Academy of Program/Project & Engineering Leadership

An agency-wide resource for technical workforce development

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Continuous Learning for the Technical Workforce

**Approach**

**Activities**

**Individual**
- Training curriculum
  - Core curriculum for 4 career levels
  - In-depth offerings in subject areas
  - Project HOPE: partnership with SMD to provide hands-on opportunities
  - SELDP

**Team**
- Direct support to project teams
  - Online assessments
  - Workshops
  - Mentoring and coaching
  - Expert practitioners
  - and technical lifecycle support
  - Team building and process support

**Organization**
- Knowledge sharing
  - Forums for project managers, systems engineers, and principal investigators
  - Publications
  - Case studies
  - Communities of practice
4-Level Career Development Framework

EXECUTIVE LEVEL
PROGRAM OR VERY LARGE PROJECT MANAGER
Core: Executive Program
Mentoring; Administrator’s Executive Forum
Leadership by example in knowledge sharing

LEARNING STRATEGIES
Cohort selected by NASA senior leaders

MID-CAREER
LARGE PM OR SYSTEMS MANAGER
Core: Advanced Project Management & Systems Engineering
Mentoring
In-depth courses; rotational assignments
Participation in knowledge sharing activities

Knowledge sharing forums
Developmental assignments
Performance enhancement for teams
Non-traditional and hands-on learning experiences

MID-CAREER
SMALL PROJECT MANAGER OR SUBSYSTEM LEAD
Core: Project Management & Systems Engineering
In-depth courses; team lead assignments; Project HOPE
Attendance at technical conferences or knowledge sharing activities

ENTRY
PROJECT TEAM MEMBER OR TECHNICAL ENGINEER
Core: Foundations of Aerospace at NASA
Obtain mentor
Join professional associations

APPEL core curriculum
Guiding Principles:

1. Competency-based.

2. Focuses on building NASA-specific expertise and capability in project management and systems engineering and makes extensive use of NASA case studies.

3. Intended to supplement an individual’s academic and professional work experience.

**Foundations of Aerospace at NASA**

Learning objective: to give participants a solid understanding of the NASA organization and its principles of technical excellence.

**Project Management & Sys. Engineering**

Learning objective: to enhance proficiency in applying project management (PM) and systems engineering (SE) processes and practices over the project life cycle.

**Advanced PM & Advanced SE**

Learning objective: to give experienced practitioners a deep understanding of the challenges of leading and managing programs and projects in a complex and dynamic environment.

**Executive Program**

Learning objective: to develop a cadre of highly qualified NASA leaders for executive leadership roles. Participants selected based on recommendations of Center Directors and Associate Administrators.

✓ PMI Registered Provider of Professional Development Units
APPEL offers rapid deployment training at any point in the project life cycle through one-on-one assistance, coaching, mentoring, focused workshops, or large-group sessions in the following areas:

- Team and Leadership Development
- Requirements Development
- Planning and Scheduling
- Program Control Analysis
- Systems Integration Support
- Risk Management
- Software Management
- Technical Review Support

Currently supporting over 100 NASA engineering and project teams

Tools and Methods:
- Baseline team and individual assessments
- Team workshops
- Expert practitioners for technical support
- Coaching and mentoring
- Follow-up team and individual assessments
Knowledge sharing activities emphasize the vital role of stories in the effective exchange of knowledge.