# Major Course Completion Requirement of Department of Management Engineering (Mater's Program)

## Thesis Degree

# Please check the common graduation requirements.

- **Credit Requirement for Graduation:** Min. 45 credits
- Mandatory General Courses: 3 credits & 1AU
  - CC511 Probability and Statistics (3),CC020 Research Ethics and Safety Management I (1AU)

Designation	Substitution	Area
CC511 Probability and Statistics	BA581 Probability and Statistics	All
	BA582 Statistical Decision Analysis and Forecasting	Managerial Economics, Finance, Marketing, Operations Strategy & Management Science, Accounting, IT Management
	BA583 Statistical Analysis for Behavioral Science	Marketing, Technology, Organization and Strategy, IT Management

## ■ Mandatory Major Courses: 3 credits

Area	Designation	Substitution
Finance, Accounting	BA582 Statistical Decision Analysis and Forecasting	BA522 Econometrics BA683 Time Series Analysis and Forecasting
Marketing, IT Management	BA541 Research Methods in Behavioral Science	
Technology, Organization and Strategy	BA541 Research Methods in Behavioral Science	BA741 Advanced Research Methods
Managerial Economics, Operations Strategy & Management Science	BA541 Research Methods in Behavioral Science  BA582 Statistical Decision Analysis and Forecasting	BA522 Econometrics BA683 Time Series Analysis and Forecasting

### **■ Elective Courses :** Min. 30 credits

X Students are required to choose one(or up two) among the below areas.

### 1. Managerial Economics (9 credits)

Classification	Designation	Substitution
	BA521 Microeconomic Analysis	BA621 Microeconomic Theory BA624 Industrial Organization
Mandatory	BA522 Econometrics	BA721 Applied Econometrics
	BA623 Economics of Innovation	BA544 Technological Innovation & Entrepreneurship

### 2. Finance (9 credits)

Classification	Designation	Substitution
Mandatory	BA521 Microeconomic Analysis	BA621 Microeconomic Theory
	BA631 Theory of Finance I	
	BA632 Theory of Finance II	

## 3. Marketing (9 credits)

Classification	Designation	Substitution
Mandatory	BA551 Marketing Theory	
	BA652 Marketing Data Analysis	BA651 Theories in Consumer Behavior
	BA751 Advanced Issues in Marketing	

## 4. Operations Strategy & Management Science (9 credits)

Classification	Designation	Substitution
Mandatory	BA572 Operations Management	
	BA683 Time Series Analysis and Forecasting	
	BA771 Operations Strategy	

# 5. Technology, Organization and Strategy (12 credits)

Classification	Designation	Substitution
Mandatory	BA542 Organizational Behavior BA544 Technological Innovation & Entrepreneurship BA545 Organization Theory BA546 Theoretical Foundation of	
	Strategic Management	

# 6. Accounting (12 credits)

Classification	Designation	Substitution
	BA511 Financial Accounting	BA811 Seminar in Financial Accounting BA813 Empirical Methods in Financial Accounting
Mandatory	BA512 Accounting Information and Capital Market	BA812 Analytical Research in Accounting BA814 Advanced Topics in Accounting Research
	BA521 Microeconomic Analysis	BA621 Microeconomic Theory
Choose 1	BA811 Seminar in Financial Accounting	
	BA812 Analytical Research in Accounting	
	BA813 Empirical Methods in Financial Accounting	
	BA814 Advanced Topics in Accounting Research	

#### 7. IT Management (9 credits)

Classification	Designation	Substitution
Mandatory	BA561 IT Management	
	BA562 Business Modeling Analysis	
	BA563 Business Media and Communication	

#### 8. Green Business (10.5 credits)

Classification	Designation	Substitution
Mandatory	GG501 Green Business Theory and Practice	
	GG510 Green Technologies and Green Industries	
	GG604 Studies on Green Growth Strategy	
Choose	The Green Business and Policy Program courses	

- Green Business and Policy Program substitute courses

GG511 Creating Green Business and Commercialization

[Substitution: MG534 Entrepreneurship and the Entrepreneur]

