# Course Requirements Undergraduate Program

General Course			Basic Course		Major Course			Elective			
Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Mandatory	Elective	Subtotal	Course	Research	Total
7 (8 AU)	21	28 (8 AU)	23	9	32	21	24	45	22	3	130

## A. Graduation Credits

At least 130 credits in total

## B. General Course Requirements: At least 28 credits

• Mandatory General Courses: 7 credits and 8 AU (1 AU means 1 hour activity / work per week for one semester)

- English I, English II, Writing Course : 7 credits
  - \* Students who enter school with high TOEFL scores earn credits for English I or II
- AU is not counted for GPA but is required for graduation.
- Elective General Courses in Humanities & Social Science: at least 21 credits (at least 7 courses)
  - Take (15 credits) 1 course in each of 5 divisions: Science Technology; Literature and Art; History and philosophy; Social Science; Foreign Language and Linguistics; the remaining courses can be chosen regardless of division.
  - \* To complete courses in the Foreign Language and Linguistics Department, students should take at least 1 course in a second foreign language.

## C. Basic Course Requirements: at least 32 credits

- Mandatory Basic Courses: 23 credits (Take one from each of the following 9 categories)
  - ① 1 course: Fundamental Physics I (3), General Physics I (3), or Advanced Physics I (3)
  - 2 1 course: Fundamental Physics II (3), General Physics II (3), or Advanced Physics II (3)
  - ③ 1 course of General Physics Lab I (1)
  - ④ 1 course of Basic Biology (3) or General Biology (3)
  - (5) 1 course of Differential & Integral I (3) or Advanced Differential & Integral I (3)
  - (6) 1 course of Differential & Integral II (3) or Advanced Differential & Integral II (3)
  - ⑦ 1 course: Basic Chemistry (3), General Chemistry I (3) or Advanced Chemistry (3)
  - ⑧ 1 course of General Chemistry Lab. I (1) or Advanced Chemistry Lab II (1)
  - (9) 1 course of Basic Programming (3) or Advanced Programming (3)
- Elective Basic Courses: at least 9 credits (General Chemistry II (3), General Chemistry Lab. II (1))

## D. Major Course Requirements: at least 45 credits

• Mandatory Major Courses: at least 21 credits

Principle of Management, Statistics for Management I, Theory of Microeconomics, Introduction to Information Systems, Managing people and Organization, Principles of Accounting, Operations Research.

• Elective Major Courses: at least 24 credits.

## E. Elective Course Requirements: at least 22 credits

- F. Research Course Requirements: at least 3 credits
  - Please be sure to take 3 credit hours for graduation research.

## G. English Language Requirements for Graduation

- One of the following requirements should be satisfied for graduation before entering school or while in school: (Applied to the students who entered in and after the 1998 academic year).
  - PBT TOEFL (ITP) score: at least 560
  - CBT TOEFL score: at least 220
  - TOEIC score: at least 760
  - TEPS score: at least 670

## H. Minor

- Minor: at least 18 credits
  - Students should take both Introduction to Economics and Introduction to OR. These are taken from among the elective courses in humanities and the general electives. In addition, six more courses (18 credits) are required from the mandatory and elective courses in Management Engineering to include Principles of Business Administration.

#### **Graduate Programs**

## 1) Master's Program: at least 45 credits

(at least 36 credits for coursework + at least 9 research credits).

General Courses	Major	Courses	Research	Total	
General Courses	Mandatory	Elective	Research		
3	12	21	9	45	

• General Courses: 3 credits

CC511 Probability and Statistics

[ substitution: MGT500 Probability and Statistics

MGT502 Statistical Decision Analysis and Forecasting ]

- Mandatory Major Courses: at least 12 credits
  - MGT502 Statistical Decision Analysis and Forecasting
    - MGT506 Mathematical Programming
    - MGT564 Microeconomic Analysis
    - MGT611 Organizational Behavior Theory
- Elective Major Courses: at least 21 credits

① 2 Courses among					
MGT610 Research Methods	MGT613 Strategic Management				
MGT620 Marketing theory	MGT660 Advanced Financial Management				
MGT665 Econometrics	MGT700 Probability Models with Applications				
② 1 Course among					
MGT505 Information Technology and Application					
MGT542 Management Informations System					
MGT587 Introduction of Internet Technology					

• Research: at least 9 credits

#### 2) Doctoral Program: at least 84 credits

(at least 54 credits for coursework + at least 30 research credits)

General Courses	Major	Courses	Research	Total	
Contrai Courses	Mandatory	Elective	Resourch		
3	12	39	30	84	

• General Courses: 3 credits

CC511 Probability and Statistics

[ substitution: MGT500 Probability and Statistics

MGT502 Statistical Decision Analysis and Forecasting ]

• Mandatory Major Courses: at least 12 credits

MGT502 Statistical Decision Analysis and Forecasting	MGT506 Mathematical Programming
MGT564 Microeconomic Analysis	MGT611 Organizational Behavior Theory

- Elective Major Courses: at least 39 credits
- Research: at least 30 credits
  - Personal Research : Be admitted 7 credit
  - Don't admit credits to take in Master's degree