

WORK ROLE: 13AD

WORKROLE TITLE: Systems Engineer

WORKROLE DESCRIPTION:

Systems Engineers enable the delivery of Information Technology capabilities through the use of interdisciplinary approaches (e.g., Computer Science, Engineering, Logistics, Physical Sciences). They may lead and be responsible for the end-to-end lifecycle systems engineering activities. Systems Engineers support acquisition life-cycle management by performing strategic systems migration planning; capturing and translating mission and customer functional, performance, and support capabilities into requirements; allocating requirements to systems architecture components; developing the requests for change; and testing, validating, and deploying systems. They also perform configuration management, maintain schedules, are responsible for the systems engineering processes that support process improvement, and evaluate technology options and utilization opportunities.

COMPETENCIES/KNOWLEDGES:

Skills

Adaptability	Advising/Consulting	Comms Networks Design&Dev
Component Testing	Configuration Management	Courage
Creative Thinking	Customer Service	Data Analysis
Engaging and Collaborating	Ethics	Exploring Alternatives
Influencing	Integrate Disciplines	Interpersonal Skills
Leadership	Learning	Mediation
Multi-media Communication	Oral Communication	Organizational Representation
Process Analysis & Improvement	Quality Assurance	Resource Management
Risk Management	Security Engineering	Situational Awareness
Strategic Planning	Synthesis	System Design
System Measurement	System Testing	Systems Change Analysis
Systems Requirements Mgt	Technology Evaluation	Technology Exploitation
Verification & Validation	Written Communication	

Knowledges

Acq Mgmt Processes	Analytical techniques	Comparative analysis technique
Computer hardware architecture	Cost-benefit analysis	Decision-making techniques
IC membership, mission, etc.	INFOSEC regs & principles	Info mngt tech policies
Info sys design prins & practs	NGA customers	NGA mission, vision, etc.
NGA organizational structure	NGA policies & procedures	NGA program impl directive
NGA security plcy & procds	NSGI community	Network architecture principle
Process improv princpl & tchnqs	Security class and control	Service oriented architecture
System design principles	System development	System engineering planning
System engineering techniques	US Government technology goals	

EDUCATION/LICENSES/CERTIFICATIONS:

A Education: Bachelor's degree in Computer Science, Engineering, Mathematics, Physical Science, or a related discipline. Enrollment in a Systems Engineering Graduate Certificate Program (SEGCP), or a Graduate program in a Management or technical discipline is highly desirable. -OR- B. Experience: Ten years of acquisition work experience in SPRDE, Information Technology, or a closely-related field that demonstrates the ability to successfully perform the tasks associated with this work.

ENVIRONMENTAL/PHYSICAL REQUIREMENTS:

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