GG535 Valuation of Green Firms

[Substitution: FMB663, FIN551 Valuation of Green Firms]

GG536 Green Fund Investment Strategy

[Substitution: FMB666Green Fund Investment Strategy]

GG601 Research Methodology for Green Business

[Substitution: BA522 Econometrics,

BA571 Mathematical Programming,

BA863 Research Methodology for Management]

- **Research**: Min. 9 credits (including seminar credits)
  - O Seminar: BA966 (required)

("CC010 Leadership Lecture" is counted as seminar)

- O Personal Research: up-to 3 credit
- O Student of double major green business are required more than 1/3 whereas more in-depth study on green business.

<ul> <li>English Proficiency Requirement:</li> <li>Students are required to complete min. two English Courses.</li> <li>BUS927 Business Presentation, BUS929 Academic Writing in English</li> <li>This requirement can be waived for the students who have passed English screening test.</li> </ul>
<ul> <li>☐ Transitional Measures</li> <li>☐ MS in Account students entered in 2013</li> <li>☐ Students can take substitute course for 'BA512 Accounting Information and Capital Market' with an approval from their advising faculty and head of School of Management Engineering ('9 credits maximum rule for other departments does not apply).</li> </ul>
Students entered in/before 2014 can substitute 'BA543 Seminar or Strategy Implementation' to 'BA543 Strategic Management', 'BA546 Theoretical Foundation of Strategic Management' to 'BA743 Advanced Strategic Management'.
— Students entered in 2015 can substitute BA743 Advanced Strategic Management' to 'BA546 Theoretical Foundation of Strategic Management'
Students entered in/before 2009 can substitute 'MGT500 Probability and Statistics' or 'BA581 Probability and Statistics'.

# Major Course Completion Requirements for Department of Management Engineering, (Doctoral Program)

## Please check the common graduation requirements.

- Credit Requirement for Graduation: Min. 66 credits
  - O Not required, if you have already fulfilled this in the master's program.
- Mandatory General Courses: 3 credits & 1AU
  - CC511 Probability and Statistics (3),CC020 Research Ethics and Safety Management I (1AU)

Designation	Substitution	Area
CC511 Probability and Statistics	BA581 Probability and Statistics	All
	BA582 Statistical Decision Analysis and Forecasting	Managerial Economics, Finance, Marketing, Operations Strategy & Management Science, Accounting, IT Management
	BA583 Statistical Analysis for Behavioral Science	Marketing, Technology, Organization and Strategy, IT Management

### ■ Mandatory Major Courses: 3 credits

Area	Designation	Substitution
Finance, Accounting	BA582 Statistical Decision Analysis and Forecasting	BA522 Econometrics BA683 Time Series Analysis and Forecasting
Marketing, IT Management	BA541 Research Methods in Behavioral Science	
Technology, Organization and Strategy	BA541 Research Methods in Behavioral Science	BA741 Advanced Research Methods
Managerial Economics, Operations Strategy & Management Science	BA541 Research Methods in Behavioral Science  BA582 Statistical Decision Analysis and Forecasting	BA522 Econometrics BA683 Time Series Analysis and Forecasting

# ■ Elective Courses: Min. 30 credits

X Students are required to choose one(or up two) among the below areas.

### 1. Managerial Economics (12 credits)

Classification	Designation	Substitution
Mandatory	BA521 Microeconomic Analysis	BA621 Microeconomic Theory BA624 Industrial Organization
	BA522 Econometrics	BA721 Applied Econometrics
	BA622 Game Theory and Applications	
	BA623 Economics of Innovation	BA544 R&D, Innovation and Entrepreneurship

### 2. Finance (9 credits)

Classification	Designation	Substitution
	BA631 Theory of Finance I	
	BA632 Theory of Finance II	
Mandatory	BA635 Empirical Studies in Finance	BA732 Empirical Corporate Finance BA734 Empirical Asset Pricing BA736 Empirical Research in Capital Markets BA737 Financial Econometrics

