	
	Foreign Languages	Second Foreign Languages [1-1] Second Foreign Language(3) [1-2] Second Foreign Language(3) [2-1] Second Foreign Language(3)	9	
		English	[1-2] [2-1] Must earn 2 or 4 credits from among College English 1, College English 2, or Advanced English according to the TEPS score.	2(4)
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>• Must earn 15 credits or more in at least 4 different areas.</li> <li>• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.</li> </ul>
	Culture and Art			
	History and Philosophy			
	Politics and Economy		3	
	Humans and Society			
	Nature and Technology		3	
	Life and Environment			
General Education Electives		One course from either Readings in Classics 1 or Readings in Classics 2 (1)	2	
All General Education Courses			5(3)	<ul style="list-style-type: none"> <li>• Students may select any courses from the list of General Education courses.</li> </ul>

\* Courses in Nature and Technology and Life and Environment from <Worlds of Knowledge> can be substituted with courses in Mathematical Sciences and Natural Sciences from <Academic Foundations>.

\* Second Foreign Language Requirements

- Students in the College of Humanities must earn 9 credits in Second Foreign Language courses and must complete at least one course at the intermediate level or above.
- Students who major in Second Foreign Language must complete the above requirement by taking different foreign or classical language courses than English and their major foreign language courses.

\* Numbers in brackets indicate semester scheduling recommendations.

\* Note the following table for the foreign and classical language courses at the intermediate level and above.

Foreign and Classical Languages	Course Titles of Intermediate and Above Foreign Languages and Classical Languages
Classical Chinese	Intermediate Classical Chinese, Readings in Classical Chinese Masterpieces, Selected Classical Chinese Readings in History and Philosophy by Chinese and Korean Writers
Chinese	Intermediate Chinese 1, Intermediate Chinese 2, Chinese Conversation 1, Chinese Conversation 2, Media Chinese
French	Intermediate French 1, Intermediate French 2, French Composition, Current French
German	Intermediate German 1, Intermediate German 2, German Composition, Readings in German Art and Culture, Contemporary German
Russian	Intermediate Russian 1, Intermediate Russian 2, Russian Conversation, Readings in Russian Art and Culture, Exploring Russian Media
Spanish	Intermediate Spanish 1, Intermediate Spanish 2, Spanish Composition, Spanish Conversation, Current Spanish
Other Foreign and Classical Languages	Introduction to Portuguese 2, Italian 2, Arabic 2, Hindi 2, Swahili 2, Mongolian 2, Turkish 2, Vietnamese 2, Malay-Indonesian 2, Sanskrit 2, Advanced Japanese 1, Advanced Japanese 2, Classical Greek 2, Latin 2



College of Social Sciences

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] College Writing: Process & Structure(3)	3	
	Foreign Languages	2 courses	4-6	<ul style="list-style-type: none"> <li>Students with a TEPS score of 800 and below upon matriculation must take at least one English course. [1-2]</li> </ul>
Worlds of Knowledge	Language and Literature	(3)	12	<ul style="list-style-type: none"> <li>Must earn at least 12 credits in at least 4 out of 7 areas including at least 3 credits in either Nature and Technology or Life and Environment.</li> </ul>
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
All General Education Courses			15-17	<ul style="list-style-type: none"> <li>Students may select any courses from the list of General Education courses.</li> </ul>

※ Numbers in brackets indicate semester scheduling recommendations.

College of Natural Sciences

General Education		Credit Requirements (44 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure(3)	3	
	Foreign Languages	2 courses	4-6	<ul style="list-style-type: none"> <li>Students with a TEPS score of 900 and below upon matriculation must take at least one English course.</li> </ul>
	Mathematical Sciences	Must take one course from among the following: Calculus 1,2(6) Honor Calculus and Practice 1,2(6), or Differential and Integral Calculus 1,2(8) (6Credits or 8Credits)	25	<ul style="list-style-type: none"> <li>Students under the Department of Biological Sciences may take Calculus for Life Science 1,2(6).</li> <li>Differential and Integral Calculus 1,2(8) are recommended to freshmen under the Department of Mathematical Sciences, Statistics, and Physics &amp; Astronomy.</li> </ul>
	Natural Sciences	Must earn more than 12 credits from among the following: Statistics(3), Physics1,2(or Honor Physics 1,2 or Foundation of Physics 1,2)(6), Physics(3), Chemistry 1,2(or Foundation of Chemistry1,2)(6), Chemistry(3), Biology 1,2(6), Biology(3), Earth and Environmental Sciences(3), Astronomy (3), Atmospheric Science(3), Earth System Science(3), Oceanography(3) (Note that Statistics(3) is required in the Department of Statistics.)		<ul style="list-style-type: none"> <li>Courses offered with corresponding lab requirements must be taken concurrently. (Honor Physics1,2(6) must be taken concurrently with Physics Lab. 1,2(2))</li> <li>Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.</li> </ul>

General Education		Credit Requirements (44 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations				<ul style="list-style-type: none"> <li>A few top students selected through a screening process may be waived from at least 6 credits and up to 14 credits in Academic Foundations (Mathematical Sciences, Natural Sciences). Although exempt courses are included in the total course load calculations, exempt credits are not counted toward the degree requirements. Thus, when exempt from more than 8 credits, students must ensure they meet the General Education minimum credit requirements (36 credits).</li> </ul>
	Computer and Information Science			
Worlds of Knowledge	Language and Literature		12	<ul style="list-style-type: none"> <li>Must earn 12 credits in at least 4 out of 5 areas.</li> <li>Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.</li> </ul>
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
	Life and Environment			
All General Education Courses				<ul style="list-style-type: none"> <li>Students may select any courses from the list of General Education courses.</li> </ul>

※ Numbers in brackets indicate semester scheduling recommendations.

College of Nursing

General Education		Credit Requirements (36 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Academic Foundations	Critical Thinking and Writing	[1-1] College Writing: Process & Structure(3)	3		
	Foreign Languages	2 courses	4-6	<ul style="list-style-type: none"> <li>Students with a TEPS score of 900 and below upon matriculation must take at least one English course.</li> </ul>	
	Natural Sciences	[1-1] Chemistry(3), Chemistry Lab.(1) [1-2] Biology(3), Biology Lab.(1)	8	<ul style="list-style-type: none"> <li>Students taking Chemistry(3), Biology (3) must also take Chemistry Lab. (1), Biology Lab.(1) concurrently.</li> </ul>	
Worlds of Knowledge	Language and Literature		3	<ul style="list-style-type: none"> <li>Must complete one of the recommended courses, which are indicated with a star (★), from either Language and Literature or Culture and Art areas.</li> <li>Must earn 18 credits in more than 4 areas.</li> </ul>	
	Culture and Art				
	History and Philosophy		Bio-Medical Ethics(3)		3
	Politics and Economy				3
	Humans and Society		Invitation to Sociology(3), Introduction to Psychology(3)		6
	Nature and Technology				
	Life and Environment				
All General Education Courses			1-3	<ul style="list-style-type: none"> <li>Students may select any courses from the list of General Education courses.</li> </ul>	

※ Numbers in brackets indicate semester scheduling recommendations.

