

Course title: QUALITY AND MEASUREMENT IN INFORMATICS

Lecturers	Assoc. Prof. Valentina Kirinić, Ph.D., Assoc. Prof. Melita Kozina, Ph.D., Mario Žgela, Ph.D.
Language of instruction:	Croatian and English
Schedule:	60 teaching hours - 4 hours per week (2 hours lectures + 2 hours laboratory exercises)
Study level	Master
Study programme	Information and Software Engineering
Semester	Winter
ECTS	5
Goal	The aim of the course is to familiarize students with a comprehensive approach to quality management in all aspects of information technology, as well as the necessary measurements which are an essential part of such systems.
Content	In doing so, quality is being analyzed in details as modern business paradigm, is shows: ISO 9000 system quality model, application of standards in informatics, improvement methods in the software production, support methods to the development of the IS, and the application of statistical methods and techniques in informatics. An integral part of such systems is the measurements (metrics). The course gives a taxonomy of modern areas of measurement in the information technology, and it shows certain parts, such as: measuring the quality of business systems, measurement of quality of business processes, measurements in structural and object development of IS, measurements of the investment effectiveness in information technology, measurements of some specific areas, such as readiness of a region for e-business, the level of security of IS, and so on. The course gives a theoretical foundation in this field, but also shows the practical application of related concepts, methods, techniques and tools. It is designed for professionals who want to gain knowledge of this field in order to lead such projects in practice and continue to deepen their knowledge.
Preconditions	
Realization and examination	Classes: Lectures, laboratory exercises Exam: Written exam and assignment
Literature	ISO/IEC 9126 - Software engineering - Quality model / Planning / Evaluation, International Organization for Standardisation, Geneve, Switzerland

	<p>ISO/IEC 12207 - Software Life Cycle Processes, International Organization for Standardisation, Geneva, Switzerland, 2009</p> <p>ISO/IEC 14598 - Software engineering - Product evaluation, International Organization for Standardisation, Geneva, Switzerland, 2008</p> <p>ISO/IEC 9126:2008 - Quality management, International Organization for Standardisation, Geneva, Switzerland, 2008</p> <p>CMMI - Capability maturity models, Carnegie Mellon University, Pennsylvania, 2009</p>
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