DESIGN STUDIO 1: IDEA AND FORM

IE University
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Degree course: FIRST
  Semester: 1º
Category: BASIC
Number of credits: 6.0
Language: English

PREREQUISITES
The students should have presented all the necessary documentation to access the Bachelor in Architectural Studies degree following the policies of IE University.

SUBJECT DESCRIPTION
Design Studio I: Idea and Form is a propaedeutic subject that interrogates how objects, buildings, cities, and landscapes are shaped. It focuses on the critical analysis of both the processes of creation and the generation of design works in real space and time. Existing architectural projects and their developed contexts are analyzed, through looking at what inspired the designs and the common practices of master architects. The content is studied in subsequent scales that move through the artifacts of domestic spaces to the anonymous constructions spread across the landscape. It lays out the FUNDAMENTALS of design and is the cornerstone of the whole design studio sequence.

Students learn architectural design through the development of individual projects and are trained to analyze and react to a set of architectural problems, always underpinned by a series of theoretical classes. The course is based on a rational framework that structures the learning process of the students and organizes their acquired skills and abilities, underlying the logic of design exercises with the analysis of specific case studies.

The goal of Design Studio I: Idea and Form is not only to show the students the tools that architects rely on in order to formalize the ideas and concepts in which the discipline is based, but also to open the way towards different interpretation systems that may foster the processes of exchange with other artistic media.

Any work of art is the outcome of merging imaginary mental experiences and physical demands of natural laws. Architecture is also born out of the mental activity developed in the imaginary space of architects, a space that is constituted by those references, motives, and themes that concern them as a consequence of the time in which they live. Architects work in a concrete way by mixing imagination and physical reality, a way of proceeding that is impossible to disengage with, and clearly relates to representation. Architects need to be able to communicate ideas in all their complexity and with any and all means of graphic expression, not only to be understood by those who have to materialize the projects and by the society as a whole, but also as part of the personal evolution of their own creative process.

Perception and representation need to follow a parallel learning process in the training of the architect, which will contribute to the learning process of how to transform ideas into form. In this abstract transit it is not possible to apply a universal theory of design, valid for every case and situation. Design demands a dialectical process that relates thinking and action, which needs to be always open and in permanent transformation. Thus, the goal of a theory of design is not to find formulas that will try to solve problems, but to be able to propose the instruments that will allow us to pose the adequate questions.

The following aphorism is attributed to Antonio Gaudí: “Science is learnt by principles and art by examples.” As Gaudí pointed out, artists cannot rely on direct-application formulas. Instead, they must construct their own visual universe by means of observation, interpretation, and representation of the world around them, considering experiences, achievements, and findings as peculiar to them. In this sense, artists must be subjected to an accumulative process of learning that is born out of their own perception. Architects, both technicians and artists, must know how to interpret the built environment under a permanent critical view.

Design Studio I: Idea and Form is the initial point of departure in the construction of the personal creative process and a key tool to activate the mechanisms of analysis and reflection around concepts. These are precisely the concepts that need to be mastered in order to materialize the ideas that architects imagine during the design process.

Critical analysis must re-produce the mental process that the author has followed when producing his/her work. The specific knowledge of architecture is placed on the works and projects, where it is accessible for our interpretation; it is hidden but not lost, it is coded but not indecipherable. A work of architecture differs from a mere construction artifact by means of its narrative quality, for its ability to show—in a very intelligible way—the process followed in creation. For this reason, in order to know the internal order of architecture, it is necessary to reverse the construction of each of the
phases that constitute the process of materialization. The built work is the starting point and the
definition of a hypothesis about the possible artistic and intellectual framework that originated its
construction. To analyze is to subject the architectural work to a series of questions that will allow
describing it with enough precision. It is a process of permanent distillation in which observing,
imagining, and designing is necessary in order to be able to observe, imagine, and design again.

