
Bachelor in Interior Design

Teaching guide

Academic Year 2022/2023

Computer-aided drawing and infographics II

Subject information

Title

Bachelor in Interior Design

Type

Compulsory

Module

Artistic

ECTS Credits

6

Subject

Computer-aided drawing and infographics II

Learning

On-site learning

Code

3639

Lecturer

Alejandro Carrasco Hidalgo

Year

First

Language

English

Semester

Second

Subject Lecturer

Lecturer

Alejandro Carrasco Hidalgo

Academic tutorials

For any enquiries regarding the subject, students can contact the lecturers by email or during their office hours.

Contact

alejandro.carrasco@esne.es

Pre-requisites

Essential

Specific requirements of the curriculum

Recommended

Have passed Computer-aided drawing and infographics I

Subject contribution to the Curriculum

Subject's field of knowledge

This course is part of the Artistic module and complements the hand-drawing tools learnt in other courses applying them within digital environments.

Interdisciplinary relation with other subjects from the curriculum

The course is a continuation of Computer-Aided Drawing and Infographics I, whose content is needed to follow the second part of the course. It is connected with all the courses that address the question of architectural representation, since the use of digital tools is not something isolated but rather connected to other drawing techniques.

Professional motivation of the subject

Within this course, the student will acquire the necessary knowledge to represent architectural projects using digital tools. The connection with professional environments is clear since the production of infographic material is needed to communicate spatial ideas in a daily basis.

Learning outcomes in relation to the competences developed through the subject

General competences

CG01. Know and understand artistic and social manifestations that have an impact on interior design from an historical perspective.

CG02. Know the design tools used in the field of interior design.

Basic competences

CB4. Students can transmit information, ideas, problems and solutions to both specialized and non-specialized audiences.

CB5. Students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

Transversal competences

CT01. Search, select, analyze and integrate information from different sources.

CT02. Choose the strategies, tools and moments you consider most effective for learning and independently implementing what you have learned.

CT03. To adapt to conceptual, instrumental and work environment changes based on the training received.

CT04. Manage time and resources efficiently.

CT07. Use materials, resources and technologies in a responsible, safe and efficient way.

CT10. Communicate and express themselves with confidence and creativity in various languages, taking into account the recipient and the environment.

Specific competences

CE01. Know the fundamentals of metric geometry in interior design

CE02. Know the analysis and theory of form and the laws of visual perception to apply them in the design of spaces

CE03. Use spatial representation procedures in interior design projects

CE04. Use computer aided programs to design spaces and environments.

Learning outcomes

By the conclusion of this course, students will understand/be able to:

- Produce photorealistic infographics of interior spaces.
- Represent three-dimensional spaces using non-photorealistic methods: collage / illustration

Contents / Syllabus / Units

Brief description of the contents

- Digital modelling of three-dimensional objects.
- Texturing and mapping of entities.
- Lighting and preparation of interior scenes.
- Image rendering and export configuration.
- Postproduction of infographics.
- Representation of three-dimensional spaces through non-photorealistic tools

Syllabus

The course program is based in a constructive learning model that looks for the development of a critical thinking attitude. The proposed pedagogy aims to propose tools and strategies to solve the proposed problems, so students look for independent solutions that stimulate their behavior through an active academical activity.

1. Tridimensional constructions.

Object modelling in 3DsMax

- Spline modelling.
- Polygonal modelling.

2. Lights, camera, textures and action!

- Texturing objects in VRay.
- Creation of original textures and implementation of external textures.
- Lighting of architectural scenes in VRay. Direct and indirect lights.
- Camera placing. The importance of points of view. Configuration and artistic/compositive work to obtain images.
- Rendering configuration: obtaining photorealistic infographics from three-dimensional digital scenes.

3. Production and Postproduction. Other formats.

- Image postproduction in Adobe Photoshop.
- Development of non-photorealistic drawings: illustration and collage.
- Interconnections with other software: perspectives and axonometries.

Schedule

Units / Topics	Period
1. Unit 01. Tridimensional Constructions	Sesiones 1, 2, 3, 4, 9
2. Unit 02. Lights, camera, textures and action!	Sesiones 5,6,7,8,10,11
3. Unit 03. Production and Postproduction. Other formats.	Sesiones 12,13,14,15

Learning activities and teaching methodologies

Learning activities	Teaching Methodologies	Hours	% On-site
<p>Lectures</p> <p>Face-to-face lessons given by lecturers in-class</p>	<p>Lecture</p> <p>The professor introduces a topic to teach concepts, theories, ... in the classroom</p>	20	100
<p>Workshops</p> <p>In each subject, projects or practical cases where the student must analyse the information, detect relevant aspects, make decisions or propose solutions to improve the situation, are proposed.</p>	<p>Work-based learning and/or case studies</p> <p>The teacher proposes projects or practical cases for students to analyse and solve them, applying the contents previously learned.</p>	40	100
<p>Tutorials</p>	<p>The tutor solves questions on matters already discussed In class</p>	10	0
<p>Final exam</p>	<p>Final exam</p>	4	100
<p>Autonomous work</p>	<p>Student's personal learning through the study of the subject's contents and the reading and analysis of complementary materials</p>	76	0

