

**1st Workshop on U.S. Undergraduate Programs in Systems Engineering**  
**U.S. Air Force Academy, Colorado Springs, CO.**  
**April 7-8, 2010**

The Workshop Report provides information regarding the impetus for this workshop, goals and products, and panel descriptions. A compressed file containing all briefs is also available for download.

**Wednesday, April 7, 2010**

**Opening Plenary**

- **Keynote address**, Mr. Stephen Welby, Director, Systems Engineering, Defense Research and Engineering
- **Keynote address**, Mr. Charles Toups, Vice President and General Manager, Network and Tactical Systems, Boeing Network and Space Systems
- **Keynote address**, Lt Col Paul Lambertson, Director, Systems Engineering, USAF Academy
- **The BKCASE Project and an Analysis of U.S. Undergraduate Programs in Systems Engineering**, Dr. Art Pyster, Stevens Institute of Technology

**Panels**

**Panel Session 1: What are Best Practices in Teaching Systems Engineering to Undergraduates?**

Panelists:

Michael Smith (chair)  
Roger Burk  
Drew Hamilton  
Seshadri Mohan  
Armen Zakarian

**Panel Session 2: Should Systems Engineering Degrees Only Be Offered at the Graduate Level?**

Panelists:

Dinesh Verma (chair)  
Dennis Barnabe (No briefing slides used)  
Thomas Mazzuchi  
Timothy Trainor  
Brian Wells

**Panel Session 3: How Much Classical Engineering and Application Domain Focus Should Be in A Bachelors Degree in Systems Engineering?**

Panelists:

Don Taylor (chair)  
Paul Coffman  
Brian Gallagher  
Brett Peters  
Ariela Sofer

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**Thursday, April 8, 2010**

**Breakout Group 1: *What are the primary undergraduate education requirements for systems engineering personnel in government program offices?***

Facilitator/Chair: Cliff Whitcomb, Naval Postgraduate School

**Breakout Group 2: *What are the top 5 challenges to successful bachelors degree programs in systems engineering and how should those challenges be addressed?***

Facilitator/Chair: George Donohue, George Mason University

**Breakout Group 3: *Within the first four years after graduation, what should someone with a bachelors degree program in systems engineering know and be capable of doing on the job?***

Facilitator/Chair: Michael Papay, Northrop Grumman Corporation

**Breakout Group 4: *How much classical engineering (general, industrial, mechanical, electrical, etc.) and application domain focus (telecommunications, naval, medical, etc.) should be in a bachelors degree in systems engineering?***

Facilitator/Chair: Paul Compton, University of Alabama, Huntsville