

ENGINEERING MANAGEMENT & SYSTEMS ENGINEERING



KEY SKILLS

- Analytical
- Decision-Making
- Leadership
- Planning & Organization
- Problem Solving
- Project Management
- Teamwork & Interpersonal
- Time Management
- Writing



CONCENTRATIONS/SPECIALIZATIONS

- Management
 - Crisis, Emergency, & Risk
 - Engineering & Tech
 - Environmental & Energy
 - Finance & Cost Analysis
 - Information Security
 - Knowledge & Info
 - Operations Research & Management Science
 - Reliability of
- Infrastructure Systems
- Software Engineering & Information Systems
- Systems Engineering
 - Traditional Disciplines (e.g. Structural, Electronics, Mechanical, Thermodynamics, etc.)
 - Specialty Disciplines (e.g. Affordability, Safety, Logistics, etc.)



SAMPLE DEGREES

- Applied Science & Tech. (BA)
- Computer Science (Project Mgmt. & Leadership) (BS)
- Civil Eng./Computer Eng./Electrical Eng.+ Eng. Mgmt. (BS/MS)
- Cybersecurity Policy & Compliance (MEng)
- Eng. Mgmt. (DEng, MS, PhD)
- Project Management (MS)
- Systems Eng. (BS, MS, PhD)
- Systems Eng. + Eng. Mgmt. (BS/MS)



SAMPLE OCCUPATIONS

- Construction Management Engineer
- Cost Systems Analyst
- Engineering Management Consultant
- Engineering Project Manager
- Head of Systems Design & Integration Eng.
- IT Systems Engineer
- Lead Systems Engineer
- Process Control Technology Principal
- Senior Lead Analyst
- Systems Engineer
- Technical Consultant
- Test Engineering Director



POSSIBLE WORK SETTINGS

- Construction Company
- Consulting Firm
- Engineering Firm
- Facility (In-House Management Team)
- Federal Government
- Finance Company
- Manufacturing Company
- Nonprofit Organization
- Software Developer
- Tech Company
- Transportation Company
- Utility Company/Energy Provider



SAMPLE STUDENT ORGS

- Engineers Without Borders
- Int. Council on Systems Engineering
- National Society of Black Engineers
- Society of Women Engineers
- Systems Hacking Club
- Tau Beta Pi (Engineering Honor Society)
- Theta Tau (Co-ed Eng. Fraternity)



SAMPLE EMPLOYERS

- ABB Group
- Accenture
- Aliant Energy
- Allstate Insurance
- Amazon
- Apple
- BAE Systems
- Boeing
- CACI International
- Central Intelligence Agency
- Commonwealth Fusion Systems
- Dell
- Eaton Corporation
- Emerson Electric
- Flextronics
- GE Energy Management, Inc.
- Hewlett-Packard
- IBM
- Kforce Technology
- Laticrete International, Inc.
- Leidos
- Lockheed Martin
- Microsoft
- MITRE
- National Security Agency (NSA)
- Noblis
- Northrop Grumman
- Oceaneering
- Pacific Gas & Electric Company
- Panasonic Avionics Corporation
- Randstad Engineering
- Raytheon
- Rockwell Collins
- TestPros
- Trinity Industries
- US Department of Defense
- US Department of State
- Vitech Corporation



PROFESSIONAL ORGS

- Association of Facilities Engineers
- Institute of Electrical & Electronics Engineers (IEEE)
- Institute of Industrial & Systems Engineers
- International Council on Systems Eng.
- National Society of Professional Engineers

