

## Course guide

### 320141 - EA - Artistic Expression

**Last modified:** 11/04/2025

**Unit in charge:** Terrassa School of Industrial, Aerospace and Audiovisual Engineering  
**Teaching unit:** 717 - DEGD - Department of Engineering Graphics and Design.

**Degree:** BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2010). (Compulsory subject).

**Academic year:** 2025    **ECTS Credits:** 6.0    **Languages:** Catalan

#### LECTURER

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**Coordinating lecturer:** Voltas Aguilar, Jordi

**Others:** Quin Voltas, Josep Oriol

#### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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**Specific:**

CED20-DIDP. Ability to design and project in different environments of effective and efficient communication with the different agents involved in the industrial design and development process. (Specific technology module: industrial design).

CED21-DIDP. Ability to make decisions regarding the graphic representation of concepts. (Specific technology module: industrial design).

CED22-DIDP. Ability to apply specific methods, techniques and instruments for each form of technical representation. (Specific technology module: industrial design).

CED23-DIDP. Knowledge of design topology, products, and their presentation. (Specific technology module: industrial design).

CED62-DIDP. Practical ability to analyze the form, composition, and structure of the product. (Specific technology module: Industrial Design)

**Generical:**

CG01-DIDP. Ability to conceive, develop, understand and execute the product design process, within a necessary balance between technical and socio-cultural context, responding to the needs of the company, the market, society and users.

#### TEACHING METHODOLOGY

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Methodology is based in practical and theoretical classes. A theoretical introduction will be done at the beginning of every class. This introduction will explain the projects.

Pencil, graphite, ink, colour materials and computer programs will be used to represent objects and personal creations during the course.

The Practice Based Learning consists of improving image manipulation and the use of tools, techniques, materials, processes and specific skills.

The first seven weeks, freehand exercises will be done, and the seven last week students will do a project (including freehand exercises and using computer programs).

#### LEARNING OBJECTIVES OF THE SUBJECT

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To familiarize students with the knowledge of image perception and different elements and laws that forms the image perception.

To learn the qualities of each visual element and its implementation.

To boost skills, ingenuity and ability to analyze an industrial product and communicate it with visual language. Application of colour, texture and light in artistic expression.

To know the planning process in industrial design and apply the right techniques.

To develop the ability to analyze and draw correctly.

## STUDY LOAD

Type	Hours	Percentage
Hours small group	30,0	20.00
Hours large group	30,0	20.00
Self study	90,0	60.00

**Total learning time:** 150 h

## CONTENTS

### TOPIC 1: Visual Perception

**Description:**

Image as language  
Shape as an object representation  
Image as the representation of shape  
Visual language syntax  
Feeling, intuition, creativity in design practice  
Methodology for design creativity

**Specific objectives:**

Empowering the development of creativity

**Related activities:**

Av. 1 Make photographs of daily situations: reflections on water, metal and glass.

**Full-or-part-time:** 9h

Theory classes: 2h

Practical classes: 2h

Self study : 5h

### TOPIC 2: Type of materials (working tools) and its use

**Description:**

- General description of different techniques, instruments, materials pencil, felt tip pen, pen, and brushes
- Paper: type, quality, presentation and formats
- Auxiliary instrumentation

**Specific objectives:**

Familiarize the student in the use of tools, processes and materials

**Related activities:**

Av. 2 Analysis of consumer products

**Full-or-part-time:** 9h

Theory classes: 2h

Practical classes: 2h

Self study : 5h

### TOPIC 3: Perspective

**Description:**

Axonometric system

Orthogonal parallel projection, Isometric. Dimetric, Trimetric...

Perspective elementary bodies.

Shadows on the conical perspective. Light and shadow. The size and depth depending on the light.

Fundamental forms. Surfaces. Intersections.

