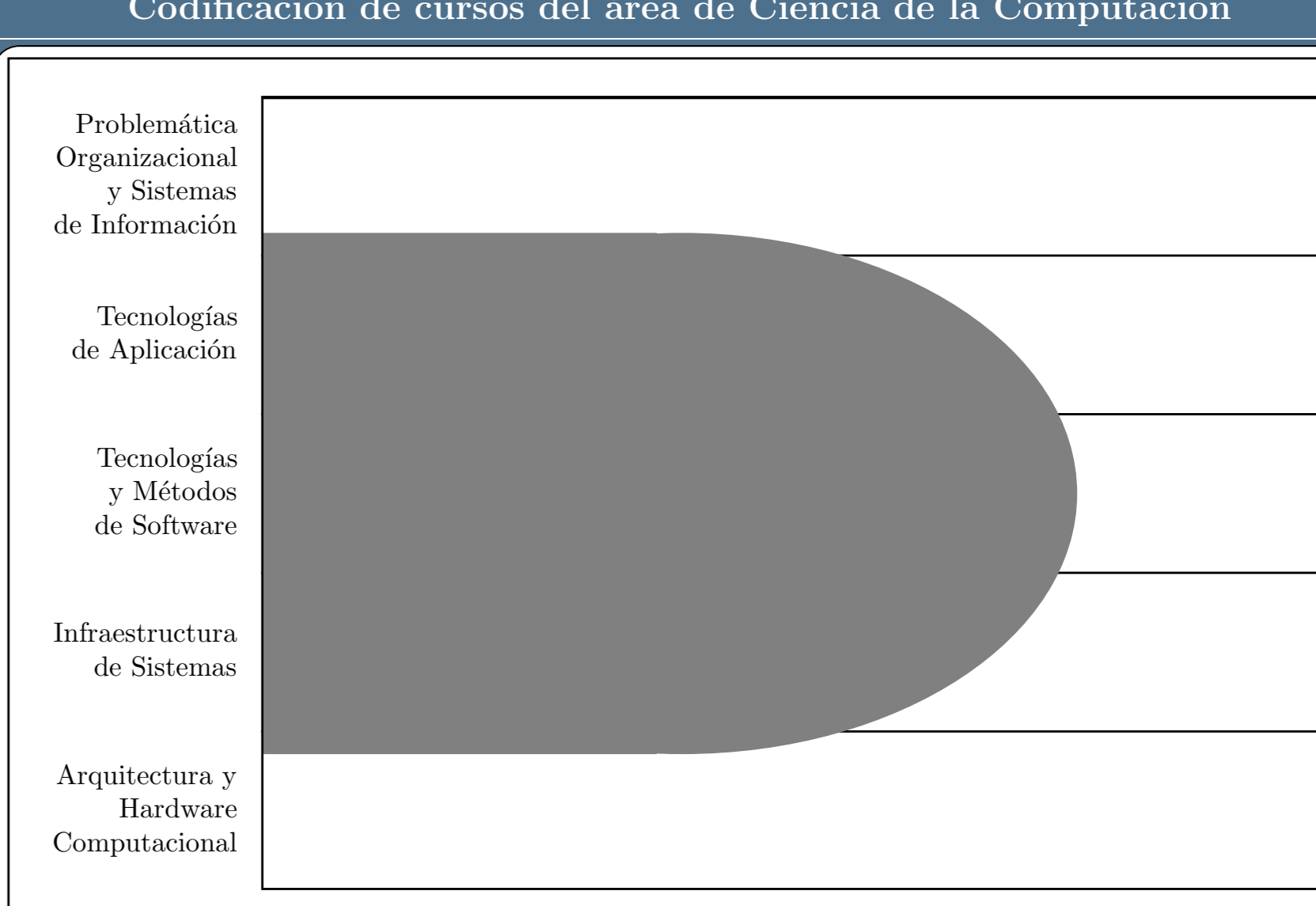
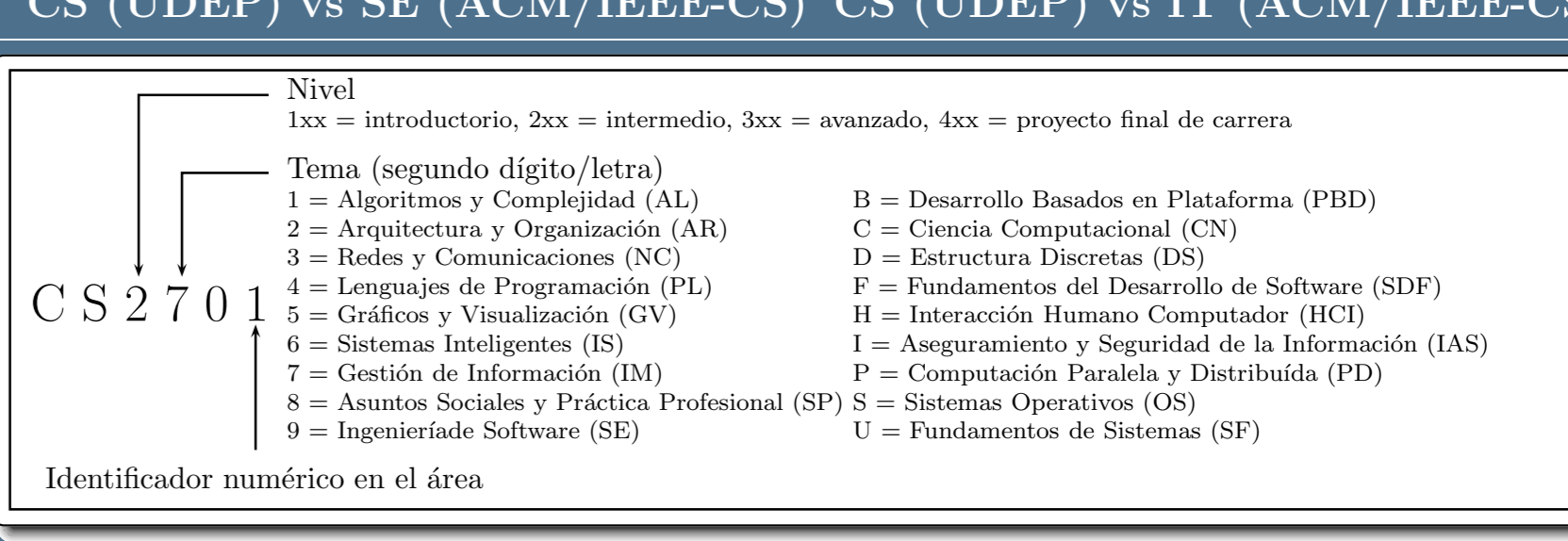
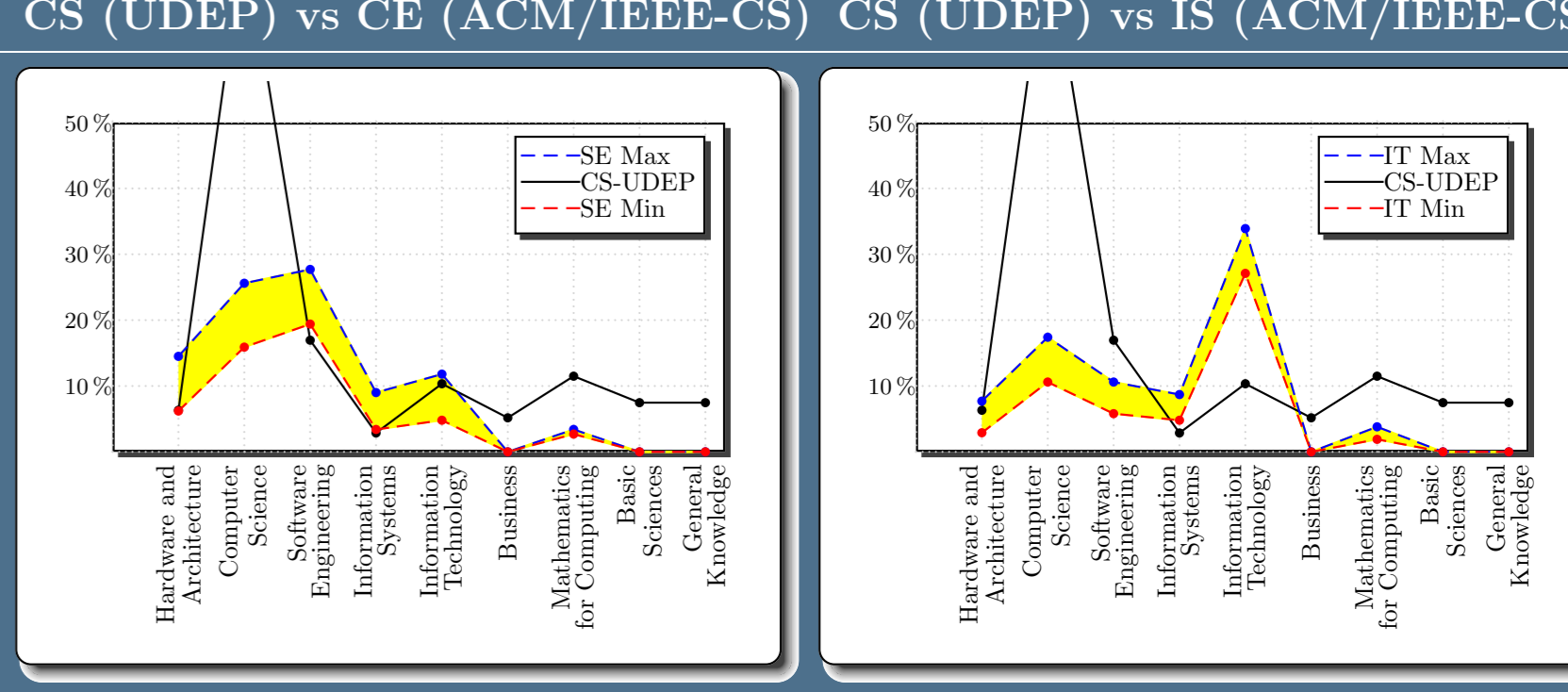
