



## Course Syllabus:

# Industrial Design BA (A), Sketching and Modeling Techniques, 6 Credits

## General data

<b>Code</b>	IU090G
<b>Subject/Main field</b>	Industrial Design
<b>Cycle</b>	First cycle
<b>Progression</b>	A
<b>Credits</b>	6.00
<b>Progressive specialisation</b>	First cycle, has only upper-secondary level entry requirements
<b>Answerable department</b>	Department of Industrial Design
<b>Established</b>	2011-06-01
<b>Date of change</b>	2016-03-24
<b>Version valid from</b>	2016-07-01

## Aim

The aim of the course is to make the student well prepared to be able to use basic as well as advanced sketching and modeling techniques when working with design in the design process.

## Course objectives

The student should be able to:

### Part I

Sketching techniques:

- carry out rendered sketches in a variation of three-point perspectives.

Modeling techniques:

- with the technique be able to visualise; type of idea model, overall idea functions and traditional production methods of plastic products.
- be able to carry out a model with insights of finish and quality.

### Part II

Sketching techniques:

- carry out advanced rendering, explosive views as well as topic modeling with traditional techniques.

Modeling techniques:

- with the technique be able to visualise; shape of refined idea model, overall functions and traditional production methods of plastic products.
- carry out a refined idea model with insights of finish and quality.

### Part III

Sketching techniques:

- in a faithful and transparent manner be able to animate a design proposal with lightning, surfaces and material reproduction in different contextes with the help of digital tools.

Modeling techniques:

- be able to model the design proposals in a digital environment for rendering as well as for presentation pictures and for the production of a physical model in a rapid prototyping machine.

## Content

### Part I

Sketching techniques:

- Three-point perspective
- Rendering
- Surfaces and material resemblance
- Presentation sketches, backgrounds

Modeling techniques:

- Light foamed polymers

### Part II

Sketching techniques:

- Advanced rendering
- Topic modeling
- Exploded views
- Cutaway drawing

Modeling techniques:

- Medium-weight foamed polymers

### Part III:

Sketching techniques:

- Digital rendering on basic and advanced level
- Lightning, surfaces and material reproduction
- Design presentations, backgrounds, environments
- Shape, composition
- Technological concepts

Modeling techniques:

- Digital modeling
- Modeling for rapid prototyping

## Selection rules and procedures

The selection process is in accordance with the Higher Education Ordinance and the local order of admission.

## Teaching form

The teaching consists of seminars and workshops where everyone participates, compulsory attendance. In addition to teacher supervised time the course is conducted as group work and independent studies.

## Examination form

2.0 credits, I101: Assignment I

Grades: Pass (P) or Fail (F)

2.0 credits, I201: Assignment II

Grades: Pass (P) or Fail (F)

2.0 credits, I301: assignment III

Grades: Pass (P) or Fail (F)

Grading criteria for the subject are available at  
<http://www.miun.se/en/Student/Services/Grading-Criteria/>.

## Grading system

Fail (U) or Pass (G)

## Course reading

### Required literature

**Author:** Olofsson Erik, Sjöln Klara  
**Title:** Design Sketching  
**Edition:** 2005  
**Publisher:** KEEOS Design books  
**URL:** [www.designsketching.com](http://www.designsketching.com)