College of Business Administration

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] College Writing: Process & Structure(3), - One course from either Academic Foundations or Worlds of Knowledge (3)	6	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	Calculus for Business(3), Statistics(3), Statistics Lab.(1)	7	• Students taking Statistics must also take Statistics Lab. concurrently.
Worlds of Knowledge	Language and Literature		3	
	Culture and Art		3	
	History and Philosophy		3	
	Politics and Economy		3	
	Humans and Society		3	
	Nature and Technology		3	
General Education Electives		Physical Education	1	
All General Education Courses			4-6	• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Engineering (Department of Civil and Environmental Engineering)

General Education		Credit Requirements (45 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] One course from either College Writing: Process & Structure or Writing in Science & Technology	3	
	Foreign Languages	[1-1][3-1] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12	
	Natural Sciences	[1-1][1-2] Required electives(16) Must earn 8 credits each semester from among the following: Physics 1-2(or Honor Physics 1,2), Chemistry 1,2, Biology 1,2, Physics, Chemistry, Biology, Earth Science, (Statistics), Physics Lab. 1-2, Chemistry Lab. 1,2, Biology Lab. 1,2, Physics Lab., Chemistry Lab., Biology Lab., Earth Science Lab., (Statistics Lab.)	16	• Students taking Statistics and courses in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
	Computer and Information Science	[2-1] Digital Computer Concept and Practice	3	

General Education		Credit Requirements (45 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>• Must earn 6 credits in at least 2 out of the following 5 areas: Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society.</li> <li>• * Refer to the information below.</li> </ul>	
	Culture and Art				*(3)
	History and Philosophy				
	Politics and Economy				
	Humans and Society				*(3)
	Nature and Technology				
	Life and Environment				
General Education Electives		Volunteer Social Service 1	1	<ul style="list-style-type: none"> <li>• Required for all undergraduates</li> </ul>	
All General Education Courses				<ul style="list-style-type: none"> <li>• Students may select any courses from the list of General Education courses.</li> </ul>	

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’ which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

Courses for Entrepreneurship	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
Courses for Creativity	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

□ College of Engineering (Department of Mechanical and Aerospace Engineering)

General Education		Credit Requirements (40 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure	3	
	Foreign Languages	[1-1,2] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12	
	Natural Sciences	[Freshmen 1-2] Required electives (12) [1-1] Physics 1(or Honor Physics 1), Physics Lab. 1 [1-2] Physics 2(or Honor Physics 2), Physics Lab. 2 [1-1,2] Must earn 4 credits from among Chemistry 1-2, Biology 1-2, Chemistry, Biology, (Statistics), Chemistry Lab. 1-2, Biology Lab. 1-2, Chemistry Lab., Biology Lab., (Statistics Lab.)	12	• Students taking Statistics and courses in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
	Computer and Information Science	[2-1] Digital Computer Concept and Practice	3	
Worlds of Knowledge	Language and Literature		6	• Must earn 6 credits in at least 2 out of 5 areas (Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society). • * Refer to the information below.
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
	Life and Environment			
All General Education Courses				• Students may select any courses from the list of General Education courses.

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

Courses for Entrepreneurship	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
'Courses for Creativity'	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

College of Engineering (Department of Materials Science and Engineering)

General Education		Credit Requirements (43 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] Writing in Science & Technology	3	
	Foreign Languages	[1-1,2] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12	
	Natural Sciences	[1-1,2] Required electives (16) Must earn 8 credits each semester from among the following:: Physics 1-2(or Honor Physics 1-2), Chemistry 1-2, Biology 1-2, Physics, Chemistry, Biology, (Statistics), Physics Lab. 1-2, Chemistry Lab. 1-2, Biology Lab. 1-2, Physics Lab., Chemistry Lab., Biology Lab., (Statistics Lab.)	16	• Students taking Statistics and courses in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses. • Must earn 8 credits in 2 semesters by taking either Physics 1,2 or Chemistry 1,2 in sequential order.
	Computer and Information Science	[1-2] Fundamentals of Computer System	2	

General Education		Credit Requirements (43 or more)		
Categories	Areas	Required Courses	Credits	Comments
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>• Must earn 6 credits in at least 2 out of 5 areas (Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society).</li> <li>• * Refer to the information below.</li> </ul>
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
	Life and Environment			
All General Education Courses				<ul style="list-style-type: none"> <li>• Students may select any courses from the list of General Education courses.</li> </ul>

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

Courses for Entrepreneurship	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
Courses for Creativity	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

□ College of Engineering (Department of Electrical and Computer Engineering)

General Education		Credit Requirements (44 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Academic Foundations	Critical Thinking and Writing	[1-2] Writing in Science & Technology or College Writing: Process & Structure	3		
	Foreign Languages	[1-1][3-1] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.	
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12		
	Natural Sciences	[1-1,2] Required electives(16) - Physics 1,2(or Honor Physics 1,2), Physics Lab. Take 4 credits of 1:2 each semester totaling 8Credits - Must earn 4 credits each semester (total 8 credits) from among the following: Chemistry 1,2, Biology 1:2, Chemistry, Biology, (Statistics), Chemistry Lab. 1,2, Biology Lab. 1:2, Chemistry Lab., Biology Lab., (Statistics Lab.)	16	• Students taking Statistics and courses in Natural Sciences must take the corresponding Labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.	
	Computer and Information Science	[1-1] Digital Computer Concept and Practice	3		
Worlds of Knowledge	Language and Literature		6	• Must earn 6 credits in at least 2 out of the following 5 areas: Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society.  • * Refer to the information below.	
	Culture and Art				* (3)
	History and Philosophy				
	Politics and Economy				
	Humans and Society				* (3)
	Nature and Technology				
	Life and Environment				
All General Education Courses				• Students may select any courses from the list of General Education courses.	

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)



Courses for Entrepreneurship	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
'Courses for Creativity'	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

College of Engineering (Department of Computer Science and Engineering)

General Education		Credit Requirements (44 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] One course from either Writing in Science & Technology or College Writing: Process & Structure	3	
	Foreign Languages	[1-1][3-1] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [1-2] Engineering Mathematics 1 [2-1] Engineering Mathematics 2 [2-2] Statistics, Statistics Lab.	16	• Students taking Statistics must take the lab concurrently.
	Natural Sciences	[1-1] [1-2] Required electives(12) - Must earn 8 credits [1-1] and 4 credits [1-2] from among the following: Physics1,2(or Honor Physics 1,2), Chemistry 1,2, Biology 1,2, Physics, Chemistry, Biology, Physics Lab. 1,2, Chemistry Lab. 1,2, Biology Lab. 1,2, Physics Lab., Chemistry Lab., Biology Lab.	12	• It is recommended that students majoring in the Department of Computer Sciences and Engineering take Biology 'Biology(or Biology 1)' specially designed for their major by the Department of Biological Sciences. • Students taking courses in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
	Computer and Information Science	[1-1] Digital Computer Concept and Practice	3	

General Education		Credit Requirements (44 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>• Must earn 6 credits in at least 2 out of 5 areas (Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society).</li> <li>• * Refer to the information below.</li> </ul>	
	Culture and Art				* (3)
	History and Philosophy				
	Politics and Economy				
	Humans and Society				* (3)
	Nature and Technology				
	Life and Environment				
All General Education Courses				<ul style="list-style-type: none"> <li>• Students may select any courses from the list of General Education courses.</li> </ul>	

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

‘Courses for Entrepreneurship’	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
‘Courses for Creativity’	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

□ College of Engineering (Department of Chemical and Biological Engineering)

General Education		Credit Requirements (44 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Academic Foundations	Critical Thinking and Writing	[1-1] Writing in Science & Technology	3		
	Foreign Languages	[1-1,2] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.	
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12		
	Natural Sciences	[1-1,2] Required electives(16): Four courses in Academic Foundations (16 credits) must be taken from among the following three series of options (8 credits per term). (1) Physics 1·2 (or Honor Physics 1·2), Physics Lab. 1·2, Chemistry, Chemistry Lab., Biology, Biology Lab. (2) Chemistry 1·2, Chemistry Lab. 1·2 Physics, Physics Lab., B Biology, Biology Lab. (3) Biology 1·2, Biology Lab. 1·2, Chemistry, Chemistry Lab., Physics, Physics Lab.	16	• Students taking courses in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.	
	Computer and Information Science	[1-2] Digital Computer Concept and Practice	3		
Worlds of Knowledge	Language and Literature		6	• Must earn 6 credits in at least 2 out of 5 areas (Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society). • * Refer to the information below.	
	Culture and Art				* (3)
	History and Philosophy				
	Politics and Economy				
	Humans and Society				* (3)
	Nature and Technology				
	Life and Environment				
All General Education Courses				• Students may select any courses from the list of General Education courses.	

※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.

※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.

※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.

※ For all students who entered in 2013 and before, ‘Principles of Computer System’ can be substituted with ‘Digital Computer Concept and Practice’.

※ Numbers in brackets indicate semester scheduling recommendations.

