

Detailed Syllabus for ACVIP Modeling and Analysis Training Class

1. ACVIP Overview

- How ACVIP solves common MBSE project issues
- Introduction to the ACVIP Workflow

2. Developing an ACVIP Management Plan

- Coordinating stakeholders, identifying main roles, meeting certification and qualification milestones
- Template for creating an ACVIP Management Plan
- **Exercise:** Develop your own ACVIP Management Plan

3. Structuring Models for Delivery and Virtual Integration

- Key Principles of ACVIP Modeling
- ACVIP Analysis Harness and Template
- **Exercises:** ACVIP analysis methods and tools

4. Analysis Tools: Low Fidelity Model Analysis

- Applying ACVIP Analysis Early in a Program
- Model Properties Supporting Low Fidelity Analysis
- **Exercises:** Running ACVIP analysis tools on low fidelity models

5. Analysis Tools: High Fidelity Model Analysis

- ACVIP Analysis Applied to Higher Fidelity Models
- Model Properties Supporting High Fidelity Analysis
- **Exercises:** Running ACVIP analysis tools on high fidelity models

6. Multi-Organization Model Based Development

- Collaborative Development using ACVIP
- **Exercise:** Developing models across multiple organizations

7. Multi-Organization Model Based Integration

- Collaborative Integration using ACVIP
- **Exercise:** Virtually integrate component models from multiple sources

8. Automated Analysis and Conformance

- Model Integration Workflow: The SysML<--->AADL Connection
- Maximizing Interoperability: The FACE <---> AADL Connection
- Continuous virtual integration (CVIT)
- Managing IP while Working with External Suppliers
- **Exercise:** Generate AADL from a FACE USM and extend to support analysis