**Specific objectives:**

To apply the acquired knowledge and to reinforce the practice of the systems of representation

**Related activities:**

Av. 3 Analysis of photographs taken at Av. 1

**Full-or-part-time:** 30h

Theory classes: 5h

Practical classes: 5h

Self study : 20h

### TOPIC 4: Analyse shapes

**Description:**

- Introduction to the analysis of different shapes
- Geometric construction of the objects
- Find basic shapes of different objects

**Specific objectives:**

Develop the observation of forms and their dimensional relationships

**Related activities:**

Av. 4 To analyze pictures appearing in different adds.

**Full-or-part-time:** 30h

Theory classes: 5h

Practical classes: 5h

Self study : 20h

## TOPIC 5: Object representation

### Description:

Design as a process  
Sketches  
Analytical drawing  
Descriptive drawing  
Lace  
Proportion and scale  
The human proportion  
Composition  
The frame  
Textures  
Expressive possibilities  
Texture as a visual and graphic appeal  
Qualities of the surface  
Processes for the production of textures: photographic slides, frames and other techniques  
Qualities of surfaces  
Psychological effects of textures  
Representative materials  
Technical aspects of textures. Materials, techniques and process

### Specific objectives:

To deepen in the expressive possibilities of the representation of objects

### Related activities:

Av. 5 Layout of the different components of a mechanical set.

### Full-or-part-time: 30h

Theory classes: 5h

Practical classes: 5h

Self study : 20h

## TOPIC 6: Colour

### Description:

Physical Nature  
Additive and subtractive mixtures. Light colour, colour field.  
Ranges and chromatic modulations  
Shade, value, saturation  
Colour ranges  
Harmony and contrast  
Colour and culture. Colour and symbol  
Perceptive. Aerial perspective  
Colour as a plastic material (pigment, binder and diluents in different techniques)  
Materials textures. Physical texture and visual texture

### Specific objectives:

Practice and develop skills in the realization and presentation of ideas

### Related activities:

Av. 6 Presentation of a project of own creation

### Full-or-part-time: 22h

Theory classes: 1h

Practical classes: 1h

Self study : 20h

## ACTIVITIES

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### (ENG) PROVA PARCIAL

**Description:**

Making a statement where they intervene the different objectives and contents of the first part

**Specific objectives:**

Exercising in practice by adding a temporary component

**Material:**

The one suitable for the practice of the subject

**Delivery:**

Evaluable test

**Full-or-part-time:** 3h

Theory classes: 3h

### (ENG) PROVA FINAL

**Description:**

Completion of a statement where they intervene the different objectives and contents of the first and second partial

**Specific objectives:**

Exercising in practice by adding a temporary component

**Material:**

The one suitable for the practice of the subject

**Delivery:**

Evaluable test

**Full-or-part-time:** 3h

Theory classes: 3h

## GRADING SYSTEM

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The portfolio including all the activities done during the first half course will be presented during the week of exams.

The unsatisfactory results of the practices can be redirected through the delivery (during the course and before the end of December) of repeated exercises to improve grade.

The grade of the repeated practices will replace the note that you want to improve.

The grade obtained by the application of the renewal will replace the initial grade as long as it is higher.

Activities can be passed only if the professor supervises them in class.

Creativity will be valued.

Weekly Activities: 50%

Project along course: 30%

Individual exam: 10%

Individual exam: 10%

For those students who meet the requirements and submit to the reevaluation examination, the grade of the reevaluation exam will replace the grades of all the on-site written evaluation acts (tests, midterm and final exams) and the grades obtained during the course for lab practices, works, projects and presentations will be kept.

If the final grade after reevaluation is lower than 5.0, it will replace the initial one only if it is higher. If the final grade after reevaluation is greater or equal to 5.0, the final grade of the subject will be pass 5.0.

## EXAMINATION RULES.

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1. Classes are practical and theoretical.
2. Every student has to bring their own material.
3. Theoretical content will be done during theoretical classes and also in practical classes.
4. Some activities will be done during the first part and last part of the course.
5. All exercises and assistance (during all the course) is required for evaluation of the subject
6. Practical exercises can be finished outside class time. Exercises that have not been supervised by the professor will not be approved.
7. Students will work with A4 paper size (unless some particular activities)

## BIBLIOGRAPHY

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