※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

'Courses for Entrepreneurship'	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
'Courses for Creativity'	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

College of Engineering

(Department of Architecture and Architectural Engineering - Architectural Engineering Major)

General Education		Credit Requirements (37 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] Writing in Science & Technology	3	
	Foreign Languages	[1-1,2] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1	9	
	Natural Sciences	[1-1,2] Required electives(12) [1-1] Physics1(or Honor Physics 1), Physics Lab. 1 [1-1] Must earn 4 credits (including labs) by taking either Statistics or a course in Natural Sciences (excluding Physics 1, Physics 2) [1-2] Physics 2(or Honor Physics 2), Physics Lab. 2	12	• Students taking Statistics or courses in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in highschool may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
	Computer and Information Science	[1-1] Digital Computer Concept and Practice	3	
Worlds of Knowledge	Language and Literature		6	• Must earn 6 credits in at least 2 out of the following 5 areas: Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society. • * Refer to the information below.
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
	Life and Environment			
All General Education Courses				• Students may select any courses from the list of General Education courses.

※ For students entered in 2014 and thereafter, the required 3 credits in 'Courses for Entrepreneurship' can be substituted with courses in 'Humans and Society' from <Worlds of Knowledge>, and the required 3 credits in 'Courses for Creativity' can be substituted with courses in 'Culture and Art' from <Worlds of Knowledge>.

- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

‘Courses for Entrepreneurship’	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
‘Courses for Creativity’	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

College of Engineering (Department of Architecture and Architectural Engineering - Architecture Major)

General Education		Credit Requirements (37 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] One course from either College Writing: Process & Structure or Writing in Science & Technology	3	
	Foreign Languages	[1-1,2] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2	6	
	Natural Sciences	[1-1] Required electives(4) [1-2] Required electives(8) * Must earn 4 credits in Physics 1(or Honor Physics 1) with the lab and must earn another 4 credits from either Earth Science or Earth and Environmental with the corresponding labs. * Must earn 4 credits in Natural Sciences with the lab concurrently.	12	• Students taking a course in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
Worlds of Knowledge	Language and Literature		3	
	Culture and Art		3	
	History and Philosophy		3	
	Politics and Economy		3	
	Humans and Society			
	Nature and Technology			
Life and Environment				
All General Education Courses				• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

□ College of Engineering (Department of Industrial Engineering)

General Education		Credit Requirements (46 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure [2-1] Speech and Debate [4-2] Writing in Science & Technology	9	
	Foreign Languages	[1-1,2] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Statistics, Statistics Lab. [1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	16	• Students taking Statistics must take the lab concurrently.
	Natural Sciences	[1-1,2] Required electives(8) Must earn 4 credits each semester from among the following: Physics 1,2(or Honor Physics 1,2), Chemistry 1,2, Biology 1,2, Physics, Chemistry, Biology, Physics Lab. 1,2, Chemistry Lab. 1,2, Biology Lab. 1,2, Physics Lab., Chemistry Lab., Biology Lab.	8	• Students taking a course in Natural Sciences must take the corresponding lab concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
	Computer and Information Science	[1-1] Digital Computer Concept and Practice	3	
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>• [1-2, 2-1] Must earn 6 credits in at least 2 out of 5 areas (Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society).</li> <li>• * See below.</li> </ul>
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
All General Education Courses				• Students may select any courses from the list of General Education courses.

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

'Courses for Entrepreneurship'	006.044 Technology and Enterprise 005.058 Entrepreneurship and Economy 006.043A Technology and Economy 005.060 Engineering Ethics and Leadership 005.059 Patent and Technology Transfer 400.212 Technology and Entrepreneurship 400.025 Modern Technology and Ethical Thinking 400.513 History of Engineering and Technology 400.213 Innovation and Creativity Practice 400.214 Engineering Frontiers and Leadership	*[2-2]
'Courses for Creativity'	009.200 Glance at Korean Contemporary Urbanism and Architecture 009.203 Creativity and Design 009.021 Technology and Art: Exhibit·Art·Engineering 009.201 The Science of Sound, and Experience of Music Instrument Design and Evaluation 400.018 Creative Engineering Design 400.318 Digital Art Engineering 406.549 Creative Technology Intelligence 406.324A Creative Thinking for Engineers	*[3-1]

※ Numbers in brackets indicate semester scheduling recommendations.

□ College of Engineering (Department of Naval Architecture and Ocean Engineering)

General Education		Credit Requirements (44 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Academic Foundations	Critical Thinking and Writing	[1-2] One course either from College Writing: Process & Structure or Writing in Science & Technology	3		
	Foreign Languages	[1-1,2] 2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.	
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12		
	Natural Sciences	[1-1,2] Required electives(16) - Must earn 4 credits each semester in Physics1-2(or Honor Physics 1-2), Physics Lab. 1-2, totaling 8 credits. - Must earn 4 credits each semester from among the following: Chemistry 1-2, Biology 1-2, Chemistry, Biology, (Statistics), Earth Science, Oceanography, Chemistry Lab. 1-2, Biology Lab. 1-2, Chemistry Lab., Biology Lab., (Statistics Lab.), Earth Science Lab., Oceanography Lab.	16	• Students taking Statistics or a course in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.	
	Computer and Information Science	[1-1] Digital Computer Concept and Practice	3		
Worlds of Knowledge	Language and Literature		6	• Must earn 6 credits in at least 2 out of 5 areas (Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society). • * Refer to the information below.	
	Culture and Art				*(3)
	History and Philosophy				
	Politics and Economy				
	Humans and Society				*(3)
	Nature and Technology				
All General Education Courses				• Students may select any courses from the list of General Education courses.	

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
  
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

‘Courses for Entrepreneurship’	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
‘Courses for Creativity’	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

College of Engineering (Department of Energy Resources Engineering)

General Education		Credit Requirements (40 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] Writing in Science & Technology	3	
	Foreign Languages	[1-1,2] Take two courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12	
	Natural Sciences	[1-1,2] Required electives (12) - Must earn 12 credits from among the following: Physics 1:2(or Honor Physics 1:2), Chemistry 1:2, Physics, Chemistry, Earth System Science, Physics Lab. 1:2, Chemistry Lab. 1:2, Physics Lab., Chemistry Lab., Earth System Science Lab.	12	• Students taking a course in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
	Computer and Information Science	[1-1] Digital Computer Concept and Practice	3	



General Education		Credit Requirements (40 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>• Must earn 6 credits in at least 2 out of 5 areas (Language and Literature, Culture and Art, History and Philosophy, Politics and Economy, Humans and Society).</li> <li>• * See below</li> </ul>	
	Culture and Art				* (3)
	History and Philosophy				
	Politics and Economy				
	Humans and Society				* (3)
	Nature and Technology				
	Life and Environment				
All General Education Courses				<ul style="list-style-type: none"> <li>• Students may select any courses from the list of General Education courses.</li> </ul>	

- ※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.
- ※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.
- ※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.
- ※ Numbers in brackets indicate semester scheduling recommendations.
- ※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

‘Courses for Entrepreneurship’	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
‘Courses for Creativity’	(GE) 054.019 A Glimpse at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

□ College of Engineering (Department of Nuclear Engineering)

General Education		Credit Requirements (44 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] One course from either Writing in Science & Technology or College Writing: Process & Structure	3	
	Foreign Languages	[1-1][3-2] 2 courses from among College English 1, College English 2, or Advanced English	4	• Must take the English courses according to the TEPS scores upon matriculation.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1 [1-2] Calculus 2 or Honor Calculus and Practice 2 [2-1] Engineering Mathematics 1 [2-2] Engineering Mathematics 2	12	
	Natural Sciences	[1-1] Required electives(8) Must earn 8 credits from among the following: Physics1(or Honor Physics1), Chemistry1, Biology 1, Physics Lab. 1, Chemistry Lab. 1, Biology Lab. 1 [1-2] Required electives(8) Must earn 8 credits from among the following: Physics2(or Honor Physics2), Chemistry 2, Biology 2, (Statistics), Physics Lab. 2, Chemistry Lab. 2, Biology Lab. 2, (Statistics Lab.).	16	• Students taking Statistics and courses in Natural Sciences must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
	Computer and Information Science	[1-1] Digital Computer Concept and Practice	3	
Worlds of Knowledge	Culture and Art		*(3)	• * Refer to the information below.
	History and Philosophy		3	
	Language and Literature		3	
	Politics and Economy			
	Humans and Society		*(3)	
	Nature and Technology			
	Life and Environment			
All General Education Courses				• Students may select any courses from the list of General Education courses.

※ For students entered in 2014 and thereafter, the required 3 credits in ‘Courses for Entrepreneurship’ can be substituted with courses in ‘Humans and Society’ from <Worlds of Knowledge>, and the required 3 credits in ‘Courses for Creativity’ can be substituted with courses in ‘Culture and Art’ from <Worlds of Knowledge>.