Architecture has a poetic dimension that transcends the resolution of the most immediate needs. It
is a dimension that goes beyond the rational thinking and that can only be responded to by means
of a sound knowledge acquired by personal experience. It is a dimension that can only be achieved
when the architect builds up his/her knowledge through his/her own analysis and experience.

**The learning process associated with design** is thus based in the analysis and discovery—with
very precise examples—of how a work of architecture was conceived in order to satisfy specific
demands, how it was adapted to the ideas and circumstances of a concrete time and how it retains
its validity today. The main objective of this process is to develop ability for critical analysis and for
tracing the inverse path of the architectural design.

Combining the teaching of design and theory, this propaedeutic subject avails students with the
fundamental knowledge to continue their architectural studies curriculum. It is the necessary base
to conceive and to formalize the architectural work and it is the first step to enhance students’ social
responsibility for the construction of our commonly shared built environment.
*COORDINATION BETWEEN DSI AND DSII*

Design Studio I: Idea and Form and Design Studio II: Form and Material address the FUNDAMENTALS that make up the base of the entire Design Studio sequence for the Bachelor in Architectural Studies. DSI makes a special emphasis on questions of representation and the definition of architectural acts, while DSII focuses on materiality and the phenomenological experience of architecture.

DSI explores the ordinary and the everyday life, defining the minimum conditions of inhabitation and underlying the functional dimension of architecture; while DSII foregrounds the poetical dimension of architecture, its ability to convey a certain meaning and to define the conditions of inhabitation in an extraordinary way. Hence, DSI and DSII explore the relationship of the architectural work with site and function in two opposed and complementary ways. In DSI the site condition is usually fictional and abstractly defined, and relationships between a point of view and an architectural threshold are usually established through function. In DSII the site condition is usually concrete and given and provides the necessary context in which the project is developed. DSI primarily focuses on the exploration of the activities of the everyday life in the domestic scale, while DSII explores the extraordinary activities that take place in a city and examines the contextual relationship between public and private spaces.

In DSI we explore the question of “architecture as frame” (its ability to create a relationship with the landscape in which it is inserted); in DSII we explore the question of “architecture as language” (its ability to create a relationship with society and culture).

*COORDINATION BETWEEN DSI AND AHC (ARCHITECTURE HISTORIES AND CONTEXTS)*

The concepts and terms discussed in Architecture Histories and Contexts (AHC), which are considered fundamentals of architectural vocabulary, will be related to the themes analyzed and discussed during the two parts in which the program of DSI is divided: Thresholds and Retreats.

The 3 keywords/topics featured in each weekly AHC class will be present during the particular steps of the development of the design project of DSI. By this means, students, besides gaining exposure with historical examples to the introduced concepts (i.e. wall/ window/ door; column/ roof/ ceiling; threshold/ corner/ thickness-poche), are able to see how these concepts are present and form part of the projects they are analyzing or designing in DSI.

*COORDINATION BETWEEN DS1 AND GC (GRAPHIC COMMUNICATION)*

Students will learn the basic principles of architectural representation in the subject of Graphic Communication (GC). The 50% of the sessions of GC will be imparted before the start of DSI, so that students are availed with the basic graphic communication skills at the start of DSI. The other 50% of the GC sessions will be developed during the analytical part of DSI (on a weekly basis up to the mid-term), so that students are knowledgeable about the language of architecture when the design part of DSI starts.

**OBJECTIVES AND SKILLS**

2.1 BASIC AND GENERAL COMPETENCIES

Per Ministerial Decree EDU/2075/2010, 29 of July; and the official accreditation request for the Bachelor in Architectural Studies, July 2015; see BOCYL, 14 March 2018: p. 10477-10481)
CB1: Students have demonstrated knowledge and an understanding of a given area of study, building upon the foundation of secondary education, supported by advanced texts, and including aspects that engage the latest state of the art in their area of study.

CB2: Students know how to apply their knowledge professionally to their work or vocation and possess the competencies that are often demonstrated through elaboration and defense of arguments and the resolution of problems within their area of study.

