

Course Description
This four-week course covers the techniques required to break down and map requirements into plans that will ultimately drive software production. Upon successful completion of this course, you will be able to:

- Create effective plans for software development
- Map user requirements to developer tasks
- Assess and plan for project risks
- Apply velocity-driven planning techniques
- Generate work estimates for software products

SOFTWARE PRODUCT MANAGEMENT Specialization

Course 4: **AGILE PLANNING FOR SOFTWARE PRODUCTS**

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Module 1 Introduction to Planning	Module 2 Project Planning	Module 3 Iteration Planning	Module 4 Risk Planning
Introduction: Specialization Preview 2 minutes	Lesson 4.2.1(A): Story Points 16 minutes <ul style="list-style-type: none">• Summarize the term story point<ul style="list-style-type: none">- Identify different ways of sizing a task• Generate an story point for a user story<ul style="list-style-type: none">- Recall the term user story	Lesson 4.3.1(A): Estimating Task Time 20 minutes <ul style="list-style-type: none">• Recognize what a good estimate entails<ul style="list-style-type: none">- Identify issues with estimation- Summarize the concepts of the Cone of Uncertainty• Summarize the approaches for creating estimates (Bottom-up, analogy, experts)• Determine (calculate) the task time using the formula	Lesson 4.4.1(A, B, C, D): Anti-Patterns 40 minutes <ul style="list-style-type: none">• Summarize anti-patterns that should not be followed<ul style="list-style-type: none">- Identify anti-patterns that should not be followed- Recognize why these anti-patterns should not be followed
Introduction: Introduction to Agile Planning for Software Products 4 minutes	Discussions: User Story Points	Course Resources: Worksheet: Calculating Task Time	Lesson 4.4.2: Causes of Failures 6 minutes <ul style="list-style-type: none">• Determine the risks in a scenario<ul style="list-style-type: none">- Summarize the term risk- Identify types of risks
Course Resources: Agile Planning for Software Products - Course Notes & Glossary	Lesson 4.2.2: Velocity Estimates 9 minutes <ul style="list-style-type: none">• Summarize the term velocity<ul style="list-style-type: none">- Identify the steps in calculating velocity- Identify factors that influence velocity- Identify what makes velocity stable• Calculate the velocity of an example• Recognize that a story is only counted towards velocity if the story is done<ul style="list-style-type: none">- Summarize the concept of done	Discussions: Estimating Task Times	Lesson 4.4.3: Risk Assessment, Likelihood, and Impact 10 minutes <ul style="list-style-type: none">• Summarize the impact vs. likelihood matrix<ul style="list-style-type: none">- Summarize the term impact- Summarize the term likelihood- Recognize the magnitude of a scenario in relation to the matrix• Determine where a scenario falls on the matrix
Lesson 4.1.1(A): Introduction to Planning 12 minutes <ul style="list-style-type: none">• Recognize that planning is a necessary step• Summarize release and iteration plans• Recall key terms used within SPM<ul style="list-style-type: none">- Recall the term task- Recall the term role- Recall the term schedule- Recall the term milestone- Recall the term work product	Discussions: Velocity	Lesson 4.3.2: Task Dependencies 7 minutes <ul style="list-style-type: none">• Recognize that tasks can depend on each other<ul style="list-style-type: none">- Summarize the term start-start- Summarize the term start-finish- Summarize the term finish-start (most common)- Summarize the term finish-finish	Lesson 4.4.4: Risk Strategies, Contingency, Mitigation 10 minutes <ul style="list-style-type: none">• Generate a risk management plan<ul style="list-style-type: none">- Summarize the term risk management plan- Summarize the term risk- Summarize the term indicator- Summarize the term action- Recognize how to prioritize risks• Summarize the term unforeseen risks
Lesson 4.1.2: Uncertainty Space 6 minutes <ul style="list-style-type: none">• Summarize the concepts of the uncertainty space diagram<ul style="list-style-type: none">- Make connections to Agile from previous course- Describe navigating the uncertainty space diagram	Lesson 4.2.3: Time Boxing 6 minutes <ul style="list-style-type: none">• Describe what a time box is• Recall how story points work• Summarize the term release• Summarize the term time boxing• Explain how time boxing relates to Scrum	Lesson 4.3.3: Critical Path Method Chart 10 minutes <ul style="list-style-type: none">• Summarize the concept of CPM chart<ul style="list-style-type: none">- Summarize the term critical path- Summarize the term slack	Discussions: Product Management Techniques
Lesson 4.1.3: Work Breakdown Structure 14 minutes <ul style="list-style-type: none">• Summarize the term work breakdown structure• Carry out a work breakdown structure on an example• Recognize a task that is an appropriate size	Lesson 4.2.4: Gantt Charts 5 minutes <ul style="list-style-type: none">• Summarize the concept of the Gantt Chart<ul style="list-style-type: none">- Recognize that the Gantt could be at the task level or release level	Lesson 4.3.4: Pert Chart 9 minutes <ul style="list-style-type: none">• Summarize the concept of PERT chart<ul style="list-style-type: none">- Summarize the term critical path- Differentiate between the CPM Diagram and the PERT chart- Summarize the term slack• Generate a PERT Chart	Reading: Module 3: Supplemental Resources
Peer Graded Assignment: Work Breakdown Structure Passing threshold - 70%Course weight 5%	Lesson 4.2.5: Release Plans 15 minutes <ul style="list-style-type: none">• Recognize the individual aspects of a release plan• Assemble a release plan	Peer Graded Assignment: CPM Chart Passing threshold - 80%Course weight 5%	Module Assessment: Quiz 4 – Graded (8 questions) Passing threshold - 70%Course weight 15%
Lesson 4.1.4: Estimates, Targets, and Commitments 14 minutes <ul style="list-style-type: none">• Differentiate between the terms estimate, target, and commitment<ul style="list-style-type: none">- Summarize the term estimate- Summarize the term target- Summarize the term commitment• Identify an example as either an estimate, a target, or a commitment	Peer Graded Assignment: Release Planning Passing threshold - 80%Course weight 5%	Lesson 4.3.5: Iteration Plan 11 minutes <ul style="list-style-type: none">• Summarize the concept of an iteration plan<ul style="list-style-type: none">- Summarize the term iteration• Recognize that this is not assigned work—this is to be self-assigned by developers• Assemble an iteration plan	Course Assessment: Course Final Quiz – Graded (36 questions) Passing threshold - 75%Course weight 40%
Reading: Module 1: Supplemental Resources	Reading: Module 2: Supplemental Resources	Reading: Module 3: Supplemental Resources	Discussions: Week 4
Module Assessment: Quiz 1 – Graded (8 questions) Passing threshold - 70%Course weight 10%	Module Assessment: Quiz 2 – Graded (eight questions) Passing threshold - 70%Course weight 10%	Module Assessment: Quiz 3 – Graded (8 questions) Passing threshold - 70%Course weight 10%	
Discussions: Week 1	Discussions: Week 2	Discussions: Week 3	

NOTE: The lesson number refers to the course, module, and lesson. For example, lesson 1.2.3 refers to the first course, second module, third lesson.