※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.

※ When students are exempt from taking ‘Fundamentals of Computer System, Digital Computer Concept and Practice’, they are recognized as fulfilling the minimum credit requirements in Academic Foundations(Computer and Information Science) even when the students did not earn the required credits. Regardless, students must meet the minimum general education credit requirements.

※ Numbers in brackets indicate semester scheduling recommendations.

※ Aside from the above General Education requirements, the students entered in 2013 and thereafter must earn 3 credits from both ‘Courses for Entrepreneurship’ and ‘Courses for Creativity’, which are designated by College of Engineering, totaling 6 credits . (Students must consult with the department about the requirement)

Courses for Entrepreneurship	(GE) 046.018 Technology and Enterprise (GE) 054.027 Entrepreneurship and Economy (GE) 046.017 Technology and Economy (GE) 054.025 Engineering Ethics and Leadership (GE) 054.028 Patent and Technology Entrepreneurship (Major) 400.212 Technology and Entrepreneurship (Major) 400.025 Modern Technology and Ethical Thinking (Major) 400.513 History of Engineering and Technology (Major) 400.213 Innovation and Creativity Practice (Major) 400.214 Engineering Frontiers and Leadership
'Courses for Creativity'	(GE) 054.019 A Glance at Korean Contemporary Urbanism and Architecture (GE) 054.021 Creativity and Design (GE) 054.022 Technology and Art: Exhibit·Art·Engineering (GE) 054.020 The Science of Sound, and Experience of Music Instrument Design and Evaluation (Major) 400.018 Creative Engineering Design (Major) 400.318 Digital Art Engineering (Major) 406.549 Creative Technology Intelligence (Major) 406.324A Creative Thinking for Engineers

College of Agriculture and Life Sciences (Department of Agricultural Economics and Rural Development)

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure(3)	3	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
Worlds of Knowledge	Language and Literature		3	
	Culture and Art			
	History and Philosophy			
	Politics and Economy	3		
	Humans and Society			
	Nature and Technology	3		
Life and Environment	3			
All General Education Courses			15-17	• Students may select any courses from the list of General Education courses.

※ Credit requirements in 'Nature and Technology' and 'Life and Environment' from <Worlds of Knowledge> can be substituted with a course (3 credits) in 'Nature and Technology' or 'Life and Environment' and a course (3 credits) in 'Mathematical Sciences' or 'Natural Sciences' from <Academic Foundations>.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Agriculture and Life Sciences (Excluding Department of Agricultural Economics and Rural Development)

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure(3)	3	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	Take one from among the following: Calculus for Life Science 1·2, Calculus 1·2 Honor Calculus and Practice 1·2	6	
	Natural Sciences	Take 2 from among the following: Physics(3)·Physics Lab.(1) Chemistry(3)·Chemistry Lab.(1) Biology(3)·Biology Lab.(1) Atmospheric Science(3)·Atmospheric Science Lab.(1) Earth System Science(3)·Earth System Science Lab.(1)	8	• Students taking Physics, Chemistry, Biology, Atmospheric Science, Earth System Science must take corresponding labs concurrently.
Worlds of Knowledge	Language and Literature		3	
	Culture and Art			
	History and Philosophy	3		
	Politics and Economy	3		
	Humans and Society	3		
	Nature and Technology			
	Life and Environment			
All General Education Courses			1-3	• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Fine Arts

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] Choose one course	3	• This subject area includes the following courses: College Writing: Process & Structure, Writing in Humanities, Writing in Social Sciences, Writing in Science & Technology
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
Worlds of Knowledge	Language and Literature		12	• Must earn at least 12 credits in more than 4 areas.
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
	Life and Environment			
All General Education Courses			15-17	• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Education (Department of Education, Department of Ethics Education, Department of Korean Language Education, Department of English Education, Department of German Language Education, Department of French Language Education, Department of Social Studies Education, Department of History Education, Department of Geography Education, Department of Physical Education)

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] College Writing: Process & Structure(3)	3	• Students under Department of Education and Department of Physical Education must select one course from this subject area.
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
Worlds of Knowledge	Language and Literature		3	• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.(※Department of Korean Language Education is excluded)
	Culture and Art			
	History and Philosophy	3		
	Politics and Economy	3		
	Humans and Society			
	Nature and Technology	3		
	Life and Environment			
General Education Electives		Must earn 2 credits from among Physical Education courses.	2	(※ Department of Physical Education is excluded)
All General Education Courses			13-15	• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Education (Department of Mathematics Education)

General Education		Credit Requirements (37 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure(3)	3	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1(3)	6	
		[1-2] Calculus 2 or Honor Calculus and Practice 2(3)		
Natural Sciences	[1-1-2] Must take one course among Physics1·2(or Honor Physics 1·2), Chemistry 1·2, Biology 1·2, Physics, Chemistry, Biology, Earth Science, and (Statistics) for each semester,	8	• Students taking Physics1·2(or Honor Physics 1·2), Chemistry 1·2, Biology 1·2, Physics, Chemistry, Biology, Earth Science, Statistics must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.	

General Education		Credit Requirements (37 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Computer and Information Science		2(3)	• Before taking Mathematics Education major courses, students should have a foundation in computer programming; therefore, elementary programming courses are recommended.
Worlds of Knowledge	Language and Literature		3	• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.
	Culture and Art			
	History and Philosophy		3	
	Politics and Economy		3	
	Humans and Society			
	Nature and Technology		3	
Life and Environment				
General Education Electives		Must earn 2 credits in Physical Education	2	
All General Education Courses				• Students may select any courses from the list of General Education courses.

※ When students are exempt from taking 'Fundamentals of Computer System, Digital Computer Concept and Practice', they are required to earn 2(3) credits in <Academic Foundations>.

※ Although (Statistics), (Statistics Lab.) are included in Mathematical Sciences, they are counted towards Natural Sciences credit requirements.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Education (Department of Physics Education, Department of Chemistry Education, Department of Biology Education, Department of Earth Science Education)

General Education		Credit Requirements (38 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] Choose one course	3	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Calculus 1 or Honor Calculus and Practice 1(3)	3	
	Natural Sciences	[1-1-2] Must take 4 courses from among the following: Calculus 2(or Honor Calculus and Practice 2), Physics 1(or Honor Physics 1), Chemistry 1, Biology 1, Earth Science, (Digital Computer Concept and Practice)	14(16)	• Students taking Physics 1 · 2(or Honor Physics 1 · 2), Chemistry 1 · 2, Biology 1 · 2, Physics, Chemistry, Biology, Earth Science, Statistics must take the corresponding labs concurrently. • Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.
Worlds of Knowledge	Language and Literature		3	• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.
	Culture and Art			
	History and Philosophy		3	

General Education		Credit Requirements (38 or more)		
Categories	Areas	Required Courses	Credits	Comments
Worlds of Knowledge	Politics and Economy		3	
	Humans and Society			
	Nature and Technology		3	
	Life and Environment			
General Education Electives		Must earn 2 credits in Physical Education	2	
All General Education Courses				• Students may select any courses from the list of General Education courses.

※ When students are exempt from taking 'Fundamentals of Computer System, Digital Computer Concept and Practice', they are required to earn 2(3) credits in <Academic Foundations>.