CB3: Students can gather and interpret relevant facts (usually within their area of study) in order to make judgments that include reflection on relevant social, scientific, and ethical topics.

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

CB5: Students have developed the necessary learning skills to continue their studies with a high degree of autonomy.

CG2: Knowledge of the role of the fine arts as a factor that can influence the quality of architectural creation.

CG7: An understanding of the relationship between people and buildings, and between buildings and their contexts, as well as the need to relate buildings and adjacent spaces to needs and to the human scale.

2.2 SPECIFIC COMPETENCIES
Per Ministerial Decree EDU/2075/2010, 29 of July; and the official accreditation request for the Bachelor in Architectural Studies, July 2015; see BOCYL, 14 March 2018: p. 10477-10481)

PREPARATORY MODULE (CE1-11) (W: Workshop Format)

CE1: Ability to apply graphic knowledge to the representation of spaces and objects.

CE3: Adequate knowledge of systems of spatial representation, as applied to architecture and urbanism.

CE4: Adequate knowledge of the analysis and theory of form and the laws of visual perception, as applied to architecture and urbanism.

CE5: Adequate knowledge of metric and projective geometry, as applied to architecture and urbanism.

CE6: Adequate knowledge of graphic surveying techniques in all phases, from sketching to scientific restitution, as applied to architecture and urbanism.

CE10: Adequate knowledge of the fundamentals of topography, hypsometry, cartography and site grading, as applied to architecture and urbanism.

2.3 TRANSVERSE COMPETENCIES OF THE UNIVERSITY

CT2: Ability to exercise professional behavior in accordance with constitutional principles and ethical values of the respective profession.

CT3: Manage unforeseen situations with the capacity to respond to changes within organizations.

CT4: Use disciplinary knowledge to analyze and evaluate current situations.

CT5: Integrate oneself into interdisciplinary and multicultural teams to achieve common goals in a
context of diversity.

CT6: Work actively at in an international context.

2.4. SPECIFIC OBJECTIVES AND SKILLS

In this course, we will emphasize the fundamentals of architecture, understanding it as an open productive frame that can engage the world transformatively. A play between the internal and external components of architecture, those related with the interior space and those others with the environment will be constantly fostered in order to develop engaged spaces in-between. The students will need to develop a critical understanding of the idea of the threshold, as well as its potential, to be able to enhance the experience of domestic spaces.

We will place special emphasis on the specific competencies CG7, CE1, CE3, as described above.

METHODOLOGY

Covid-19 has brought us a world that we thought only lived in fiction. In the School of Architecture and Design, we understand the current crisis as an opportunity to imagine a new pedagogy, one that explores new paths in architecture education that go beyond any contingency. Concomitant with this idea, IE University introduced the concept of Liquid Learning as a response to the times we live at as well as strengthening the quality of education. In this new Liquid Learning environment, students on-site and online, and considering status changes throughout time, will receive the same quality of education due to the revision of our pedagogical methods and application of new technologies to make the new environment feasible to ensure the best experience.

In order to execute this plan, some changes will be introduced within the teaching methodology, the most important of them, the organization of the courses through synchronous and asynchronous sessions. To make definitions clear, synchronous sessions refer to those sessions where students and professors coincide in time, although they might or might not, coincide in space. This means that during these sessions the students might be sharing Studio with the professor, or might be remote although present at the same time thanks to the technologies that will allow those students to be part of the Studio activities. Asynchronous sessions will be those where professors and students do not coincide in time nor space. During these sessions, the interaction between professors and students, and among students, will be produced in different ways, such as project portfolio reviews, detailed feedback, lectures, forums, and other activities that will be explained below.

3.1 TEACHING METHODOLOGY

The methodological system of DSI will make students aware of the fact that the knowledge they are going to acquire in this subject is, broadly stated, a consequence of the personal experience and critical self-reflection that they accumulate on the topics that are proposed in the program.

