

# 101/205 Business Process Analysis and Discrete Event Simulation Using Metastorm ProVision® 6



## Course Syllabus

<b>Important Facts:</b>	5 days 60% Lecture/Demonstration 40% Hands-on Exercises
<b>Target Audience:</b>	Business architects, business analysts, project managers, Six Sigma and Lean practitioners, business staff involved in documenting, designing or improving business processes, business managers and process owners, IT professionals responsible for working with management and business analysts to facilitate and automate business process improvements, and professionals responsible for using workflow model simulations to quantify business process timing, costs and resource utilization.
<b>Class Objectives:</b>	<p>Upon completion of this five-day class, you will be able to create, maintain and publish a set of models used to describe and analyze business processes and associated business architecture components (who, what, when, where, why, &amp; how) using Metastorm ProVision. You will be able to set both project and process boundaries, as well as describe the business environment and key drivers. You will also have practiced techniques and skills used in capturing, communicating and verifying information about both the current (As-Is) and future (To-Be) state of business processes.</p> <p>Additionally, this class provides first-hand experience using ProVision's discrete event simulation capability to apply metrics to workflow models and calculate process timing, costs and resource utilization. You will be able to set-up, analyze and modify workflow models and understand business process component behavior using workflow model simulation techniques.</p>
<b>Prerequisites:</b>	This course includes the introductory-level ProVision training course, so no prior experience with Metastorm ProVision is required. You should have an interest in gaining a deep understanding of modeling and analyzing business processes, and also a strong interest in learning how to apply metrics to workflow models to determine process timings, costs and resource utilization. Familiarity with business processes, project management and computer fundamentals is a plus.
<b>Topic Outline:</b>	<b>Day 1</b> <ul style="list-style-type: none"><li>▪ Introduction<ul style="list-style-type: none"><li>○ Course Objectives, Content &amp; Timing</li><li>○ Setting Student Objectives</li></ul></li><li>▪ Enterprise Architecture Overview (where BPA fits)</li><li>▪ Metastorm ProVision Basics<ul style="list-style-type: none"><li>○ Structure</li><li>○ Navigation</li><li>○ Preferences</li></ul></li></ul>

- Exercise: Metastorm ProVision Basics
- Parent/Child Modelers
  - 18 Parent/Child Modelers
  - Detailed coverage of Organization Modeler
- Exercise: Parent/Child Modelers
- Model Editing
  - Delete, Exclude, Hide & Clone
  - Toolbars & Customization
- Object Associations
  - Building Associations
  - Association Grids
  - Artifacts, Rules, Issues & Notes
- Exercise: Model Editing & Associations
- Object Appearance & Model Settings
  - Modeling Languages
  - Object Appearance
  - Model Settings
- Exercise: Object Appearance & Model Settings
- Business Interaction Modeler
  - Usage
  - Component
  - Development Approach
- Exercise: Business Interaction Modeler

## Day 2

- Process Identification
  - Process Characteristics
  - Process Context using Communication Modeler
  - Development Approach
- Communication Modeler
  - Usage
  - Building Process Context Models
- Exercise: Communication Modeler
- Model Layers
  - Usage
- Exercise: Model Layering
- Process Modeler
  - Usage
  - Structure
  - Development Approach
- Exercise: Process Modeler
- Workflow Modeler (Basic)
  - Usage
  - Basic Components
  - Development Approach
- Exercise: Workflow Modeler (Basic)
- Workflow Modeler (Intermediate)
  - Activity Usage
  - Activity Alias
  - Nesting Workflow Models
  - Activity Collaboration
  - Scenarios
  - Development Approach

- Exercise: Workflow Modeler (Intermediate)

### Day 3

- Process Redesign
  - Principles
  - Opportunities
  - Problems
- Exercise: Practice Workshop (using a client-specific process)
- Checking, Publishing & Reporting
  - Tools (Completeness, Spelling & Interpreter)
  - Publishing organized documents to Microsoft® Word®, Printer & HTML
  - Reporting using Crystal Reports®
- Exercise: Checking, Publishing & Reporting
- Working Together in Shared Repositories/Notebooks
  - Merge
  - Knowledge Exchange/Teamwork
  - Check-out/Check-in
  - Knowledge Exchange Viewer/Editor
  - Introduction to Knowledge Exchange Repository Management (not covered in full detail)
- Exercise: Working Together
- Business Process Analysis Summary

### Day 4

- Introduction to Simulation
- Principles & Concepts
- Exercise: Simulation
- Sources
  - Count, Frequency & Rate
  - Probability Distribution Function
- Exercise: Basic Source
- Empirical Streams
- Exercise: Empirical Stream
- Source Availability & Delay Time
- Exercise: Source Availability & Delay Time
- Workflows
- Exercise: Transit Time & Capacity
- Activities
  - Work Time
  - Delay Time
- Exercise: Activity Time
- Recipes
- Exercise: Recipe
- Resources
  - Types
  - Rates
  - Assignments
  - Availability
- Exercise: Resource Utilization
- Resource Delay
- Exercise: Resource Delay
- Cost Elements

- Direct
  - Indirect
- Exercise: Cost Elements
- Decision Points
- Exercise: Decision Points

## Day 5

- Junctions
  - Convergent/Divergent
  - Recipes
- Exercise: Junctions
- Stores
- Exercise: Stores
- Scenarios
  - Features
  - Recruitment
  - DES Details
- Exercise: Calculation
- DES Settings
  - Run Time
  - Warm-up Time
  - Cool-down Time
- Exercise: Simulation Time
- Resource & Commodity Constraints
- Exercise: Capacities
- Alternates & Crews
- Exercise: Alternates & Crews
- Simulation Paths
- Exercise: Simulation Paths
- Simulation with Animation
- Exercise: Animation
- Reports & Grids
- Exercise: Cost Reporting
- Resource Reporting
- Exercise: Resource Reporting
- Timing Calculation & Queues
- Exercise: Timing
- Activity States
- Exercise: Activity State
- Commodity States
- Exercise: Commodity State
- Resource States
- Exercise: Resource State
- Entity States
- Exercise: Entity State
- Auto Layout & Comparison
- Exercise: Auto Layout & Comparison
- Simulation Summary & Next Steps