Universidad Zaragoza

Academic Year of Degree: 2026/27

25888 - Photography, Composition and Image Edition

Teaching Plan Information

Academic year: 2026/27
Subject: 25888 - Photography, Composition and Image Edition
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Tipo de enseñanza: In person
Ambit: Industrial engineering, mechanical engineering, automatic engineering, industrial organization engineering, and navigation engineering
Degree: 558 - Bachelor's Degree in Industrial Design and Product Development Engineering
ECTS: 6.0
Year: 4
Semester: First semester
Subject type: Compulsory
Module:

1. General information

The subject aims to complement the training of students in terms of knowledge of the communicative possibilities of the industrial product and the image created from it.

Knowledge about the presentation of industrial products requires a series of visual communication skills, such as narrative, technical and creative management, gaining relevance both in the capture and editing of images.

With this objective in mind, we propose the integration of digital tools that provide images that respond to the objectives set, while at the same time have an outstanding aesthetic and informational component.

2. Learning results

- Understand the operation of a camera and the basic accessories required.
- Be capable of capturing still images using the optimum combination of photographic equipment and accessories.
- Properly control camera settings and parameters.
- Be able to obtain correct images under different lighting conditions, both natural and artificial.
- Know how to obtain photographic images with the appropriate quality for later use.
- Master the basic concepts related to the composition and manipulation of photographic images.
- Know the most common formats, manipulation tools and reproduction techniques for photographic images.
- Be capable of advanced and appropriate manipulation of photographic images.
- Be able to make use of the full potential of photographic images in their professional activity.
- Master the basic concepts related to the composition and manipulation of digital images.
- Know the most common formats, manipulation tools and reproduction techniques for photographic images.
- Be capable of advanced and appropriate manipulation of photographic images.
- Be able to make use of the full potential of photographic images in their professional activity.

3. Syllabus

Static imaging

- Origins and evolution of photography. Genres and styles.

- Image narrative, art direction and photography. Framing, composition and angulation.

- Photographic cameras and parameter control. Formation of the photographic image. Camera formats and types. Diaphragm and f-numbers. Shutter speed. ISO/ASA.

- Industrial photography and product photography.

- Product still life design.

- Lenses, objectives and optical filters.

- Natural lighting. Artificial lighting. Characteristics and expressive possibilities.

Image composition and editing

- The human visual system: perception of images.

- Components of a digital image editing system: digitalization, manipulation, storage, and reproduction.

- High dynamic range: problem, formats, tone reproduction and manipulation.
- Color representation. Representation of transparency.
- Static digital image. Treatment: Basic operations. Interpolation. Histograms. Filters. Compression of images. Formats.
- Image integration and postproduction techniques: color correction, use of layers, and other digital effects.
- New editing and image generation techniques: Deep learning models in photography.

4. Academic activities

Classroom activities (lectures, cases, and laboratory practices): 60 h

Carrying out practical application or research work: 45 h

Personalized teacher-student mentoring: 5 h

Study and personal work: 30 h

Assessment tests. 10 h

5. Assessment system

Students can pass the course by completing a continuous assessment, which will be graded out of 10 points according to the following proportions:

· Directed work: 40%
· Performance and submissions corresponding to practical sessions: 40%
· Written exam: 20%

To pass the course through continuous assessment, a minimum weighted average grade of 5/10 and a grade higher than 4/10 must be obtained in each of these three components and for each of the two modules of the course (image acquisition and image editing). If the minimum required grade is not obtained in any of the three components, the final grade for the course will be the lower of the weighted average and 4. Furthermore, to pass the course through continuous assessment, it is essential to submit all assigned practical work and projects on time and in the required format.

All students who opt for continuous assessment must:

· Submit all practical work and projects on time and in the required format to be eligible for passing.

· Provide the requested evidence of authorship for the work. Otherwise, the grade for that work will be 0.
Note: Fraudulent use of AI tools will result in a failing grade for the course.

Students who do not choose the evaluation procedure described above, do not pass the assessments during the teaching period, or wish to improve their grade, will have the right to take a comprehensive exam that may include: a theoretical and/or practical exam, along with one or more projects with oral presentations specifically designed for this evaluation method.

5.1. Academic fraud prevention

The use of unauthorised electronic materials or devices during the assessment may result in immediate exclusion from the examination and a fail mark (a numerical mark of ‘0’ for the assessment).

Furthermore, the lecturer in charge may complete the grade report and submit it to the General Inspectorate of Services, so that it may, where appropriate, consider initiating disciplinary proceedings against the student for academic fraud.

In the case of a continuous assessment exam [continuous assessment cannot continue, unless otherwise specified in the academic guide.]

In the case of a regular or extraordinary exam session, the initiation of disciplinary proceedings will result in the grade ‘pending resolution’ until the proceedings are concluded.

6. Sustainable Development Goals

4 - Quality Education
10 - Reduced Inequalities

7. Bibliography

Delgado Álvarez, J. D. (2022). *Elaboración de un manual de fotografía de producto para fotógrafos profesionales* (Bachelor's thesis).

Freeman, M. (2019). *The Photographers Eye: A graphic Guide: Instantly Understand Composition & Design for Better Photography*. Hachette UK.

Gil, P. (2022). *Fotografía de producto y publicitaria*. Anaya Multimedia.

Hunter, F., Biver, S., & Fuqua, P. (2015). *La Luz: ciencia y magia*. Anaya Multimedia.

Peterson, B. (2017). *Los secretos de la exposición fotográfica.* Ediciones Tutor, SA.

Sans, M. (2019). *Aprende a fotografiar productos como un profesional*. Editorial GG.

Soriano, T. (2020). *Ayúdame a mirar. La biblia del reportaje gráfico*. Anaya Multimedia.

Vázquez, R. I. (2020). *Proyecto fotográfico personal: Guía completa para su desarrollo: de la idea a la presentación*. JdeJ editores.