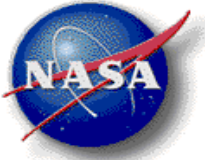


# JSC Space Systems Engineering Development Program (SSEDP) Overview

17 May 2012



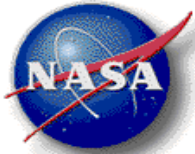
# SSEDP Overview

- JSC SSEDP was implemented as a result of needed skills/experience identified by JSC leadership to meet future challenges.
  - In response to Constellation and the Vision for Space Exploration, Agency and JSC senior leadership placed an importance on creating a mechanism to develop our system engineering expertise.
- Based on the Integrated System Engineering Competency Model resulting from the 2008 NASA System Engineering Behavior Study.
- 24-month program focused on building system engineering capability and technical leadership through a variety of development activities and a focus on work assignments.
- Target audience is GS-13/14 individuals who are performing at the level of Subsystem Lead or higher.
  - 26 participants currently in Class 2, graduation in November 2012
  - 25 graduates from Inaugural Class (2008 – 2010)



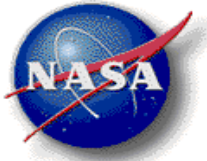
# SSEDP Components

- Assessments
  - NASA System Engineering Behavior and Leadership Assessment
  - 360 assessment against the APPEL Systems Engineering competency model
  - Assessments for the Leadership module: FIRO-B, Change Style Indicator, MBTI
- Individual Development Plan (IDP)
  - Complete IDP and discuss with supervisor, mentor, and SSEDP Manager
- Core Curriculum
  - Complete all core curriculum (4 courses), including group and individual projects required for the core system engineering modules
  - Must complete all four systems engineering core modules and achieve a grade of B or higher to receive the graduate certificate in Space Systems Engineering
- Mentoring/Coaching
  - Initiate a relationship with a mentor or continue relationship with an existing mentor
  - Initiate a relationship with a coach, who will help participant focus on areas for development in the NASA Systems Engineering Behavior competency model
- Knowledge Sharing/Group Learning Events
  - Participate in at least 3 knowledge sharing/group learning activities (e.g. System Engineering Forum, brown bags, book clubs)
- Work Assignments
  - Actively seek work assignments that significantly strengthen skills in leadership and systems engineering



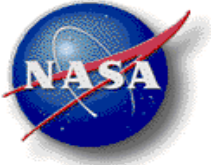
# SSEDP Class 2 Schedule

	January	February	March	April	May	June
2011	Speed Mentoring Session	Mentor/Protégé Training Leadership Module in Colorado Springs, CO	<u>Heart of Change</u> Book Club	SDOE 635: <i>Human Spaceflight</i>  “Innovative Approaches to System Engineering”		
	July	August	September	October	November	December
	<u>Digital Apollo</u> Book Club  “The Art and Science of System Engineering”	SDOE 625: <i>Applied Space Systems Engineering</i>		<i>Gettysburg Leadership Experience &amp; GSFC Field Trip</i>	<u>To Engineer Is Human</u> Book Club	
2012	January	February	March	April	May	June
	SDOE 633: <i>Mission &amp; System Design/Space System Verification &amp; Validation</i>		Congressional Operations & Headquarters Field Trip	SDOE 650: <i>System Architecture &amp; Design</i>		
	July	August	September	October	November	December
	JPL Field Trip & <u>High Velocity Leadership</u> Book Club		<b>Systems Thinking</b>			End-of Program Graduation



# Impact

- SSEDP participants considered a critical labor resource when filling key SE leadership positions
  - Most participants transition to positions of greater scope and higher responsibility while in the SSEDP or within a year after graduation (e.g. AES SE&I Leads)
- Currently assessing future content of the SSEDP
  - Overall budget as well as travel funding are challenges to continuing program as currently designed
  - Assessing transition to more experiential-based program, similar to SEED/SELDP, for SE core competency and leverage other JSC leadership training



# Backup



# SSEDP System

