

DEVELOPMENT PLANNING MATRIX				
	Level 1	Level 2	Level 3	Level 4
LEVELS OF PROJECT LEADERSHIP	Team Practitioners/Technical Engineers	Subsystem Leads	Project Managers/Project Systems Engineers	Program Managers/Project Systems or Chief Engineer
APPEL CORE COURSES	Foundations of Aerospace at NASA	Project Mgmt and Systems Engineering	Advanced Project Mgmt and Advanced Systems Engineering	Executive*
IN-DEPTH COURSES are offered in various topic areas. These are guidelines as to when in an individual's career a course can be taken. Individuals should attend courses to enhance competencies in current positions or for future development requirements.	Project Management			
	-Beyond EVM Basics -Beyond Scheduling Basics -EVM Overview -NASA's Budgeting Process -Project Planning Analysis & Control -Risk Management -Understanding EVM -Understanding Project Scheduling	- Assessing Project Perf. -Advanced EVM -Integrating EVM with Acquisition -Continous Risk Mgmt -Management of Space Technology -Project Acquisition Workshop -Scheduling & Cost Control	-Integrating Cost & Schedule -International Project Management (<i>course can be taken by anyone in a role that deals with IPM issues</i>)	Future possible development for mature PGM/PM population -7120.5 Assessment Tool -Executive Workshops
	Systems Engineering			
	-Fundamentals of Systems Engineering -Lifecycle, Processes, and Systems Engineering -Requirements Development and Management	-Concept Exploration & Systems Architecture -Decision Analysis -Developing& Implementing SEMP -Space Systems V&V -Transition, Product Delivery, & Mission Ops		
	Communications & Leadership			
-Communicating Technical Issues -Negotiations	-Team Leadership	-Leading Complex Projects	Consider Agency Leadership Courses offered by OHCM.	
Technical - General				
-Introduction to Aeronautics	-Innovative Design for Engineering Applications -Mars Mission System Design -Science Mission Systems Design & Ops Course/Lab -Seven Axioms of Good Engineering -Space Launch Transportation Systems		-Principal Investigator Forum	
DEVELOPMENTAL WORK ASSIGNMENTS: (TO BE DETERMINED BY CENTERS)				
EXAMPLES OF KNOWLEDGE SHARING ACTIVITIES				
These are only examples. Each Center should identify those experiences specific to Center needs.	-Obtain a mentor -Attend a technical conference -Demonstrate working knowledge of Agency policy documents -Join national & international affiliations or technical bodies (i.e. INCOSE, PMI)	-Write and present a technical paper -Attend the Master's Forum, PM Challenge, or other non-NASA conferences	-Write a technical paper and present it at the Master's Forum, PM Challenge or external NASA conference -Study case studies	-Become a mentor -Conduct storytelling sessions -Instruct or become a guest speaker at APPEL courses -Write an article in ASK magazine

*Individuals will be selected for participation in this program.