## 3. Marketing (9 credits)

Classification	Designation	Substitution
Mandatory	BA551 Marketing Theory	
	BA652 Marketing Data Analysis	BA651 Theories in Consumer Behavior
	BA751 Advanced Issues in Marketing	

## 4. Operations Strategy & Management Science (15 credits)

Classification	Designation	Substitution
	BA521 Econometrics	BA621 Microeconomic Theory
	BA522 Econometrics	
Mandatory	BA572 Operations Management	
	BA683 Time Series Analysis and Forecasting	
	BA771 Operations Strategy	

# 5. Technology, Organization and Strategy (18 credits)

Classification	Designation	Substitution
Mandatory	BA542 Organizational Behavior	
	BA543 Seminar on Strategy Implementation	
	BA544 R&D, Innovation an Entrepreneurship	d
	BA545 Organization Theory	
	BA546 Theoretical Foundation of Strategic Management	
Choose 1	BA741 Advanced Research Methods	
	BA744 Advanced Technology and Innovation Management	BA623 Economics of Innovation

## 6. Accounting (18 credits)

Classification	Designation	Substitution
Mandatory	BA521 Microeconomic Analysis	BA621 Microeconomic Theory
	BA522 Econometrics	BA681 Multivariate Statistical Analysis BA683 Time series analysis and forecasting
	BA632 Theory of Finance II	
Choose 3	BA811 Seminar in Financial Accounting	
	BA812 Analytical Research in Accounting	
	BA813 Empirical Methods in Financial Accounting	
	BA814 Advanced Topics in Accounting Research	

### 7. IT Management (15 credits)

Classification	Designation	Substitution
Mandatory	BA561 IT Management	
	BA562 Business Modeling Analysis	
	BA563 Business Media and Communication	
	BA764 Classical Readings in Information Systems Research	
	BA863 Research Methodology for Management	

### 8. Green Business (13.5 credits)

Classification	Designation	Substitution
Mandatory	GG501 Green Business Theory and Practice	
	GG510 Green Technologies and Green Industries	
	GG604 Studies on Green Growth Strategy	
Choose	Green Business and Policy Prograr	n substitute courses

- Green Business and Policy Program substitute courses

GG511 Creating Green Business and Commercialization

[Substitution: MG534 Entrepreneurship and the Entrepreneur]

GG535 Valuation of Green Firms

[Substitution: FMB663, FIN551 Valuation of Green Firms]

GG536 Green Fund Investment Strategy

[Substitution: FMB666Green Fund Investment Strategy]

GG601 Research Methodology for Green Business

[Substitution: BA522 Econometrics,

BA571 Mathematical Programming,

BA863 Research Methodology for Management]

<ul> <li>Research: Min. 30 credits (including seminar credits)</li> <li>Must take 30 credits of research courses including 2 seminars 'BA986'.</li> <li>Research credits taken in Master program do not apply to fulfill the requirement</li> <li>Personal Research: up-to 7 credit</li> <li>Student of double major green business are required more than 1/3 whereas more in-depth study on green business.</li> </ul>
<ul> <li>English Proficiency Requirement:</li> <li>Students are required to complete min. three English Courses.</li> <li>BUS927 Business Presentation BUS928 Teaching Effectiveness in English BUS929 Academic Writing in English</li> <li>BUS927 and BUS929 can be waived for the students who have passed English screening test</li> <li>Students are required to obtain level 8(Advanced-Mid) or higher score in OPI Test before final evaluating dissertations for requesting degrees.</li> </ul>
Credits earned from other departments at KAIST(Optional) Credits earned from other departments can be transferred towards graduation requirement. A maximum of 18 credits can be transferred, but credits earned during the current degree must not exceed 9 credits.  (Students whose double-major was Green Business and Policy will have no limits in credit transfers.)  Credits earned from other universities by credit exchange:  If approved by the Head of the school, Accepted as a course in the
School of Management Engineering
Completion of Business Basic Course  Doctoral students of bachelor's degree in Non-Business Administration must complete 3 Credits excluding courses on one's major.
Transitional Measures  O If students entered in 2017 take BA986 seminar while in school, it is recognized for completion in the first year.