The course is distributed in two broad categories: Thresholds and Retreats. Each category will be learnt through the development of different (but connected) exercises that will be properly explained and reviewed in class in the format of a workshop.
The workshops (all of them hybrid and synchronous sessions) will consist of the continuous development of both the formal analysis (1st half of the semester - Thresholds) and the proposal of design (2nd half of the semester - Retreats) of a project. These design projects will be underpinned by lectures and discussion seminars (which will most of them be offered on-line and asynchronously). The asynchronous sessions will consist of a series of classes of design theory that will avail students with the required information to do formal analysis and will prepare them for historical inquiry; sometimes students will be assigned texts that respond to specific questions, which will be discussed in forums within the same asynchronous session. The series of different approaches to a design project by means of a rigorous sequence of workshops (synchronous hybrid classes every week) and lectures and seminars (given asynchronously) will help the students acquiring a high degree of control over the process of design.

Development of design projects:

The professor will always introduce the design project giving a brief description of the limits of the intervention and the basic objectives that will need to be pursued. The work will be always developed at least in two iterations, so that students have the opportunity to review the work while it is still in progress and response to the received feedback accordingly. Drawings, photographs, texts, and references will be brought to class in digital format, and students will also be able to download these documents from the IE Campus. Students will always be encouraged to broaden and complete this documentation either individually or in group, relying on the resources of the library and different databases.

Students will work on their design projects individually and will be able to pose their questions or comments in the IE Campus Forum during the entire development of the exercise. Over the workshop sessions, students will present their exercises sometimes individually, sometimes collectively, but always in front of the rest of the class. The different steps of the process will be developed by means of drawings, models, or simple written texts. Corrections will follow both the desk-crit method (that consists in correcting the work while being developed by the student), and the pin-up system (a more formal method that consists in hanging up all the work in a vertical wall). The professor will comment on and correct, publicly, the most outstanding aspects of each presentation in order to lead the students towards the different potential lines of development and research of the design projects.

3.2. LEARNING METHOD FOR THE STUDENTS/ ECTS LOAD

Class development and students' dedication:

The subject of DSI consists of 6 ECTS units, equivalent to 50 IE sessions or 75 hours of classes. During the first half of the semester, there will be always 2 sessions per day of class, with one or two classes per week and 5 additional asynchronous sessions (6 weeks). During the second half of the semester, there will be one class per week, with 2 or 3 sessions, and 4 additional asynchronous sessions (8 weeks).
An important part of each class will be devoted to review the evolution of the design projects during the workshop session. Lectures will introduce the theoretical theme from which the students will need to draw the basic foundations to develop the projects in and outside the classroom. Seminars will complement the theoretical classes discussing several concepts extracted from one or several texts previously assigned to the students.

Public corrections of the design projects will represent the intermediate moment in which the instrumentality of the general concepts explained during the lectures and discussed through the readings of the texts can be tested. These tutorials will try to follow the evolution of the learning process of the students and will help the students getting used to show their work in public, both graphically and verbally, from the initial stages of their analytic and design work.

The character of this subject is primarily practical, which demands students to work outside the class consistently. The design projects will be assessed during the workshop sessions (hybrid) and the mid-term and final reviews with external juries (on-line).

Communication and supporting tools: DSI will take advantage of the IE Campus. Although the professor will be present in class every week, students will rely on the different tools of the IE Campus in order to download and upload documents, the different steps of their exercises, leave comments on their own work—or that of their classmates—and formulate different questions. Personal communication between the professor and the students, besides the office hours and classes, will also happen through email in a fluent way.

Class electronic requirements: Although we highly recommend the use of a laptop in class, the use of Wi?Fi in class for any activities not related to this course will hinder your grade in participation. Absolutely no messaging or texting is allowed during the class.

Distribution of the ECTS load: The analytical and design proposal exercises are the basis of the evaluation of the students’ work and will be necessarily completed and submitted. The development of these exercises is accumulative and the assessment is continuous.

3.3. DECISION OF ON CAMPUS OR REMOTE LEARNING

It is highly recommended that students who are in Madrid/Segovia attend the synchronous sessions on Campus. It is at the student’s discretion to attend classes on campus or remotely.