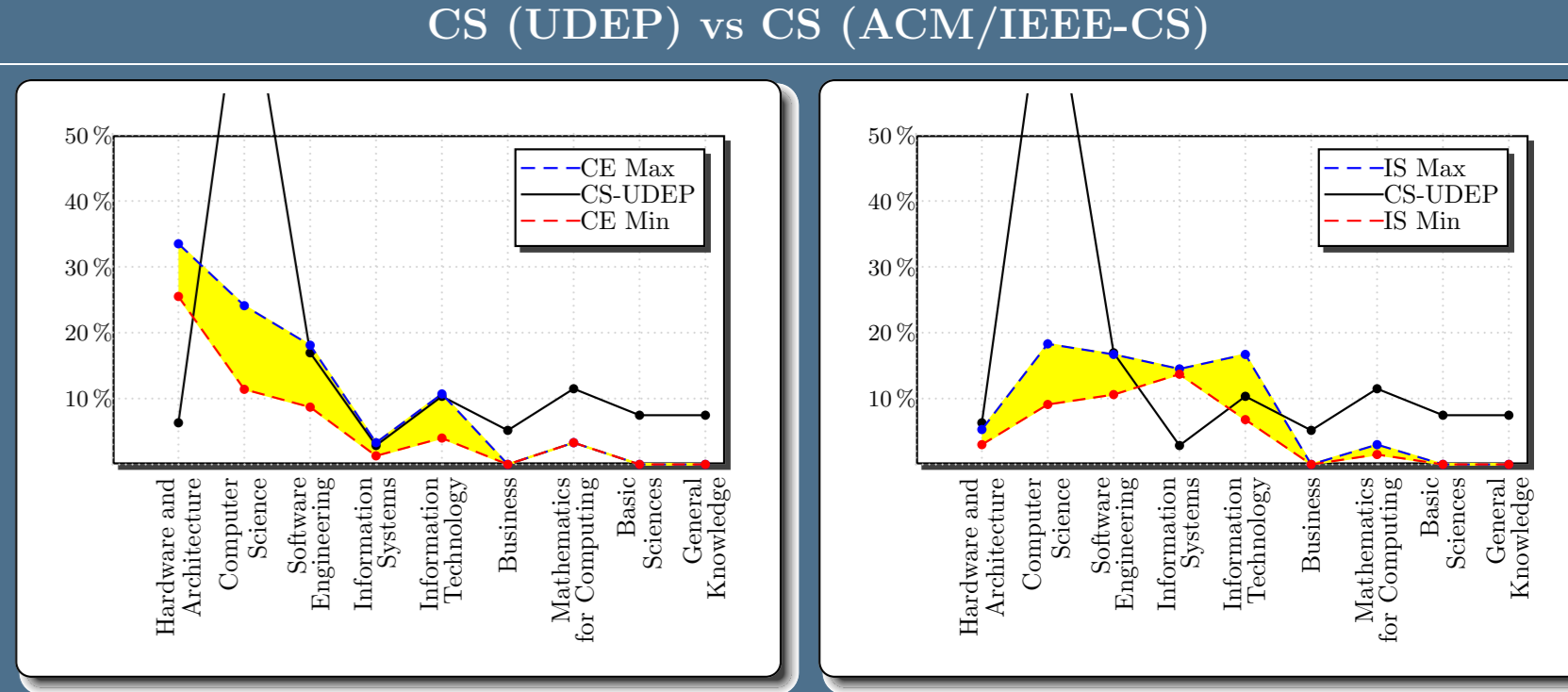
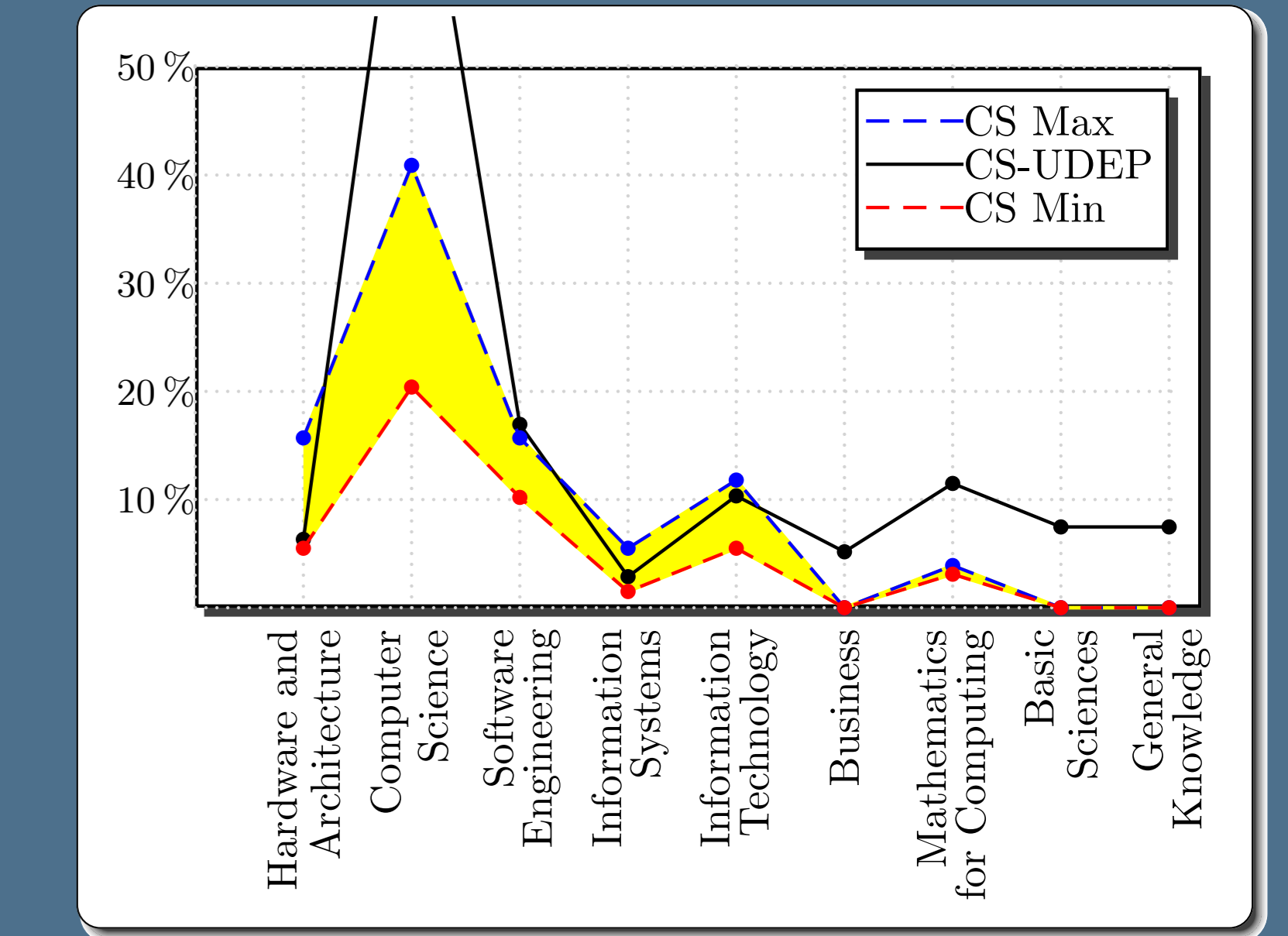
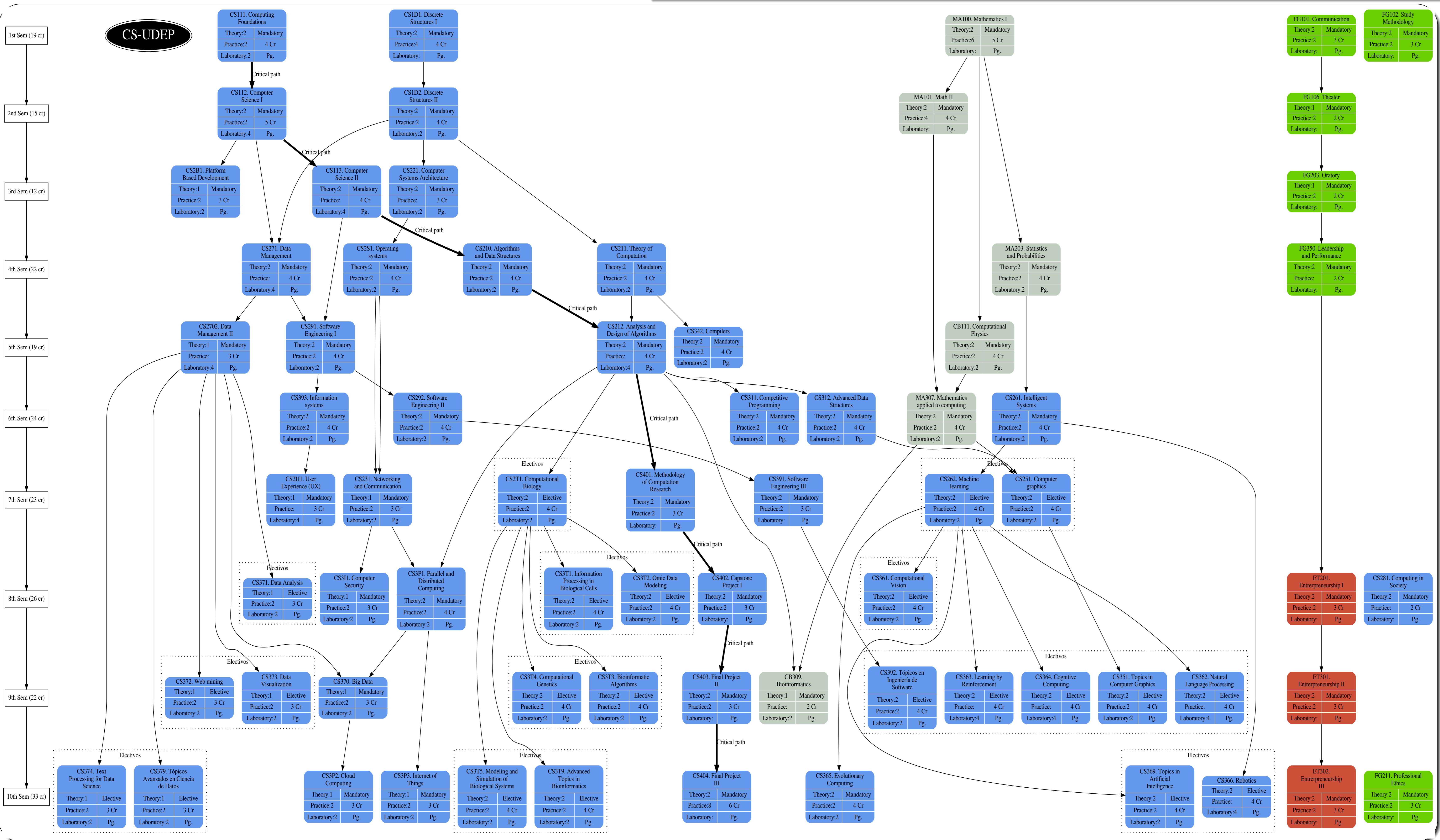


Mission: To contribute to the scientific, technological and technical development of the country forming competent professionals oriented to the creation of new science and computational technology, as engine that impels and consolidates the software industry based on scientific research and technological in innovative areas, forming, IN OUR professionals, a set of skills for solving computational problems with a social commitment.

