

Systems Engineering for Product Life Cycle Management Course

Instructor: Mr. David F. Tyler, Advanced Automation Corporation (AAC)

Course Description:

This intensive 3 day course is part of WSTIAC's Systems Engineering Course Series and provides a comprehensive overview of the discipline of Systems Engineering and how it is applied over the life cycle of a product. Systems Engineering is the integration of several engineering fields into an efficient and effective process for the overall technical management of programs and development of systems and equipment which meet user requirements. The field has been evolving and new systems engineering frameworks and definitions are presented. Topics include Systems Engineering standards, models, technical management, analysis and evaluation, product realization, product control, configuration and data management, product support, coupled with a practical approach to capability maturity. Specialty Engineering disciplines such as manufacturing, logistics, environment, human factors, are reviewed and integrated into the Systems Engineering process with several case study examples from industry and government.

Topics Include:

- Introduction to Systems Engineering and the Product Lifecycle
 - Systems Engineering Overview
 - Related Standards, Models, Frameworks Standards
 - DOD 5000 Series (*recently updated*)
 - JCIDS (Development of requirements documents (ICD, CDD and CPD) and Analyses (such as LCC, BCA, AoA, etc.) (*recently updated*))
- The Systems Engineering Process
- System Development Process
- Introduction to Managing Systems Engineering
 - Systems Engineering Tools & Techniques
 - Risk Management
 - Systems Engineering Metrics
 - Environmental Impact Analysis

- Supportability Analysis
- Survivability Analysis
- System Cost/Effectiveness Analysis
- System Modeling
- System Security Analysis
- Trade Studies
- Training Analysis
- Verification Analysis
- Disposal Analysis

Systems Engineering by Acquisition Phase
Current Trends & Memos

About the Instructor:

Mr. David Tyler is a Senior Acquisition and Systems Engineering expert. He has more than 30 years in the field across a wide range of DoD, DoE, NASA and commercial programs. He has developed systems engineering plans for a wide array of government and commercial organizations. Mr. Tyler has written over 50 papers on these and related topics. He is a member of the Logistics Management Community at DAU

Security Classification:

The Systems Engineering Series courses are UNCLASSIFIED.

Handout Material:

Each student will receive a comprehensive set of course notes covering the material presented.

For additional information, contact
Ms. Mary Priore
315.339.7135
mpriore@alionscience.com
<http://wstiac.alionscience.com/training>

Notice: WSTIAC reserves the right to cancel, change the course schedule, and/or instructor if required. In the event of a schedule change or cancellation, the customer will be immediately informed.