



### **1. Integration of different professional / educational backgrounds**

- The construction industry is composed of many different participants with different backgrounds, skills and tools to apply in a construction project.
- The students accessing the master proceed from different construction backgrounds.
- It exists the need of a connection between them.
- The final goal is to achieve an integrated project.
- These are the tools that lie within the master premises, with them the student will achieve the knowledge to organize and improve the performance of a project and the people related to it.

### **2. Holistic view**

- It is not the same knowledge, the one possessed by each of the construction participants by themselves, than the one owned by a participant that can see all the other together.
- The construction market is in need of this professional that can integrate all the individual knowledge together.
- Concepts of each module: The theoretical load of the master is divided in four modules → each module answer to a part of the construction industry that students have to integrate in their own educational background. It is not the same professional a civil engineer than an architect, and the tools that both use are not the same, so it is fundamental, to have a wider perspective of the work performed by each one, and promote the interrelations between different construction fields.
- Integrated view of the modules: In the master, due to the four modules, construction can be seen as a whole process (integrated planning) from the research starting point, passing through design, management and finally construction.
- That is what this master offers, the training of a professional able to deal with different parts of the construction and able to understand individual processes and languages within the construction industry.

### **3. Project related study**

- Project management skills
  - o The group project developed is where the PM skills will be developed
  - o The specific moment where the integration between the participants of the construction industry has to be connected to achieve a real project.
  - o The students of the master will serve as a sample of the parts that have to be integrated and will serve as a first practical approach to this matter.
  - o Moreover the special circumstances of the master as an international master, will introduce the added problem of the different nationalities.

- This way the student will learn how to manage different perspectives, knowledge and cultures in the same project, and be able to achieve a satisfactory result.
- Technical skills
  - It is not the main aim of the master to lecture about some specific technical skills. The aim of the master is more focused towards a wider knowledge, nevertheless to achieve this knowledge it is necessary to frame it into a specific project to see the practical application of it.
  - The different professors integrating the master panel can help the students to work in different aspects of the construction industry and help them see it through their eyes and experience.
  - This group of experiences will help the students with their management skills and will give them a specific example of what are the problems that other construction participants face when developing a project
- Research skills
  - It is not usual than the educational background of technical degrees includes research as part of their structure.
  - The master provides the students with the possibility of getting close to this field. Either for research purposes of a project or for the possibility of developing a PhD in the future.
  - Besides it is through research, how the students will be in touch with the latest innovations in the construction world. It has to be taken into account that without the research module, it will be almost impossible to understand any of the advances that construction industry is producing.
- Soft skills
  - It has to be taken into account that the projects are composed by people, not only are they tasks to fulfil.
  - The students will learn how to see construction through other professional eyes and the better way to integrate all in a single project.
  - These skills are the ones that will make a difference in the students that finish the master. Is this point the one that will differentiate them from the rest of actors involved in the construction scene, and is this kind of professional the one that the market is in need of.
  - The organization of the participants in the construction and the subsequence tasks they have to perform needs a wider overview to adapt the construction language from one professional to the other.

#### **4. Group work**

- Students with different backgrounds that are going to conform the different parts of the construction industry need to have a connection point to work between them. To achieve an integrated project, the different parts must have common tools or communication access, in order to improve the process.
- Having students with different backgrounds will allow the group to widen their knowledge and share different approaches towards construction.
- The Group Project developed through the master program will allow applying this different knowledge into a real project. This way the students can develop their project management skills and actually achieve a result.
- Project Management skills are only achieved by a practical approach to a project. The master offers this possibility. It requires from the students an organization plan that includes weekly meetings, where the decisions for the project will be taken. The Group Project is developed at the same time than the different modules so scheduling skills and the ability of delivering results on time will be a barrier to overcome.