



Dr. Geoffrey C. Orsak, Dean (left)

Dr. Jerrell T. Stracener, SEP Founding Director (center)

Dr. Russell Vacante, DoD DAU Director (right)

## U.S. DoD Defense Acquisition University

### A Strategic Partnership

- Enhanced educational opportunities for members of the Department of Defense (DoD) Acquisition, Technology, and Logistics (AT&L) workforce.
- Transferability of certain DAU courses toward a Graduate Certificate in Systems Engineering or the Masters Degree in Systems Engineering at SMU's School of Engineering.

## U.S. DoD AND VA TUITION BENEFIT POLICY

- For policy provisions, contact Jim Dees, [jdees@engr.smu.edu], Sr. Director of Enrollment Management
- 214-768-1456 or 800-601-4040

## PROGRAM DESCRIPTION

A program designed to develop expertise for development and management of systems (products and services) to satisfy customer requirements, the SEP considers engineering, technology, environmental, management, risk, and economic factors by viewing the system as whole, over its life cycle using systems engineering principles, methods and practices. "Systems thinking" skills are developed which foster more effective practice for engineers or engineering managers within the business enterprise. The objective is to provide individuals with the capability to effectively manage the development of complex systems in an ever-changing global environment.

## PROGRAM DEVELOPMENT

The SMU Systems Engineering Program has been developed, and continues to be developed, with on-going active participation by Development Team members affiliated with Lockheed Martin, Raytheon, Vought, Bell Helicopter, Boeing, Northrop Grumman, NASA, and the U.S. Departments of Defense, Air Force, Army and Navy.

## PROGRAM OPTIONS

- Non-degree Studies
- Certificate Series
- Master of Science
- PhD in Applied Science

## DELIVERY OPTIONS

- On-Campus
- Off-Campus
  - ◆ Internet
  - ◆ Industry & Government Sites
  - ◆ Video Conferencing

### APPLICATION INFORMATION AND ADMISSIONS CRITERIA

- [engr.smu.edu/emis/sys](http://engr.smu.edu/emis/sys)
- [engr.smu.edu/graduate/admissions.html](http://engr.smu.edu/graduate/admissions.html)
- [jerrell@engr.smu.edu](mailto:jerrell@engr.smu.edu)



### SYSTEMS ENGINEERING COURSES

#### Current Courses

- EMIS 7300 System Analysis Methods
- EMIS 7301 Systems Engineering Process
- EMIS 7303 Integrated Risk Management
- EMIS 7305 Systems Reliability, Supportability & Availability Analysis
- EMIS 7307 Systems Integration and Test
- EMIS 7310 Systems Engineering Design
- EMIS 7312 Software Systems Engineering
- EMIS 7315 Systems Architecture Development
- EMIS 7320 Systems Engineering Leadership
- EMIS 7330 Systems Reliability Engineering
- EMIS 7335 Human-Systems Integration
- EMIS 7340 Logistics Systems Engineering
- EMIS 7347 Critical Infrastructure Protection/Security Systems Engineering
- EMIS 8340 Systems Engineering Software Tools
- EMIS 8342 Six Sigma Systems Engineering
- EMIS 8348 Supply Chain Systems Engineering
- EMIS 7318 Systems Engineering Planning & Management
- EMIS 8305 Systems Life Cycle Cost & Affordability Analysis
- EMIS 8307 Systems Test and Evaluation
- EMIS 8310 Collective Systems Design
- EMIS 8315 Innovation in Systems Design
- EMIS 7369 Reliability Engineering
- EMIS 7370 Probability & Statistics for Scientists & Engineers

#### Courses In Development

- Systems Requirements Engineering
- Systems Program Management
- Systems Modeling & Simulation

### ACADEMIC PROGRAM REQUIREMENTS

#### Non-degree Studies Admission

- A Baccalaureate degree is required for admission
- Admission to Non-degree study requires the consent of the Program Director
- Students may not take more than three courses on a Non-degree status
- Students on a Non-degree study plan may apply to study toward a graduate degree

#### Certificate Series Admission

- Admission Requirements: Same as Masters Degree
- Certificate Requirements: Completion of the courses specified for the individual certificate with a minimum G.P.A. of 3.00 on a scale of 4.00 for those courses

#### Master of Science

##### Admission Requirements

- Bachelor of Science in engineering, mathematics, or one of the quantitative sciences
- G.P.A. of at least 3.00 out of 4.00 scale in previous undergraduate and graduate study
- A minimum of two years of college-level mathematics, including at least one year of calculus

##### Degree Requirements

- Thirty term-credit hours of graduate courses with a minimum G.P.A. of 3.00 on a 4.00 scale
- Satisfactory completion of the following five core courses:
  - ◆ EMIS 7300 Systems Analysis Methods
  - ◆ EMIS 7301 Systems Engineering Process
  - ◆ EMIS 7303 Integrated Risk Management
  - ◆ EMIS 7305 Systems Reliability, Supportability & Availability Analysis
  - ◆ EMIS 7307 Systems Integration and Test
- Plus satisfactory completion of five non-core SE courses with Program Director's approval

#### PhD in Applied Science

A minimum academic credit of 54 term credit hours earned in course work beyond the baccalaureate degree or a minimum of 24 term credit hours earned in course work beyond a Master's degree, in addition to 24 term credit hours earned in dissertation work.