※ Although Digital Computer Concept and Practice is included in Computer and Information Science, they are counted towards Natural Sciences credit requirements.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Human Ecology (Division of Consumer and Child Studies)

General Education		Credit Requirements (42 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] College Writing: Process & Structure(3) [2-1] Writing in Social Sciences(3)	6	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 800 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-2] Statistics(3), Statistics Lab.(1)	4	• Students taking Statistics must take Statistics Lab. concurrently.
Worlds of Knowledge	Language and Literature		3	• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.
	Culture and Art			
	History and Philosophy		3	
	Politics and Economy		3	
	Humans and Society			
	Nature and Technology		3	
Life and Environment				
All General Education Courses			14-16	• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Human Ecology (Department of Food and Nutrition)

General Education		Credit Requirements (40 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure(3) [2-1] Writing in Science & Technology(3) [3-1] Speech and Debate(3)	9	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 800 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Statistics(3), Statistics Lab.(1) [1-2] Must earn 3 or 4 credits from either Calculus for Life Science 1, or Physics(3) and Physics Lab.(1)	7(8)	• Students taking Chemistry, Biology, Statistics, Physics must take the corresponding labs concurrently.
	Natural Sciences	[1-1] Chemistry(3), Chemistry Lab.(1) [1-1] Biology(3), Biology Lab.(1)	8	
Worlds of Knowledge	Language and Literature		3	• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.
	Culture and Art			
	History and Philosophy	3		
	Politics and Economy	3		
	Humans and Society	3		
	Nature and Technology			
	Life and Environment			
All General Education Courses				• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Human Ecology (Department of Textiles, Merchandising and Fashion Design)

General Education		Credit Requirements (40 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] College Writing: Process & Structure(3) [2-1] Writing in Social Sciences or Writing in Science & Technology(3) [3-1] Speech and Debate(3)	9	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] Statistics(3), Statistics Lab.(1) [1-2] Must earn 3 or 4 credits from either Calculus for Life Science 1, or Biology(3) and Biology Lab.(1)	7(8)	• Students taking Chemistry, Biology, Statistics must take the corresponding labs concurrently. • Students who did not complete Mathematics for science students in highschool may take Calculus for Humanities and Social Sciences 1(3) instead of Calculus for Life Science 1(3).
	Natural Sciences	[1-1] Chemistry(3), Chemistry Lab.(1)	4	



General Education		Credit Requirements (40 or more)		
Categories	Areas	Required Courses	Credits	Comments
Worlds of Knowledge	Language and Literature		3	<ul style="list-style-type: none"> <li>• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.</li> </ul>
	Culture and Art			
	History and Philosophy		3	
	Politics and Economy			
	Humans and Society		3	
	Nature and Technology			
Life and Environment		3		
All General Education Courses			1-4	<ul style="list-style-type: none"> <li>• Students may select any courses from the list of General Education courses.</li> </ul>

※ Numbers in brackets indicate semester scheduling recommendations.

College of Veterinary Medicine (Department of Preliminary Veterinary Medicine)

General Education		Credit Requirements (45 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] Writing in Science & Technology(3)	3	
	Foreign Languages	One College English course and one Foreign Language course	5	<ul style="list-style-type: none"> <li>• Students with a TEPS score of 801 and above upon matriculation must take Advanced English: Presentation.</li> </ul>
	Mathematical Sciences	[1-1-2] Must take either Calculus for Life Science 1 or Calculus for Life Science 2(3)	3	<ul style="list-style-type: none"> <li>• Must consult with the instructor from Department of Preliminary Veterinary Medicine before enrolling in Calculus for Life Science 1 or 2.</li> </ul>
	Natural Sciences	[1-1-2] Must take 2 courses (with labs) from among the following: Physics 1, Physics 2, Chemistry 1, Chemistry 2, Biology 1, Biology 2	8	<ul style="list-style-type: none"> <li>• Students taking Physics 1, Physics 2, Chemistry 1, Chemistry 2, Biology 1, Biology 2 must take the corresponding labs concurrently.</li> <li>• Students who did not complete Physics 1,2(or Chemistry 1,2) in high school may take Foundation of Physics 1,2(Foundation of Chemistry 1,2) instead of Physics 1,2(or Chemistry 1,2). Note that Physics Lab. 1,2(or Chemistry Lab. 1,2) must be taken concurrently with the corresponding courses.</li> </ul>
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>• Must complete one of the recommended courses, which are indicated with a star (★), from among the following areas: Language and Literature, Culture and Art, or History and Philosophy.</li> </ul>
	Culture and Art			
	History and Philosophy			
	Politics and Economy		3	
	Humans and Society		3	
	Nature and Technology			
Life and Environment				
All General Education Courses			14	<ul style="list-style-type: none"> <li>• Students may select any courses from the list of General Education courses.</li> </ul>

※ Numbers in brackets indicate semester scheduling recommendations.

College of Music

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] Choose one course	3	• This subject area includes the following courses: College Writing: Process & Structure, Writing in Humanities, Writing in Social Sciences, Writing in Science & Technology
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
Worlds of Knowledge	Language and Literature		12	• Must earn at least 12 credits in at least 4 areas.
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
All General Education Courses			15-17	• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Medicine (Department of Preliminary Medicine)

General Education		Credit Requirements (41 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] Speech and Debate(3) [1-2] Writing in Science & Technology(3)	6	
	Foreign Languages	2 courses	4-6	• Students with a TEPS score of 900 and below upon matriculation must take at least one English course.
	Mathematical Sciences	[1-1] 1 course from among Calculus for Life Science 1, Calculus for Life Science 2, Honor Calculus and Practice 1, Honor Calculus and Practice 2	3	• Students must consult with the instructor from the College of Medicine before enrolling in Calculus for Life Science 1 or 2, and those who have to take Honor Calculus and Practice may take a major course (3 credits) in the Department of Mathematical Sciences instead.
	Natural Sciences	[1-1-2] Must take more than 2 courses (with labs) from among the following: Physics 1, Physics 2, Chemistry 1, Chemistry 2, Biology 1, Biology	8	• Students taking Physics 1, Physics 2, Chemistry 1, Chemistry 2, Biology 1, Biology 2 must take the corresponding labs concurrently, and they must consult with the instructor from the College of Medicine before enrolling in those courses.
Worlds of Knowledge	Language and Literature		12	• Must earn at least 12 credits in at least 4 out of 5 areas.
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society			
	Nature and Technology			
All General Education Courses			6-8	• Students may select any courses from the list of General Education courses.

※ Numbers in brackets indicate semester scheduling recommendations.

College of Liberal Studies

General Education		Credit Requirements (36 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-1] Choose one course	3	<ul style="list-style-type: none"> <li>This subject area includes the following courses: College Writing: Process &amp; Structure, Writing in Humanities, Writing in Social Sciences, Writing in Science &amp; Technology</li> </ul>
	Foreign Languages	At least 3 courses	8(9)	<ul style="list-style-type: none"> <li>Students with a TEPS score of 900 and below upon matriculation must take at least one English course.</li> <li>Must take more than two courses in the same foreign language</li> </ul>
	Mathematical Sciences	Must take one course from among the following: Calculus 1, Honor Calculus and Practice 1, Mathematics: The Basics and Applications 1	3(4)	<ul style="list-style-type: none"> <li>Students already taken Mathematics 2, Integral Calculus and Statistics or equivalent courses cannot take Mathematics: The Basics and Applications 1.</li> </ul>
Worlds of Knowledge	Language and Literature		6	<ul style="list-style-type: none"> <li>Must take courses in more than 4 areas.</li> </ul>
	Culture and Art			
	History and Philosophy			
	Politics and Economy			
	Humans and Society		6	
	Nature and Technology			
Life and Environment				
All General Education Courses			8-10	<ul style="list-style-type: none"> <li>Students may select any courses from the list of General Education courses.</li> </ul>

※ Numbers in brackets indicate semester scheduling recommendations.

School of Dentistry (Undergraduate)

General Education		Credit Requirements (40 or more)		
Categories	Areas	Required Courses	Credits	Comments
Academic Foundations	Critical Thinking and Writing	[1-2] Choose one course	3	<ul style="list-style-type: none"> <li>This subject area includes the following courses: College Writing: Process &amp; Structure, Writing in Humanities, Writing in Social Sciences, Writing in Science &amp; Technology</li> <li>Recommended: Writing in Science &amp; Technology</li> </ul>
	Foreign Languages	2 courses	4-6	<ul style="list-style-type: none"> <li>Students with a TEPS score of 900 and below upon matriculation must take at least one English course.</li> </ul>
	Mathematical Sciences	one course	3	<ul style="list-style-type: none"> <li>Recommended: Calculus for Life Science 1 or Calculus for Life Science 2</li> </ul>
	Natural Sciences	2 courses and two corresponding labs	8	<ul style="list-style-type: none"> <li>Recommended: Physics 1-2(including Physics Lab. 1-2), Chemistry 1-2(including Chemistry Lab. 1-2), Biology 1-2(including Biology Lab. 1-2)</li> <li>Courses offered with corresponding lab requirements must be taken concurrently.</li> </ul>

General Education		Credit Requirements (40 or more)			
Categories	Areas	Required Courses	Credits	Comments	
Worlds of Knowledge	Language and Literature		6	• Must earn 6 credits in more than 2 areas from among Language and Literature, Culture and Art, and Politics and Economy.	
	Culture and Art				
	Politics and Economy				
		History and Philosophy		3	
		Humans and Society		3	
		Nature and Technology			
		Life and Environment			
General Education Electives		Must take more than 2 Physical Education, Volunteer Social Service 1(1)	3		
All General Education Courses			5-7	• Students may select any courses from the list of General Education courses.	