It is very important that students remain consistent in their decision of on campus or remote learning, so that the professor and students benefit from the possibility to plan activities in advance, knowing which students will be available in each type of session. Whether a student decides to follow their classes either on campus or remotely, they must commit to that mode, except for exceptional circumstances in which the change is for justified reasons.

The behavior of the students during the sessions must comply with IE University’s standards on education, respect for peers and professors, and commitment to joint learning. Students who connect remotely must keep their cameras on, and they must demonstrate the courtesy and online respect necessary in the digital environment.

<table>
<thead>
<tr>
<th>Teaching methodology</th>
<th>Weighting</th>
<th>Estimated time a student should dedicate to prepare for and participate in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>20.0 %</td>
<td>30 hours</td>
</tr>
<tr>
<td>Discussions</td>
<td>20.0 %</td>
<td>30 hours</td>
</tr>
<tr>
<td>Exercises</td>
<td>40.0 %</td>
<td>60 hours</td>
</tr>
<tr>
<td>Group work</td>
<td>10.0 %</td>
<td>15 hours</td>
</tr>
<tr>
<td>Other individual studying</td>
<td>10.0 %</td>
<td>15 hours</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.0 %</td>
<td>150 hours</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY

Recommended


**EVALUATION CRITERIA**

6.1. GENERAL DESIGN STUDIO SEQUENCE OBSERVATIONS
Student progress is monitored via regular individual and group tutorials, and pin-ups. There will be two critiques (midterm and final reviews) in which students are expected to produce a coherent visual and verbal presentation of their design proposal and to communicate and debate their work with others.

Grading will be based on the completion of periodic assignments, attendance and punctuality, student-instructor dialogue, participation in class-wide critiques and discussion, and the individual development of the design process. All these factors are equally important in the final evaluation and neither will take precedence over the others.

6.1.1 Midterm evaluation

After the Midterm Review, students will be evaluated based on three items:
- **PROCESS**, which will encompass work habits, production, development, and ability to evaluate and incorporate the received criticism.
- **DELIVERABLES**, which will evaluate the relation quality-quantity of the production presented, considering the work of the semester and with special emphasis on the work presented for the midterm review.
- **CRAFT**, which will evaluate the material and graphic quality of the work present (models, drawings, etc.)

Failing to present, verbally as well as graphically, or an absence during the midterm review will translate into the deduction of 2 (two) points from the final grade.

After the Midterm Review, students will receive a non-binding grade as an indication of her or his progress at that point of the semester. This grade will be based on the following scale:
- **Check**: the student has reached the goals set up for the first part of the semester.
- **Check +**: the student has surpassed the goals set up for the first part of the semester.
- **Check -**: the student has not met the minimum goals set up for the first part of the semester.

This grade will not determine the final grade and should be taken as an indication of progress.

6.1.2. Final Evaluation

For the Final Review the students will receive a grade on a scale from 0 to 10, with a minimum passing grade of 5.0.

After the Final Review, and considering the totality of the work developed over the course of the semester, students will be evaluated on two areas:
- **PROCESS**, as described above, applied to the entire semester.
- **DELIVERABLES**, considering the production in quality and quantity of the deliverables in daily basis, pin-ups, exercises, and reviews and with special emphasis in the production realized for the final review.
- **CRAFT**, considering the material and graphic quality of all the work developed and presented.
Failure to participate in the final review, in terms of deliverables or in terms of attendance, will automatically translate into failing the whole course with a grade not higher than 4.5.

No late submissions will be accepted.

The minimum attendance allowed will be that established in the IE University regulations: those students that do not attend at least 70% of all sessions will fail the course with a 0,0 and will proceed directly to third enrollment.

Students that have failed the subject in first enrollment pass to the second enrollment, except those who do not meet the minimum attendance percentage. For those attending the second extraordinary exam period, the exam will have two parts: a corrected and expanded presentation of the project as developed in the first enrollment period, and a design exercise to be administered in Segovia. The maximum grade a student may achieve in second enrollment is 8.

