

**Code: 1634 Project****Degree:** 2<sup>nd</sup> cycle – Environmental Engineering**Stream:** all**Curricular Year:** 2<sup>nd</sup>**Semester Course:** 1<sup>st</sup>**Credits:** 6 ECTS**Compulsory****Language:** Portuguese/English**Responsible:** Pedro Manuel Leão Rodrigues de Sousa**Other lecturer(s):** Francisco Cardoso Pinto and Francisco Ramos Lopes Gomes da Silva**Web Site:** <http://www.isa.utl.pt/home/node/3785>**1. Contact hours****Others 84 Total 84****2. Objectives:**

The exercise of projecting consists of the application of knowledge acquired previously in the course to a real problem, in such a form that the students adopt an integrated approximation and acquire the capacity of decision in engineering. While carrying out a study of project in the work is trained in team, in view to resolve the complex problems of a project of engineering. It is claimed so that the students familiarize themselves with the concept of project, analysing real projects, contacting with design teams, visiting projects in execution or executed and carrying out a small prior study of project, being so qualified to the professional exercise like designers.

**3. Programme:**

Transversal basic project principles in distinct areas of engineering.

Type of projects: individual, public, business and research & development.

Structure of a project:

1) written pieces: descriptive and justificatory memory; other studies of specialty; measurements; budget; process of contest – list of prices and exercise book of responsibilities;

2) drawn pieces.  
Definition and characterization of the phases of a project: study base, initiation study, feasibility study, project of execution.

While accessory pieces to the Study of Project, reference of framing to the Study of Environmental Impact (EIA), to the Proposal of Definition of Extent (PDA), to the Report of Environmental Agreement (RECAPE) and to the Environmental Strategic Evaluation (AAE).

Attendance and inspection. Environmental attendance, monitoring, auditing and public attendance.

Evaluation of environmental impacts after execution of the project.

Study and analysis of a Project, with the presentation of a detailed Report.

Some basic elements of technical drawing, necessary to the preparation of the drawn pieces of a project.

Realization of a Initiation Study of Project.

**4. Bibliography:****Main Bibliography**

Suh, N.P. *The principles of design*. Cota BISA: N01-298

**5. Assessment:**

It happens particularly in the following aspects:

- 1) Presentation of the distributed subjects (15 %);
- 2) Quality of the report synthesis (20 %) and respective presentation (5 %);
- 3) Execution of exercises of technical drawing of project (5 %);
- 4) Work of project (45 %) and respective presentation (10 %).

**6. Estimated Workload:**

168	Hours
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**7. Last Update:**

20/7/2010
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