※ Students must consult with the academic advisor before enrolling in any courses.

※ Numbers in brackets indicate semester scheduling recommendations.

(b) TEPS and <English Foundations>, <College English 1>, <College English 2>, <Advanced English> Requirements

1) Students Enrollment Criteria: Students entered in 2014 and thereafter

※ Students entered in 2013 and before must follow their matriculation year requirements.

2) Course Requirements

A. Students must earn 2 or 4 credits from among <College English 1>, <College English 2> or <Advanced English>.

※ The number of courses a student must complete is determined by the course requirements set by each college.

※ Depending on each college, students with a TEPS score of 801(or above) or 901(or above) are exempt from the College English requirements.

B. Aside from course requirements, some colleges may require a TEPS score as part of graduation requirements.

3) Enrollment Requirements

A. All freshmen must take Freshmen TEPS test, and must take the designated course(s) according to their valid TEPS score (the highest TEPS score achieved within the valid period of two years from the matriculation date).

B. Students Enrollment Criteria for Each Course

• <Advanced English>

– Students with a TEPS score of 801 and above

– Students taken <College English 1> or <College English 2>

• <College English 2>

– Students with a TEPS score of 701-800

– Students taken <College English 1>

• <College English 1>

– Students with a TEPS score of 551~700

– Students taken <English Foundations>

• <English Foundations>

– Students with a TEPS score of 550 and below

※ Special Education Students (hearing impaired and visually impaired students admitted under the special admission policy), exchange students and visiting students are exempt from the TEPS, and they must take from among <College English 1>, <College English 2>, or <Advanced English> according to their English proficiency level.

B. Major Courses

(1) Course Categorization and Completion

1) Major courses for each department/division are established in the curriculum of the relevant department/division (refer to the curriculum of each department/division).

2) Major courses are classified into requisite and elective courses. Major requisite courses may be designated as those required by relevant colleges or departments/divisions. Students may be required to select and take certain major courses from a group of courses. Major electives are courses not included among the required major courses of relevant departments/divisions and are offered from curricula of other departments/divisions, which also count as major electives by students' own department/division.

In principle, major courses must be taken by referring to the table of recommended tracks for undergraduate majors in the curriculum

of each department/division. Each department/division may establish and apply to students its own course regulations.

3) Double Major and Minor Courses

Departments/divisions offering double major and minor courses, according to their regulations, must allow students to earn at least 39 credits and 21 credits, respectively. Therefore, departments/divisions must first review courses that students have taken for their double major and further courses that they plan to take. In this way, departments/divisions can provide students appropriate guidelines to additional courses they need to take.

4) Interdisciplinary major and Combined minor Courses:

Departments/divisions offering interdisciplinary major and combined minor courses according to their regulations must allow students to earn at least 39 credits and 21 credits, respectively.

5) Student-Designed Minors:

Depending on students' application for student-designed minor, the Evaluation Committee of student-designed minor must allow students to earn at least 21 credits through courses they have selected. These courses, for the particular minor, have been approved by the committee. However, students who are under the College of Liberal Education have decided to major in student-designed minor, must earn at least 39 credits.

(2) Acceptance of Overlapping Courses

- 1) Students with double majors are allowed to earn up to 9 credits through courses that are identically offered from departments/divisions of their double major (including extra-departmental courses for departments of the college). In addition, students with double majors are allowed to earn up to 3 credits through courses that are identically offered from departments/divisions which do not belong to their double major (including extra-departmental courses for departments of the college).
  - 2) Up to 9 credits are allowed for students taking courses offered by their major's departments/divisions. For both interdisciplinary major and main major, Furthermore, up to 3 credits are allowed for students taking courses, belonging to departments/divisions other than that of their own major and interdisciplinary major, that count towards requirement of their main major and interdisciplinary major
  - 3) Students cannot earn credits for courses overlapping with those under their minor, combined minor, and student-designed minor.
  - 4) Students may calculate their own credits according to what they think they must earn. If one course is, at the same time, a requisite for the main major, double major, minor, interdisciplinary major, combined minor, or student-designed minor, then it can be counted as just one course already satisfying the requisite of each major type.
  - 5) Even if a course was taken to satisfy various types of majors, it will not allow students to have earned extra credits to the total number of credits for degree completion.
- (3) With the approval of the head of a department/division, students in the third or later year of the undergraduate program may take courses in the master's program. Credits obtained may be included in either credits required for the undergraduate program or for the master's program, after students have entered graduated school to seek a master's degree.

5. Course Completion in Graduate Program

A. Course Credits and Thesis Credits

- (1) Each department/division designates and offers major courses in the graduate program. Course credits are earned when taking major courses and thesis credits are earned separately when taking research-related courses. Thesis credits are obtained when students take courses under master's/doctoral "Research on Thesis for Graduate Program".

Students may take graduate courses that are offered by other departments/divisions, even if not considered as major courses in their own departments/divisions, based on their academic advisors' recommendation and approval of the head of their own departments/divisions. In this case, course credits may be counted as major course credits up to half of the required credits for program completion in students' own department/division. Within this half of the required credits based on Article 80, Clause 1 of university regulation, students may earn by taking courses from a different department/division (six credits may be earned by taking courses in the undergraduate program, according to Article 71 Clause 2 of the university regulations). Although not included as requirements for graduate program, undergraduate course credits taken as prerequisites within students' own departments/divisions are used for calculating students' grade point average (GPA).

Allowed credit load per program/semester for graduate students is as shown in <Table 6>.

<Table 6> Allowed Credit Load per Program/Semester

Program	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5
Master's	12	12	12	12	12 <sup>1)</sup>
Doctoral	12	12	12	12	-

- 1) Excluding Graduate School of Business
- 2) Applies to master's evening program (division 2)

(2) Thesis credits must be determined by each college/graduate school and count up to a quarter of total credits for completion of master's program and up to a third for completion of doctoral program. Although students make retake research-related courses within these limits, they may not take two or more courses during the same semester (with the exception of students in the combined master's/ doctoral program who may take up to two courses with their academic advisors' approval). Course requirements and completion method per college/graduate school are as shown in <Table 7>.

<Table 7> Thesis Course Credit Requirements and Completion Method per College/Graduate School

College/Graduate School	Program	Inclusion	Limitations on Course Credits		Remarks
			Minimum (Required)	Maximum (Accepted) <sup>1)</sup>	
College of Humanities	Master's	Not included	6	6	
	Doctoral		12	12	
	Combined master's/doctoral		18	18	
College of Social Sciences	Master's	Included	0	6	
	Doctoral		6	12	
	Combined master's/doctoral		6	12	
College of Natural Sciences	Master's	Included	0	6	
	Doctoral		0	12	
	Combined master's/doctoral		0	18	
College of Nursing	Master's	Not included	3	3	
	Doctoral		6	6	
College of Business Administration	Master's	Not included	0	6	
	Doctoral		0	12	
	Combined master's/doctoral		0	18	
College of Engineering	Master's	Included	0	6	However, credits not included for program completion for students majoring in Architecture and Interdisciplinary Graduate Program in Urban Design; Up to 3 credits counted for Dept. of Architecture and Architectural Engineering
	Doctoral		0	12	Up to 6 credits counted for Dept. of Architecture Up to 3 credits counted for Interdisciplinary Program in Urban Design
	Combined master's/doctoral		0	18	Up to 9 credits counted for Dept. of Architecture and Architectural Engineering
College of Agriculture and Life Sciences	Master's	Included	3	3	
	Doctoral		3	6	
	Combined master's/doctoral		6	9	
College of Fine Arts	Master's	Included	3	3	
	Doctoral		6	6	
College of Law	Master's	Not included	6	6	
	Doctoral		6	6	
College of Education	Master's	Included	0	6	
	Doctoral		0	12	
	Combined master's/doctoral		0	12	