6.1.3 Grading Standards
According to IE University policies, the students will be evaluated in a scale from 1 to 10. The standards of each grade are described below:

1, 2, 3, 4: Not passing level of work -- significant areas needing improvement and/or not enough deliverables to properly represent the project strategy.

5: Passing level of work with a few areas needing critical improvement, and/or the need for developing minimum required deliverables to properly represent the project strategy.

6: Fair level of work with some areas needing critical improvement.

7: Consistent, solid work during the whole semester. Solid grade, student producing what is expected at that year level.

8: Advanced level of work for what can be expected at that year level.

9: Exceptional level of work, within the standards of a slightly higher year-level of studio. Starting on a 9, the student could (according to the necessary consensus among professors) receive a MH as a recognition of an exceptional work.

10: Beyond exceptional level of work, within the standards of a much higher level of studio.

6.2. DSI EVALUATION CRITERIA AND WEIGHTENING
(Per Ministerial Decree EDU/2075/2010, 29 of July; and the official accreditation request for the Bachelor in Architectural Studies, July 2015; see BOCYL, 14 March 2018: p. 10477-10481)

This course will involve the following evaluation methods:

SE1: Attendance and Active Participation
SE3: Submission and/or Presentation of Individual Projects
SE5: On-line Forums

The outcome of each design project will be evaluated based on Concept, Process, and Craft. Other complementary aspects such as the active participation in class will allow introducing nuances in the grade.

The final projects will be evaluated, with a grade number (from 0 to 10) according to the following criteria:
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percentage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE1: Attendande and active participation in class</td>
<td>7%</td>
<td>Active participation in pin-ups and presentations</td>
</tr>
<tr>
<td>SE3: CONCEPT (Ideas, narratives and argumentation)</td>
<td>25%</td>
<td>Proposal’s rigorousness, coherence, and character/ Appropriated and well-structured presentation</td>
</tr>
<tr>
<td>SE3: PROCESS (Development of the proposed exercise)</td>
<td>25%</td>
<td>Analytical and synthetical abilities/ Development of the design idea</td>
</tr>
<tr>
<td>SE3: CRAFT (Formal presentation of developed ideas)</td>
<td>25%</td>
<td>Ability to graphically express the ideas/ Ability to formally materialize ideas according the required representation systems</td>
</tr>
<tr>
<td>SE5: ON-LINE FORUMS</td>
<td>18%</td>
<td>Weekly critical and thorough responses</td>
</tr>
</tbody>
</table>

PROFESSOR BIO

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Laura Martínez de Guereñu is an architect, design critic, and associate professor at IE University, Madrid-Segovia, Spain. She currently holds a Humboldt Research Fellowship for Experienced Researchers hosted by the TU Munich, Germany, and has also been a grantee of the first Lilly Reich Grant for Equality in Architecture (Mies van der Rohe Foundation) and a Leonardo Grant for Researchers and Cultural Creators (BBVA Foundation). She holds a Master in Design Studies with Distinction from Harvard University and a PhD in Architecture from the University of Navarra.

Laura’s essays have been published in a number of periodicals, including Architectural Histories, Architectural Record, A+U, Docomomo Journal, Mas Context, Massilia, Archivo Español de Arte, and Arquitectura Viva. Chapters have appeared in several edited volumes, such as Mies van der Rohe: Barcelona 1929 (Tenov / Fundació Mies van der Rohe, 2017) and Josef Albers: Minimal Means, Maximum Effect (Fundació Juan March, 2014), and her work as an editor encompasses Bauhaus In and Out: Perspectives from Spain (AhAU, 2019) and Rafael Moneo: Remarks on 21 Works (The Monacelli Press, 2010). Her projects study the status and the significance of the architectural, artistic, and design object that lead to a reassessment of the exchanges and transnational discourses during modernism.

OTHER INFORMATION

07th October 2020