Definition: The professional profile of this professional program can be better understood from figures on the right side. This professional has Computing as the center of his studies. That is, it has computing as an end and not as a means. According to the definition of this area, this professional is called directly to be a promoter of the development of new computational techniques that can be useful at local, national and international level.

Our professional profile is aimed at generating jobs through permanent innovation. Our professional training has three fundamental pillars: a content according to ACM/IEEE-CS Computing Curricula CS2013 and CC2020, a marked orientation to innovation and human/soft skills.



Skill/Course	First Sem	Second Sem	Third Sem	Fourth Sem	Fifth Sem	Sixth Sem	Seventh Sem	Eighth Sem	Ninth Sem	Tenth Sem
a) Apply computer and math skills.	2	2	2	2	2	2	2	2	2	2
b) Analyze problems and identify and define computational requirements.	2	2	2	2	2	2	2	2	2	2
c) Design, implement and evaluate a computer system, process, component or program.	2	2	2	2	2	2	2	2	2	2
d) Work effectively on teams.	2	2	2	2	2	2	2	2	2	2
e) Understand the professional, ethical, legal, security and social implications.	2	2	2	2	2	2	2	2	2	2
f) Communicate effectively.	2	2	2	2	2	2	2	2	2	2
g) Analyze the local and global impact of computing.	2	2	2	2	2	2	2	2	2	2
h) Lifelong learning.	2	2	2	2	2	2	2	2	2	2
i) Use current techniques and tools.	2	2	2	2	2	2	2	2	2	2
j) Apply mathematics, algorithms and CS theory in system modeling and design.	2	2	2	2	2	2	2	2	2	2
k) Apply principles of development and design in software of variable complexity.	2	2	2	2	2	2	2	2	2	2
l) Develop principles of research with international level.	2	2	2	2	2	2	2	2	2	2
m) Transform your knowledge into technological ventures.	2	2	2	2	2	2	2	2	2	2
n) Apply knowledge of the humanities in their professional work.	2	2	2	2	2	2	2	2	2	2
o) Understand that human training contributes to their authentic personal growth.	2	2	2	2	2	2	2	2	2	2
p) Put technology at the service of the human being.	2	2	2	2	2	2	2	2	2	2

- ### Educational Objectives
- After five years of graduation of our school, our professionals must be able to:
1. Have a sufficient understanding of the field including analysis of modern techniques and scientific principles of what he/she develops.
 2. Demonstrate leadership and ability to adapt to change by being promoted to a better position within the organization.
 3. Demonstrate an understanding of the ethical, legal, cultural, environmental and economic implications of what he/she develops.
 4. Demonstrate an understanding of the impact of everything he/she develops on individuals, organizations and institutions.
 5. Visibly apply their communication skills with colleagues from other areas, teamwork and interdisciplinary.
 6. Get involved effectively in team development by being a mentor, learning continuously and autonomously.
 7. Get involved in professional societies in the area.

Definición de Objetivos de Aprendizaje (Learning Outcomes)

Nivel 1 Familiarizarse (Familiarity): El estudiante **entiende** lo que un concepto es o qué significa. Este nivel de dominio **se refiere a un conocimiento básico** de un concepto en lugar de esperar instalación real con su aplicación. Proporciona una respuesta a la pregunta: **¿Qué sabe usted de esto?**

Nivel 2 Usar (Usage): El alumno es capaz de **utilizar o aplicar** un concepto de una manera concreta. El uso de un concepto puede incluir, por ejemplo, apropiadamente usando un concepto específico en un programa, utilizando una técnica de prueba en particular, o la realización de un análisis particular. Proporciona una respuesta a la pregunta: **¿Qué sabes de cómo hacerlo?**

Nivel 3 Evaluar (Assessment): El alumno es capaz de **considerar un concepto de múltiples puntos de vista y/o justificar la selección de un determinado enfoque** para resolver un problema. Este nivel de dominio implica más que el uso de un concepto; se trata de la posibilidad de seleccionar un enfoque adecuado de las alternativas entendidas. Proporciona una respuesta a la pregunta: **¿Por qué hiciste eso?**