Program	61IW – Bachelor of Science in Software Engineering

Course number and name	
Number	615000259
Name	Software Quality
Semester	S7 [(September-January)]

Credits and contact hours	
ECTS Credits	6
Contact hours	60

Coordinator's name	Gallardo Perez, Carolina (carolina.gallardop@upm.es)

Specific course information

Description of course content

• To learn and apply techniques for measuring software quality.
• To learn processes for quality management.

List of topics to be covered

1. Introduction
2. Quality techniques
3. Measuring software quality
4. Models and characteristics of software quality
5. Cost and ethics considerations
6. System quality requirements
7. Error characterization
8. Processes in quality management
9. Quality management regulation
10. Quality improvement
11. Tools for quality support

Prerequisites or co-requisites

None.

Course category in the program

_X_ R (required)	**__ E (elective)** *(elective courses may not be offered every year)*

Specific goals for the course

Specific outcomes of instruction

- RA113 - Be able to select and evaluate software quality control metrics and indicators.

- RA109 - Be versed in quality management processes and standards.
- RA83 - Be able to perform a complex task independently, selecting the best strategies for studying the problem by analyzing the specified conditions and goal. Be able to analyse and interpret information, manage information and communication technologies (ICT), have communication and interaction skills for collaborative learning. Be able to assess the effectiveness of task planning and make the right decision making to achieve a goal.
- RA114 - Be able to solve open problems, weighing up more than one alternative and critically appraising the decisions made, precisely expressing the required arguments and findings. Be able to identify and solve scenarios where the stated problem requires an approach that does not account for different levels of abstraction or the construction of a hierarchy.

Further reading and supplementary materials
– "Total Quality Management". Dale H. Besterfield, Carol Besterfield-Michna, Glen H. Besterfield, Mary Besterfield-Sacre. Prentice Hall – http://www.lpsi.eui.upm.es/webcalisoft/ – OCW

Teaching methodology			
_X_ **lectures**	__ **problem solving sessions**	__ **collaborative actions**	_X_ **laboratory sessions**
Other:			