College/Graduate School	Program	Inclusion	Limitations on Course Credits		Remarks
			Minimum (Required)	Maximum (Accepted) <sup>1)</sup>	
College of Human Ecology	Master's	Included	3	3	
	Doctoral		6	6	
	Combined master's/doctoral		6	9	
College of Veterinary Medicine	Master's	Included	0	6	
	Doctoral		0	12	
	Combined master's/doctoral		0	18	
College of Pharmacy	Master's	Included	0	6	
	Doctoral		0	12	
	Combined master's/doctoral		0	18	
College of Music	Master's	Not included	0	3	However, majors in Music Theory must earn at least 6 credits
	Doctoral	Included	3	3	However, credits not included for program completion for students majoring interdisciplinary program in Music; 3 credits counted for Western Musicology Major and up to 6 credits counted for Majors in Korean Music
College of Medicine	Master's	Not included	0	6	
	Doctoral		0	12	
	Combined master's/doctoral		0	18	
College of Dentistry	Master's	Included	0	6	
	Doctoral		0	6	
	Combined master's/doctoral		0	12	
Graduate School of Public Health	Master's	Included	6	12	
	Doctoral		6	6	
Graduate School of Public Administration	Master's	Included	0	6	
	Doctoral		0	3	
Graduate School of Environmental Studies	Master's	Included	3	3	
	Doctoral		0	3	
Graduate School of International Studies	Master's	Included	3	3	
	Doctoral		0	12	
Graduate School of Business	No research-related courses offered				
School of Law	Master's	No research-related courses offered			
	Doctoral	Not included	6	6	
School of Medicine	No research-related courses offered				
School of Dentistry	Master's	Not included	8	8	
Graduate School of Convergence Science and Technology	Master's	Included	0	6	
	Doctoral		0	12	
	Combined master's/doctoral		0	18	
Graduate School of International Agricultural Technology	Master's	Included	3	3	

Note <sup>1)</sup> Maximum number of credits include number of minimum required credits.

※ Above table applies to students in the College of Music who were admitted in or after 2007. The same applies to students in the College of Dentistry who reentered in or after 2007.

#### B. Course Credit Calculation

(1) In principle, courses in master's/doctoral program are under one graduate curriculum. A maximum of 12 credits earned more than what is required can be counted as credits earned for the doctoral degree. This is possible only if courses are under one graduate curriculum and within the same department/division of a professional graduate school (except for school of medicine).

※ In the case of colleges that include thesis credits in the credits required for the completion of the master's program, thesis credits may be counted as credits for major courses in the doctoral program.

(2) The extra 12 credits, earned as in (1) above, are counted as long as a grade of B0 or above is given for each course taken for the extra credits. These credits are given when students obtain the President's approval after the credits are evaluated by the Graduate School Academic Committee. Approved course titles and credits must be recorded in the University Registrar. However, credits counting towards master's program, which also count towards doctoral program, are considered as credits indicated in the curriculum modified in 1977.

(3) For credits earned for previous master's/doctoral program for a major at SNU, up to 12 credits for master's and 18 for doctoral can be considered as earned through the same process as in (2).

(4) To count undergraduate credits as master's as well (according to (3) of B. Major course, under 4. Course Completion for Undergraduate Program), the dean of relevant college/graduate school must obtain President's approval after the evaluation of Graduate School Academic Committee. Up to 6 credits are allowed and courses through which credits were earned must be recorded in the University Registrar.

#### C. Transferring Credits earned for Master's or Doctor's degrees from Other Universities(Institutions) (Beginning from the first semester of the academic year 2015)

(1) Credits earned for Master's or Doctor's degrees from other graduate schools can be transferred if they are of equal degree and major program. Students must have earned at least a B0 to transfer credit for the course. Transfer credits are limited to 6 credits for Master's program, 9 credits for Doctor's program, and 15 credits for the combined Master's and Doctor's program.

(2) The aforementioned credits can be recognized only with an academic advisor's recommendation, the confirmation of the chair of department(faculty), the academic council of graduate studies' review, and the president's approval.

(3) If a student receives credits described in section (1) and section (2), his/her graduate school, courses taken, credit and grades will be recorded in the university register. Course grades received in other universities will not count towards our university's GPA.

(4) If courses taken in other universities are recognized, the chair of department(faculty) may disallow the student from taking a course that covers similar content or has the same course name in our university curriculum.

### 6. Precautions on Course Completion

A. In taking courses, students must not retake courses with identical titles (including semester-long and year-long courses) other than those separately designated in the undergraduate/graduate program (example: ROTC, thesis credits, etc.).

B. Students may retake graduate courses (designated as group II courses) which have numbers/titles that are identical but whose subtitles differ from each other. These courses are considered as separate and will allow students to earn distinct credits.

C. Courses with identical titles and taken for either master's or doctoral program must be treated as having repeated the same course, according to regulations on course credit calculation (master's and doctoral as one combined program).

### 7. Grading Scale and Grade Point Average

A. Grades for courses are determined based on an overall evaluation on students' test scores, assignments, attendance, and class participation. Grade point with their corresponding grading scale is as follows (Article 85 of university regulations):

Grading Scale	A <sup>+</sup>	A <sup>0</sup>	A <sup>-</sup>	B <sup>+</sup>	B <sup>0</sup>	B <sup>-</sup>	C <sup>+</sup>	C <sup>0</sup>	C <sup>-</sup>	D <sup>+</sup>	D <sup>0</sup>	D <sup>-</sup>	F	S	U	I
Grade Point	4.3	4.0	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.3	1.0	0.7	0	N/A	N/A	N/A

B. The Grade Point Average (GPA) for a course is calculated by multiplying number of credits by the grade point. Courses graded S (satisfactory) or U (unsatisfactory) are not included in the GPA calculation. For a course graded I (incomplete) due to insufficient data used to calculate a student's grade, the GPA must be calculated after a proper grade has been assigned.

※ S/U courses are indicated in the course catalogue each semester.

C. Students are allowed to earn credits when they receive a D<sup>-</sup> or above for a course. When students retake the same course several



times, they will earn credit through the grade obtained from the latest course taken and the repeat status of the course will be indicated on the academic transcript. However, an exception is made for colleges that apply the Seoul National University Academic Probation Regulations.

- D. In undergraduate programs of the College of Medicine, College of Dentistry, and College of Veterinary Medicine and in the master's programs in the School of medicine, School of Dentistry, and School of Law, students who have failed to maintain their grades on a certain level may be placed on academic probation. Detailed information is provided in the Seoul National University Academic Probation Regulations.

## 8. The Role of the Head of each Department/Division in Administering the Curriculum

According to the regulations in this curriculum, the head of a department/division (including the head of a major or interdisciplinary program) must administer the curriculum flexibly. The head of a department/division must have the following responsibilities:

- A. Must be responsible for overall administration of major courses.
- B. Must guide students to systematically take major courses (including double majors, minors, interdisciplinary majors, combined minors, and student-designed minors).
- C. If courses from other departments/divisions need to be provided to students, the head of a department/division must request those of other departments/divisions to offer relevant courses. Heads of other departments/divisions who have been requested must cooperate by offering courses unless there are special reasons not to do so.
- D. When necessary, the head of a department/division must designate alternative courses for those not offered. When these courses are requisites, the head of relevant department/division must report them to the President via the dean of his/her college/graduate school.

## 9. Curriculum Applicability and Interim Measures

A. The Curriculum is applied to following students:

- (1) College/graduate school entrants since 2011
- (2) College/graduate school entrants since and before 2010 who continue to be enrolled in and after 2011

B. Interim Measures

- (1) When students have taken particular courses according to previous curriculum, they are considered as having taken the same courses according to the new curriculum.
- (2) When students (re)take courses of previous curriculum in order to complete graduation requirements, the following regulations apply:
  - (A) When there are changes in Course Classification
    - 1) In principle, the distinction between GE courses and major courses must not be changed. However, when GE courses have been changed into major courses or vice versa, students will be considered as having taken courses based on the courses' previous classification (GE courses or major courses).
    - 2) When requisite courses are changed into elective courses, they will be considered as elective courses.
  - (B) When certain courses have been discontinued, students may earn credits from such courses as long as there are other courses designated as alternative courses for the discontinued ones.
  - (C) When number of credits for particular courses is changed, students taking these courses must earn credits according to the changed number of credits.
  - (D) When semester-long courses are changed into year-long courses, students who take these courses before the change will be considered as having taken year-long courses.
  - (E) When year-long courses are changed into semester-long courses, students who take courses in any one of the semesters before the change will be considered as having taken semester-long courses.
  - (F) When a lecture course and a laboratory/studio practice course are integrated as one course or two different courses are combined into a single one, students who take any of the previous separate courses will be considered as having taken a combined course.
  - (G) When a single course are divided into a lecture course and a laboratory/studio practice course, credits of each divided course will equal or exceed those of the previously combined course. In this case, students may take only one of the two courses.
- (3) When course regulations have been changed or newly established, students only need to satisfy course requirements that can be fulfilled after the current semester.

