

# Maintenance 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 presents the theory and practice of Maintenance Engineering. Maintenance Engineering is becoming a critical issue today for many organizations in achieving reduced operational costs. This course provides a practical and comprehensive overview of maintenance engineering from the product design and development to the field maintenance and in service systems engineering management of operational systems. The course covers maintenance engineering design methods, maintainability predictions, analysis, testing and demonstration, and operational systems engineering principles and applications.

Topics include:

### Maintenance Engineering Course Outline – Day 1

- Introduction to Maintenance Engineering
- The Need for Maintainability
- Structuring a Maintainability Program
- Maintainability Planning
- Maintainability Measures
- Development of the Maintenance Concept

### Maintenance Engineering Course Outline – Day 2

- Maintainability Analysis
- Introduction to Maintainability in Design
- Maintainability Design Guideline
- Maintainability Prediction
- Maintainability Prediction Integration
- Maintainability Analysis
- Maintenance Task Analysis

### Maintenance Engineering Course Outline – Day 3

- Integrated Class Exercise
- Formal Design Review
- Maintainability Design Check List
- Maintainability Testing
- Maintainability Test and Demonstration
- Maintainability Data Collection and Analysis
- Maintainability Demonstration and Testing
- Operational Parameter Translation for Field Systems
- Operational System Maintenance Engineering

### 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.