Learning Assessment

Assessment activities	Assessment criteria	Weight
Final exam	Exam marking	20%
Work completed or case studies	Activities carried out on time. Objectives met.	70%
Assistance and participation in class	Interest and participation in the subject.	10%

General assessment criteria

A percentage of the final mark/assessment will evaluate the participation and implication of the student in the seminars (10%). Another part (70%) will correspond to the different practical submissions that will take place along the course. The remaining 20% will correspond to the final exam.

Attendance

Attendance to the sessions is mandatory. If the attendance by the end of the course is lower than 80%, the student won't be allowed to undertake the final exam and it will be necessary to take the 2nd call exam. It is not necessary to justify the absences, the 20% of allowed absences includes justified and unjustified absences.

Punctuality will be required at the beginning of the sessions. The student will be allowed to enter up to 10 minutes late. If the student arrives later,

attendance to the session could be denied.

Activities submission

During the course the students must present all the required contents and submissions. If there is any task that has not been submitted by the end of the course, the student may not pass the subject.

Submissions have to be delivered in time, not being admitted late submissions. If any task is exceptionally accepted out of time, it will be automatically evaluated with a maximum mark of 5.

1st call assessment

The minimum mark to pass the course is a 5 (five). Regarding the exam, it is mandatory to have at least a 4 (four), to pass the subject.

2nd call assessment

Failed submissions must be resubmitted for the 2nd call assessment in order to pass the course. It may be possible to require an extra submission if considered pertinent by subject supervisors.

Assessment criteria and percentages will be the same than the ones of the 1st call (70% works / 20% exam / 10% participation).

Bibliography

Basic bibliography

- SEGATTO, Emiliano. *Autodesk 3DS Max 2018. Guía para Arquitectos, Proyectistas y Diseñadores*. Tecniche Nuove, 2017.
- SANNINO, Ciro. *Fotografía y renderizado con V-Ray*. GC Edizioni, 2014.
- KOLAREVIC, B. *Architecture in the Digital Age – Design and Manufacturing*. Abingdon: Taylor & Francis, 2005.

Web

- Adán Martín, Youtube - <https://www.youtube.com/c/adanmq/videos>

- www.vray.com

- <https://www.autodesk.es/products/3ds-max/overview>

- mir.no

- beautyandthebit.com

- brickvisual.com

- Adobe Learn

https://helpx.adobe.com/es/support.html?promoid=25XLCW8V&mv=other#/top_products

- Autodesk Support

https://helpx.adobe.com/es/support.html?promoid=25XLCW8V&mv=other#/top_products

Comments

Plagiarism in coursework or exams will result in a grade of 0. Students will fail the assessment call automatically.

Students must always respect the intellectual property of authors. The work of others must always be accurately acknowledged and referenced.

In exams, students may not make use of unauthorised material. Students who do so will be given a grade of 0 and they will fail the assessment call automatically.

Students are allowed four first assessment calls (*primeras convocatorias/convocatorias ordinarias*) to pass the subject, plus another two second assessment calls (*convocatorias extraordinarias*).

When a student does not appear at an exam, he or she loses the opportunity of one of the assessment calls.

The grading system at ESNE follows articles 5.4 and 6 of the Real Decreto 1125/2003, of 5 September. These articles state the following: “Los resultados obtenidos por el estudiante en cada una de las materias del plan de estudios se

calificarán en función de la siguiente escala numérica de 0 a 10, con expresión de un decimal, a la que podrá añadirse su correspondiente calificación cualitativa. La mención de «Matrícula de Honor» podrá ser otorgada a estudiantes que hayan obtenido una calificación igual o superior a 9. Su número no podrá exceder del cinco por ciento de los estudiantes matriculados en una materia en el correspondiente curso académico, salvo que el número de estudiantes matriculados sea inferior a 20, en cuyo caso se podrá conceder una sola «Matrícula de Honor».

Numeric scale	Qualitative grade
From 0,0 to 4,99	Suspenso (SS)
From 5 to 6,99	Aprobado (AP)
From 7 to 8,99	Notable (NT)
From 9 to 10	Sobresaliente (SB)

Students' grades are the result of a grading system that includes continuous assessment, which allows the student's ongoing work, attitude, participation and understanding to be assessed. For this reason, class attendance and participation are essential in this system.