Separate tasks

		Proficiency levels			
		1	***2***	***3***	***4***
Activities	***Analysis***	Collect and validate functional requirements for a software system with one stakeholder according to a standard method. Define acceptance criteria for functional requirements stated above.	Carry out a requirement analysis for a software system with various stakeholders, while taking into account the quality properties including security. Carry out an analysis to formulate and validate functionality, security, design, interfaces etc. of an existing system or component. Set up an acceptance test based on quality properties.	Carry out a requirement analysis for a software system with various stakeholders in a context of existing systems. Define acceptance criteria based on quality properties and a risk analysis carried out with, among others, attention for security aspects.	Carry out an analysis for complex software-in-software systems including all non-functional requirements such as safety, security and privacy.
	Advise	Give recommendations on specific requirements of a software system based on research into existing, comparable systems.	Provide advice on the purchase and selection of software components during the development of a software system whereby the cost aspect plays a role. Provide advice on a section of the architecture or a limited software system. Give advice on the use of prototypes in validating the requirements.	Give advice concerning the choice of software architecture or existing software frameworks whereby cost aspects and quality properties such as availability, performance, security and scalability play a role. Provide advice about the approach to take during the processing and consultation of large quantities of data with attention for privacy. Provide advice on the organisation of a software development process, including the test process.	Define a vision in regards to future technology and software architecture in collaboration with stakeholders.
	Design	Create a design for a software system, including a data base with model techniques according to a standard method.	Compile a design for a software system while taking into account the use of the existing components and libraries. Apply design-quality criteria while taking into account security aspects and various types of devices. Create a design for a system that can process and consult a large quantity of data.	Compile a software architecture for a software system that is comprised of existing and new systems, and takes several stakeholders quality properties into account, including security and scalability. Compile a test strategy for system tests.	Design a system for solving a generic class of problems. Design a framework.

		Record the quality of the design, for example by testing or prototyping, taking into account the formulated quality properties. Compile test subjects according to a given test strategy,		
Realisation	Build, test and make available a simple software system. The set-up, filling and querying of a data base is part of the software system.	Build and make available a software system that is comprised of several sub-systems while using existing components. Integrate software components into an existing system whereby you safeguard the integrity, security and system performance. Carry out, monitor and report on unit integration, regression and system tests, with attention for security aspects.	Build and make available a scalable software system that correlates with existing systems, perhaps in the cloud, according to the designed architecture while using existing frameworks. Application of test automation in carrying out tests.	Coding of algorithmically complex problems. Build AI related software.
Manage & Control	Organise and make use of a management system to support the software development in teams.	Manage and use a development environment to support software development in teams, including, among others, continuous integration as an option. Apply methods and techniques to manage a software development process and safeguard the quality	Carry out configuration, change and release management in conjunction with infrastructure management. Organise a development environment with automated build and test infrastructure.	Design and realise a development environment with automated build and test infrastructure.