

City Center Campus	School of Industrial Engineering and Design
Program	56IE – Bachelor of Science in Electrical Engineering 56IA – Bachelor of Science in Industrial Electronics Engineering and Automation 56IM Bachelor of Science in Mechanical Engineering 56IQ - Bachelor of Science in Chemical Engineering 56DD - Bachelor of Science in Industrial Design and Product Development Engineering

Course number and name	
Number	565002072, 565001072, 565003072, 565004072,565005072
Name	Intellectual capital and knowledge management
Semester	S8 (February-June)

Credits and contact hours	
ECTS Credits	3
Contact hours	30

Coordinator's name	Martin Rubio, Irene [irene.mrubio@upm.es]
---------------------------	---

Specific course information	
Description of course content	
Organizations in the Knowledge Age, in Industry 4-0 need a new management model for generating, capturing, and leveraging intellectual capital assets in order to stay competitive. In this course, we review the fundamental elements required for developing a comprehensive system for creating and applying sustained levels of intellectual capital in this millennium. A central question is how to measure this knowledge, that is, Intellectual Capital.	
List of topics to be covered	
1. Introduction: Knowledge has become the resource, rather than a resource. 2. The concept of Organization. 3. Knowledge Management. 4. Organizational Learning. 5. Intellectual Capital.	
Prerequisites or co-requisites	
None.	
Course category in the program	
<input type="checkbox"/> R (required)	<input checked="" type="checkbox"/> E (elective) <i>(elective courses may not be offered every year)</i>

Specific goals for the course

Specific outcomes of instruction

- RA82 - Be able to communicate correctly in spoken and written form in different situations and for different audiences, using the conventions proper to different textual genres.
- RA83 - Be capable of analysis, critique and synthesis
- RA89 - Be able to correctly submit and document proposals.
- RA368 –Be capable of knowledge management.

Bibliography and supplemental materials

- Slides available at: <http://ocw.upm.es/organizacion-de-empresas/intellectual-capital-and-knowledge-management/class-material>
- Martín-Rubio, I. (2020) “ Challenges in Green Intellectual Capital and Knowledge Management in Sustainability and Industry 4.0” En De Castro, G., y González-Massip, J. “Knowledge Management for Corporate Social Responsibility” IGI Global.“
- International case study reports

Teaching methodology

<u> X </u> lectures	<u> </u> problem solving sessions	<u> X </u> collaborative actions	<u> </u> laboratory sessions
Other:	Case study		