Model-Based Engineering (MBE) Using SysML: Hands-On Essentials for Creating SysML Models (SysML 102) [DEF4509P]

April 28-30, 2010 | Atlanta | $1,395

NEW COURSE

Go beyond the comprehension skills you acquired in Model-Based Engineering (MBE) Using SysML: Essentials for Understanding SysML Models (SysML 101). Learn to implement essential concepts through hands-on sessions and exercises with a representative SysML tool.These skills are reinforced by doing useful things with the resulting SysML models—not just building them for the sake of documentation. For example, exercises include (i) employing SysML parametrics to perform calculations on system properties and verify requirements, and (ii) utilizing SysML activities to operate a mobile robot during a team-based competition.

Who Should Attend

- Engineers
- Scientists
- Managers
- Technicians

How You Will Benefit

- Create models in a SysML tool that include the kinds of diagrams and constructs learned in SysML 101
- Develop SysML activity models that are executable (e.g., to operate a system)
- Construct SysML models that contain calculations and execute parametric simulations
- Verify system requirements (e.g., based on simulation results) and auto-generate traceability matrices
- Perform introductory trade studies
- Generate documents automatically from system models
- Describe the benefits and costs of implementing SysML models in a real SysML tool (vs. sketching SysML diagrams in a drawing tool)

What You Will Cover

- Tool Intro
- Structure Exercises
- Behavior Exercises
- Requirements Exercises
- Collaboration Tools

Course Materials

Attendees will receive course notes (hardcopy and digital), exercises and sample models.

Learn more or register at www.defense.gatech.edu

Prerequisites

Model-Based Engineering (MBE) Using SysML: Essentials for Understanding SysML Models (SysML 101).

Certificates

This course is an elective for the:

- Modeling & Simulation Certificate
- Systems Engineering Certificate

Course Administrator

For more information about this course or an offering at your location, contact **Russell Peak** at **404-894-7572** or **russell.peak@gatech.edu**.

Russell Peak, Ph.D., is a senior researcher at the Georgia Institute of Technology where he serves as director of the Modeling & Simulation Lab (www.msl.gatech.edu) and associate director of the Product & Systems Lifecycle Management (PSLM) Center (www.pslm.gatech.edu). He is also the CTO at InterCAX LLC (www.InterCAX.com)—a spin-off company that has commercialized his work from Georgia Tech. After six years in industry (Bell Labs and Hitachi), he joined the research faculty at Georgia Tech. Since 1997 he has been principal investigator on 30+ projects with sponsors including Boeing, IBM, JPL, Lockheed, NASA, Rockwell Collins, Sandia, Shinko (Japan), TRW Automotive, US DoC (NIST) and DoD. He has authored over 80 publications (including several Best Paper awards), holds several patents, is an active member in ASME and INCOSE, and represents Georgia Tech on the OMG SysML task force.

The Instructors

Each course offering is co-taught by two or more of the following instructors:

- Manas Bajaj
- Leon McGinnis
- Chris Paredis
- Russell Peak

Content Developer — Object Management Group SM Certification Program

Course Location and Times

Atlanta, Georgia Tech Global Learning Center

- 8 a.m. - 5 p.m. Wednesday – Thursday
- 8 a.m. - noon Friday

On the first day, check in at least 30 minutes before class start time.

Detailed information about course locations, accommodations, and registration starts on page 123.

For more information and to register, visit www.defense.gatech.edu/systems-engineering or call 404-385-3500.