C. Designation and Recognition of Alternative Courses

- (1) When discontinuing particular courses, the head of relevant department/division must in principle designate alternative courses so that students can (re)take them in place of the discontinued courses. The designation of alternative courses must be approved by the President (major courses by Dean of Academic Affairs; GE courses by the Dean of the Faculty of Liberal Education).
- (2) When some major courses in the table of the curriculum are not offered and when they are deemed necessary in terms of course requirements, the head of relevant department/division may designate and allow credits to be given for alternative major courses (see 8. D).
- (3) When alternative major courses have been approved of as in category (2) above, the head of relevant department/division must report these courses to the dean of his/her college/graduate school to which they belong within the first quarter of the semester.

<Table 8> Previous Credit Requirements for Undergraduate Program

Classification		Graduation Credits		Credits for Courses in General Education			Credits for Major Courses		Remarks
College	Remarks	Since '96	Before '95	Since '02	'96-'01	Before '95	Since '96	Before '95	
College of Humanities		130	140	36	36	44	42	63	
College of Social Sciences		130	140	36	36	42	39	63	
College of Natural Sciences		130	140	Since '14:44 Since '08:47 '04-07:43 '02-03:36	36	42	Since '04:45 '02-3:39	63	
Department of Preliminary Medicine (course work completed)	Since '13: 74 Class of '12: 73 68	76	Since '14: 41 Since '12: 42 Since '07: 45 Before '06: 41	45	Before '95: 59 Class of '95: 56	Since '13: 23 Class of '12: 22 17	Before '95: 17 Class of '95: 20		
Department of Dentistry (course work completed)	68	Before '95: 76 Class of '95: 81	42	46	Before '95: 59 Class of '95: 56	17	Before '95: 17 Class of '95: 25		
Department of Veterinary Medicine (course work completed)	68	-	Since '13: 45 Since '07: 43 Before '06: 39	43	-	18	-		
College of Nursing		140	142	36	'96-'98: 40 Since '99: 36	42	'96-'98: 100 '96-'99: 94 Since '10: 96	100	
College of Business Administration		130	140	36	36	Before '95: 43 Before '89: 42	48	63	
College of Engineering	all major departments	130	140	Since '13 47(46) '11 53(52) '09: 55(56) '05-'08: 54(55) '02-'04: 37	36	42	Since '11 63 Since '05: 62 Before '04: 51	63	excluding Dept. of Architecture Architecture Major, Industrial Engineering, Nuclear Engineering * Since 2014, GE depends on your Dept.
	Computer Science and Engineering	130	140	Since '14 44(46) '13 47 '11 53 '09 55(56) '05-'08: 54(55) '02-'04: 37	36	42	Since '11 63 Since '08 60 '96-'07 51	63	
	Dept. of Architecture and Architectural Engineering /Architecture majors	160	-	Since '10:37 '09 38 37	-	-	110	-	
College of Agriculture and Life Sciences		130	140	36	36	42	48	63	
College of Fine Arts		130	140	36	36	42	48	63	60 credits from '08 in deepen major
College of Law		140	Law: 140 Public/Private Law: 150	36	36	Law: 36 Public /Private Law: 45	63	63	

Classification College		Graduation Credits		Credits for Courses in General Education			Credits for Major Courses		Remarks
College of Education		130	150	36 (Departments of mathematical/ scientific education: 37)	36	45	'96-'06: 42 Since '07: 52	84	Including teaching certification (major education) credits * Since2014, GE for Dept. of scientific education: 38
College of Human Ecology	Consumer and Child Studies	130	140	Since '06: 42 '02-'05: 36	36	42	Since '08: 48 Since '06: 54 Before '05: 45	63	
	Textiles, Merchandising and Fashion Design, Food and Nutrition	130	140	Since '14: 40 Since '06: 41 '02-'05: 36	36	42	Since '06: 54 Before '05: 45	63	
College of Veterinary Medicine		'96-'97: 158 '98-'99: 155 '00-'06: 149 Since '07: 148	153	-	'96-'97: 36 Since '98: 0	46	'96-'97: 122 '98-'99: 155 Since '00: 149	107	
College of Pharmacy		150	150	Since '05: 37 '02-'04: 36	36	45	109	100	
College of Pharmacy(2+4)		140	-	-	-	-	140	-	Since 2011
College of Music		130	140	36	36	42	48	63	
College of Medicine		148	148	-	-	-	148	148	
College of Dentistry		'97-'03: 158 Since '04: 165	Before '96: 161	-	-	-	'97-'03: 158 Since '04: 165	Before '96: 161	

# Explanatory Notes

## 1. Course Number Designation

- A. General Education Course's Identification number begins with the letter "L". Four digits before the period (.) represent area of study: first two digits indicate GE categories, and the last two digits indicate subject areas. The six-digit number after the period (.) is simply a serial number.  
<Example> L0548.000100 War and Peace in History
- B. Major course's serial number begins with the letter 'M'. Four digits in front of the period (.) represent field of academic disciplines (college, department, major program). The six-digit number after the period (.) is simply a serial number.  
<Example> M1232.000100 Korean Comparative Literature
- C. Courses developed and offered before the implementation of the new 'Next Generation Administration System of SNU(October, 2013)' will follow the previous course serial number indication system.

## 2. Credit Time Designation

- A. The first number after the course title indicates total number of credits; the following number indicates lecture hours per week and the final number indicates laboratory/studio practice hours per week (example: 3-3-0 indicates a 3-credit course that consists of 3 hours of lecture; 3-2-2 indicates a 3-credit course that consists of 2 hours of lecture and 2 hours of laboratory/studio practice).  
If there are any reasons that must be calculated per semester it can be indicated by using bracket (example: 3-(30)-(0)/credit(s)-(total hours of lecture per semester)-(total hours of laboratory/studio practice per semester)).
- B. The course without credit is not permitted.

## 3. Designation of Required Major Courses

In principle, required major courses must be indicated with an asterisk (\*) to the right of their respective course numbers. However, when designating particular courses as requisites, relevant departments/divisions must indicate the requisite status of these courses in their respective course regulations, as in the following examples:

- <Example> ① Addition of an asterisk to the right of course numbers like in 103.205\* and 104.305\*  
② Must take one of the following three courses: 400.013 Introduction to Mechanical Engineering, 400.015 Introduction to Industrial Engineering, and 400.019A Introduction to Electrical and Computer Engineering

## 4. Group II Graduate Course Designation

When it is necessary to change the contents of particular graduate courses per semester/academic year, such courses are designated as group II courses and indicated with a star (\*) to the left of their respective course numbers.

When courses classified as group II courses are offered, they use the same course numbers and titles as their non-group II counterparts but may be assigned different subtitles. Depending on the content of relevant courses, subtitles may change each time courses are offered. Students may retake courses with identical course numbers and titles as long as they differ in their respective subtitles, which are considered as separate courses.

- <Example> \* 101.672 Seminar in Classical Korean Poetry 3-3-0 has been offered under the following subtitles:  
as 101.672 Seminar in Classical Korean Poetry (Kasa) 3-3-0 during the second semester of 1996;  
as 101.672 Seminar in Classical Korean Poetry (Classical Poets) 3-3-0 during the second semester of 1997;  
as 101.672 Seminar in Classical Korean Poetry (Late Chosun Poetry) 3-3-0 during the second semester of 1998;  
as 101.672 Seminar in Classical Korean Poetry (Classical Poetry) 3-3-0 during the second semester of 1999;  
and as 101.672 Seminar in Classical Korean Poetry (Narrative Sijo) 3-3-0 during the second semester of 2000.