

## Ecodesign II

Course Name	Course type (credit/hours)	Elective course(3/3)	Course code	E027
	Target students Division/major/grade	Environmental and safety Engineering/Senior	Opening semester	2018 1ST SEMESTER
	Class time and classroom	Wed 10(CDL106) Wed 11(CDL106) Wed 12(CDL106)	English Grade	A(100%English)
Reference to this course	Prerequisite courses	없음		
	Related basic courses	LCA & EPD		
	Recommended concurrent courses	Ecodesign 1		
	Related advanced courses	없음		

Instructor	Name (title/division)		Kun-Mo Lee(Professor, Environmental and safety Engineering)			
	Office Room Number	팔달관 706	Office phone Number	2405	e-mail	
	Office hours	By appointment		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number	서관 241호	Office phone Number	2409	e-mail	

### 1. Introduction

An ecodesign method based on the 12 step procedure is applied to an actual product of your group's choice. The objective of the lab exercise is to gain practical ecodesign experience by applying the ecodesign theory to the environmental improvement of a product.

### 2. Course Objectives

To learn principles of Ecodesign method.  
 Ability be able to understand the knowledge of mathematics, basic science, information Tech. and Engineering  
 Ability be able to arrange the time table for the experiment  
 Ability be able to recognize main problems from the engineering perspective  
 Ability be able to work out as an one of group members  
 Ability ba able to communicate with the others

### 3. Class types and activities

Lecture in English  
Exercise, Group presentation and Discussion.

### 4. Teaching Method

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> lecture                                     | <input checked="" type="checkbox"/> discussion and debate         |
| <input checked="" type="checkbox"/> team project(presentation and case studies) | <input checked="" type="checkbox"/> experiments(role-playing,etc) |
| <input type="checkbox"/> designing and production                               | <input type="checkbox"/> on-site learning(on-site training)       |
| <input type="checkbox"/> others   |   |

### 5. Support Systems in Use

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> AjouBb               | <input type="checkbox"/> automatic recording system | <input type="checkbox"/> web-based assignment |
| <input type="checkbox"/> cyber lecture                   | <input type="checkbox"/> online content             |   |
| <input type="checkbox"/> class behavior analyzing system | <input type="checkbox"/> others                     |   |

### 6. Teaching Tools

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> PBL(Problem Based Learning) | <input checked="" type="checkbox"/> CBL(Case Based Learning) | <input checked="" type="checkbox"/> TBL(Team Based Learning) |
| <input type="checkbox"/> UR(Undergraduate Research)  | <input type="checkbox"/> FL(Flipped Learning)                | <input type="checkbox"/> DSAL(Data Science Active Learning)  |
| <input type="checkbox"/> others                      |  |  |

### 7. Knowledge and ability required for taking this course

- Presentation skill
- Computer(Exel,PPT,etc.)
- English

## 8. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance		10%	Attendance
midterm exam			
final exam			
quiz			
presentation		40%	Presentation (participation)
discussion			
homework		50%	Final report
etc			
study hours	3hrs/week		

## 9. Textbook and supplementary material

Main/Sub	Title (Web-site)	Writer	Publisher	Publication year
Etc	강의자료			
Sub	Life Cycle Assessment ; Best practices of ISO14040	Kun-Mo Lee and Atsushi Inaba		2004
Main	ECODESIGN Implementation	Kun-MoLee, WimmerW, ZusterR	Springer	2004
Sub	Ecodesign Pilot	WolfgangWimmerandTainerZus	Kluweracademic	2001
Sub	ECODESIGN:The Competitive Advantage	Kun-MoLee, WimmerW., QuellaF.,	Springer	2010

## 10. Class system and Class shedule

An ecodesign method based on the 12 step procedure is applied to an actual product.

## < Class Schedule >

\* language : K-korean, E-English

Weeks	Topics	language	Instructor	Teaching Method	Evaluation Method	Matter to be prepared
1	Introduction:Sustainableproduct	E	Kun-Mo Lee	seminar		
2	Generic product development process I	E	Kun-Mo Lee	seminar		
3	Generic product development process II	E	Kun-Mo Lee	seminar		
4	Ecodesign introduction	E	Kun-Mo Lee	seminar		
5	Ecodesign 12 steps	E	Kun-Mo Lee	seminar		
6	Productmodeling(chap.1)	E	Kun-Mo Lee	lab.		
7	Ecodesign implementation I (chap.3)	E	Kun-Mo Lee	lab.		
8	Ecodesign implementation II (chap.3)	E	Kun-Mo Lee	lab.		
9	Ecodesign implementation III (chap.3)	E	Kun-Mo Lee	lab.		
10	Ecodesign implementation IV (chap.3)	E	Kun-Mo Lee	lab.		
11	Ecodesign implementation V (chap.3)		Kun-Mo Lee	lab.		
12	Ecodesign implementation VI (chap.4)		Kun-Mo Lee	lab.		
13	Ecodesign implementation VIII (chap.4)		Kun-Mo Lee	lab.		
14	Ecodesign implementation VIII (chap.4)		Kun-Mo Lee	lab.		
15	Final report		Kun-Mo Lee	report		
16			Kun-Mo Lee			

## 11. Other items of notification