

requirements 101 course outline

Our Requirements 101 course is the perfect introduction for anyone looking to hone their team's skills and knowledge around gathering requirements. This course will teach the students to recognize different types of requirements and get an introduction to techniques for elicitation, scope management, models and requirements review.

ID	Topic	Learning Objective
1.0	requirements 101 training	Introduction to Requirements
1.1	introduction	
1.1.1	Course goals and objectives	
1.1.2	Agenda for day (lecture, exercises/games, lunch/breaks, and survey)	
1.2	overview	
1.2.1	Understanding impacts of incomplete, inaccurate, and late requirements and WHY we are focusing on this	Student shall be able to identify 5 impacts of incomplete, inaccurate, and late requirements
1.3	types of requirements	
1.3.1	Introduction	Student shall be able to describe the Requirements Object Model
1.3.2	Business Objectives	Student shall be able to write business objectives given a project scenario
1.3.3	Features	Student shall be able to identify and define product features, and explain how to get from Business Objectives to Features for a given scenario
1.3.4	Functional Requirements	Student shall be able to identify and define functional requirements
1.3.5	Non-Functional Requirements	Student shall be able to identify the value of documenting non-functional requirements
1.3.6	Business Rules	Student shall be to identify and define business rules
1.4	the requirements process	
1.4.1	Requirements Lifecycle (elicit, specify, validate, manage)	Student shall be able to define the 4 stages of the requirements process
1.4.2	Requirements within the Project Lifecycle	Student shall be able to identify how requirements are developed and used within each stage of the project lifecycle
1.4.3	Roles in the Requirements Process (business stakeholder, SME, RE, PDM, Dev, Test)	Student shall be able to define at least 4 roles within the requirements process and each role's responsibility within the requirements process
1.5	eliciting requirements	
1.5.1	Sources of requirements	Students shall be able to identify 5 potential sources of requirements
1.5.2	Elicitation methods	Students shall be able to identify 3 methods for eliciting requirements
1.5.3	Facilitation	Students shall be able to describe the strengths and weaknesses of interviews, workshops, sessions, etc...
1.5.4	Observations	Students shall be able to describe the strengths and weaknesses of observations
1.5.5	Questionnaire	Students shall be able to describe the strengths and weaknesses of questionnaires
1.5.6	Providing requirements	Students shall be able to describe 3 techniques to utilize when providing requirements

1.6	requirements models	
1.6	Requirements Models	
1.6.1	How requirements models help the requirements process	Students shall be able to state 3 ways that models improve the requirements process
1.6.2	How models fit into the Requirements Object Model	Students shall be able to describe how models work with the Requirements Object Model
1.6.3	Model identification and classification	Students shall be to identify 4 requirements models and explain how these models are classified
1.7	requirements specification	
1.7.1	Generating requirements from models	Student shall be able to describe the process for generating requirements from use cases, entity relationship diagrams, and system context diagrams
1.7.2	Level of detail in requirements	Student shall be able to correctly identify the right level of detail for business objectives, features, and requirements
1.7.3	Anatomy of a good requirement	Student shall be able to list 4 characteristics of a good requirement
1.7.4	Making requirements testable and measurable	Student shall be able to write functional and non-functional requirements that are testable and measurable
1.7.5	Identifying and clarifying assumptions	Student shall be able to describe the process for identifying assumptions
1.8	requirements validation	
1.8.1	Requirements validation and verification	Student shall understand the difference between requirements validation and verification
1.8.2	Reviewing requirements documentation (meetings, reviewing on one's own, inspections)	Student shall be able to list the steps used to review a requirements document
1.9	managing requirements	
1.9.1	Prioritization - Requirements should map directly back to business objectives/needs	Student shall be able to match a sample requirement with business objectives, needs, and features
1.9.2	Scope control (what is it, how do you do it, when do you do it)	Student shall understand the importance of requirements scope control and how it impacts project schedule and cost
1.9.3	Understanding impact and cost of defects using change control techniques	Student shall be able to assign relative costs to a set of requirements changes at all stages of the software development lifecycle
1.9.4	Traceability (what is it, how do you do it, when do you do it)	Student shall be able to describe how requirements are managed during the project lifecycle using traceability, and shall be able to define backward and forward traceability
1.9.5	Requirements metrics	Student shall be able to list 3 different requirements metrics
1.9.6	Requirements management tools	Student shall be able to list 3 benefits of a requirements management tool