1. Introduction to the course

1. The importance of the environment

In this increasingly digital society, our profession has evolved from being considered as peripheral to be positioned in the center of any sphere of human relationships. Indeed, computer science is everywhere, in health, in commerce, in state security forces, in industry, transports… Computer engineers manage information, which is not always translated into power as the saying goes, but in issues and concerns for the rest of citizens. We receive on account of this our own faults and other's faults, while listening to the traditional chant of "computers are evil" to justify any delay, any disaster or someone else's ineptitude.

By joining this apparent omnipresence in society to the fact that we are increasingly interconnected, and not only as citizens but as professionals (it would be inconceivable today the work of a computer engineer without access to its peers or information via the Internet or other networks), we need to rethink the assumptions under which our career was articulated at the end of last century. Time passes and much more for us: advances in information technology often get a speed faster than in other sciences. It is said that a year in the Internet equals five in the real world or the "Outernet", as it has been called. This causes an inconceivable dynamism in other sectors.

2. Contents of the course

The course is divided into three parts. Although they are intertwined with each other, making it difficult to determine an order since there is no clear history with one another, they can be defined around a few strong points. We will speak about "Professionalism", "Legal aspects" and "Ethics".

2.1. Professionalism

To this end, from a study of the profession in general to quickly particularize in ours, we will pass over the story, our history: when we began to be aware of its existence, detached from other professions, just as barbers and dentists who became two very different types of professionals in the Middle Ages.

2.2. Legal aspects

In this part of the course, we will give an insight into those major facets of our profession subject to law, considering the main standards. Obviously, it is impossible to make a summary including with completeness each and every law, regulation and other legal precepts affecting us. Hence we will focus the attention on those areas that receive more interest in terms of both the attention given by the courts and the impact on civil society, with an interest generally redirected by the media. Also we will devote attention to private or judicial computer expertise because of the real possibility that a graduate with bachelor's degree or master's degree will work continuously or eventually as an expert in any court of law or arbitration of the Chamber of Commerce, for example.

Since all exclusions necessarily imply selection, as far as possible and following the basic lines of this part of the course, we will try to cover at least the basic legal framework for good professional practice. These axes are data protection and intellectual property, and as stated above, we will add a section devoted to computer expertise, and as a prologue, an introductory chapter setting out the starting framework.

2.3. Deontology and ethics

We will introduce ethics and its relationship with the company and, above all, with computing profession. The reason for its inclusion is elementary: if it is true that the law marks a few channels of action, it does not always cover everything and even we can hear many times the proverb “every law has a loophole”. Well, the last barrier, which marks us those thin red lines not to cross, is called ethics.

As it is an unusual subject for a career in technology, it is convenient to start from the establishment of some basic concepts, and then discuss the business ethics without forgetting individual ethics or society ethics in general. We will introduce key issues such as the social balance or the codes of ethics that we cited above, and, of course, we will place particular emphasis on the relationship between ethics and computing science.

3. Exercises suggested

3.1. Open questions

1. What do you think can be part of an expert report addressed to the court? Sketch your ideas and, when you will reach the related content, compare your assumptions with what the course presents.

2. Write a list (a maximum of ten points) of the most important things that you think are part of the legal and ethical framework of your profession.

3.2. Debate in the classroom

What do you expect from this course? How do you think it will benefit your professional development?

4. References

- Marc, Prensky. (2001) *Digital Natives, Digital Immigrants*. On the Horizon. MCB University Press, West Yorkshire, United Kingdom. Vol. 9 No. 5, October 2001.