Foundations of the System Engineering and Architecture Frameworks

Açıklama

İki gün süren bu eğitim, katılımcıların Sistem Mühendisliği ile genel bir terminoloji edinmelerini, sistem vizyonuna, temel prensipleri ve ISO / IEC 15288 and ISO / IEC / IEEE 42010 standartlarına göre en son teknolojilere dayalı prosedürlerin yanı sıra DoDAF, MoDAF ve NAF gibi Sistem Mühendisliğinin mimari çerçevelerine aşina olmalarını sağlar. Katılımcılar ayrıca Open Group'un TOGAF'ın Mimari Geliştirme Yöntemi (ADM – Architecture Development Method) gibi Kurumsal Mimari Metodolojileri kullanarak bakış açılarını nasıl ayarlayabileceklerini öğrenirler.

Kimler Katılmalı?

Sistem mühendisliği alanına dahil olan herkes: Sistem Mimarları, Sistem Analistleri, Sistem Mühendisleri,

Tüm Sistem Mühendislerinin kurumsal yaklaşıma bağlı kalmalarından sorumlu olan yöneticiler

Eğitim İçeriği

Introduction

- Objectives of this training/mentoring module,
- Issues in the System Engineering and Model Typologies (AFIS, Incose),
- The System Vision: definitions and characteristics,
- Notions of the System Enginering : view and viewpoint of the standard ISO/IEC/IEEE 42010, principles, process and activities
- Typology of Requirements : business requirements, functional and non functional requirements, user requirements, design and exploitation level requirements

Project Management in the field of System Engineering

- Processes and phases, integrated and simultaneous engineering,,
- System development : generic process, engineering and integration, iteration et

recursivity,
- Organisation in the System Engineering Discipline: a collaborative management of the information, language and data

The Engineering Process and Modeling

- Description of the dynamic and static context of the system: entities, flows exchanged, external constraints,
- Modeling in system engineering: Semantic, functional, dynamic, temporal, organic modeling,
- Panorama of representations in SysML,
- Positioning the System Development Cycle in the various state-of-the-art approaches according to ISO / IEC 15288: Harmony, OOSEM, RUP-SE, State Analysis MBSE, Vitech MBSE Initiative,
- Basic process for engineering: requirements gathering- definition of technical requirements analysis, design of functional and organic / physical architectures,
- Verification of the constituents of the system against technical requirements,
- Validation against the allocated requirements and initial requirements for the complete system,
- Evaluation and optimization of architectures

Architecture Frameworks for System Engineering

- DoDAF, MoDAF, NAF
- Aligning the Architecture with Changes
- Tools for the System Engineering
- Expected Functionnalities from the tools ,
- Complementary tools for engineering,
- Presentation of a System Engineering tool,

Conclusion

- Phases of requirements gathering, analysis and design in the system engineering,
- Ensuring traceability between requirements and components of the system,
- Integration and Acceptance tests of the Requiements upon the system architecture

Ön Koşullar

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Herhangi bir ön koşul yoktur.