Information Systems and Sosftware Systems Engineering (12CFU)

The course is organized in two sections addressing different issues in the design of software systems.

Information Systems (6CFU)

Software Systems Engineering (6CFU)

Master of Science in Computer Engineering

2016-17

Information Systems (6CFU)

The first section provides advanced databases management systems topics to be used in the context of information systems. Data storage, data indexing and query planning, transaction management (transactions, concurrency control and recovery), parallel and distributed databases are presented. Then the basic concepts of information systems architectures, information management technologies (data warehouse, data handling in embedded and mobile systems, web information systems) are discussed.

Software Systems Engineering (6CFU)

The second part addresses software system development issues taking account the quality of both the development process and the produced system. All phases of the software life cycle are crossed: techniques are presented for modeling the requirement analysis and design phases with the related international standards. The development process management and planning is illustrated and accompanied by related supporting tools; also the international quality standards for these phases are presented and the maturity models. Finally, techniques for verification and validation of the software product are presented.

Exam: written test (first part), project (second part), oral test

Information Systems (6CFU)

Prof. Cinzia Bernardeschi

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