Systems Engineering Distance Learning Education Summit
31 August 2020
by
Dr. Wally Owen
Associate Chair for Distributed Programs & Outreach
Dr. Warren Vaneman
Dep Associate Chair for Marketing, Outreach & Engagement
Welcome to our Education Summit
Education
BS Naval Engineering (Management & Technology), USNA 1979
MS Management (Financial Management), NPS 1992
DPA Public Administration, Golden Gate University, 2003

NPS Experience
Faculty member since 1992
GSDM, Meyer Institute, GSEAS Department of Systems Engineering

Teaching and Academic Service Experience
NPS- Acquisition, Financial, Performance and Program Management, Public Policy, Leadership
USNA- LEAD program for Company Officers
DAU- ACQ201, SYS201 and SYS301 (DAU early days road warrior)
AA- 312 program and PO- 282, 242 and 721 programs

Associate Chair for DPO
Serve as PM for all DL programs oversee all DL functions
Manage the business of distance learning
Work closely with all NPS stakeholders and external sponsors

Active Duty Experience
Retired F4/F14 Naval Flight Officer
WESTPAC Cruise, CV64 USS Constellation (F14)
Around-the-World Cruise, CV43 USS Coral Sea (F4)
Officer Programs Officer, NRD St. Louis
Air Operations Officer, CVN65 USS Enterprise
Dr. Warren Vaneman Bio

▼ Education
- B.S., SUNY Maritime College (1986) Meteorology & Oceanography
- JPME Certificate, Naval War College (2009)

▼ NPS Experience
- Professor of Practice since 2012
- Research and teaching focus on System of Systems Engineering and Model-Based System Engineering

▼ U.S. Government Civilian Experience
- Director, International R&D
- Chief Architect
- Lead Systems Engineer
- Modeling & Simulation Lead

▼ Military Experience
- Retired U.S. Navy Reserve Captain
- Qualified Surface Warfare, Information Dominance Warfare & Space Cadre Officer
Naval Postgraduate School

ENROLLMENT 2018
AVG. STUDENT ENROLLMENT: 2,639
Resident........................................1459
Distance Learning..........................853
Certificate & Non-Degree..............327

AVG. RESIDENT DEGREE STUDENT ENROLLMENT BY SCHOOL
SIGS 344 (24%)
GSOIS 494 (34%)
GSEAS 367 (25%)
GSBPP 253 (17%)

DEGREES AWARDED: 1,260
Master........................................1,247
Ph.D..........................................11
Post-Master.................................2

AVG. RESIDENT DEGREE STUDENT ENROLLMENT BY SERVICE
Int'l 144 (10%)
Civilian 199 (14%)
Other 10 (0.6%)
USAF/R 105 (7%)
USA/R 179 (12%)
USMC/R 222 (15%)
USN/R 600 (41%)

FACULTY AND STAFF
TENURE-TRACK AND TENURED FACULTY: 231
Have Ph.D....................................100%
Distinguished..............................8%
NON TENURE-TRACK FACULTY: 379
MILITARY FACULTY: 35
GS/WAGE GRADE STAFF: 342
Full-time....................................98%
Part-time....................................2%

FACULTY BY SCHOOL
Administration 29 (5%)
SIGS 101 (17%)
GSBPP 93 (15%)
GSOIS 165 (27%)
GSEAS 195 (32%)

LEADERSHIP
President
Ann E. Rondeau
Vice Admiral, USN (Ret.)
Provost
Dr. Steven R. Lerman
Chief of Staff
CAPT Markus J. Gudmundsson, USN
Vice Provost
Dr. Douglas Moses
Dean of Students
CDR Kenneth Ferguson, USN
Dean of Research
Dr. Jeffrey Paduan
Assoc. Provost, Graduate Education
Dr. Raluca Gera
Assoc. Provost, Faculty Affairs
Dr. Michael Freeman

GRADUATE SCHOOLS
Graduate School of Business and Public Policy (GSBPP)
Dr. Keith F. Snider
Graduate School of Engineering and Applied Sciences (GSEAS)
Dr. Clyde Scandrett, Dean
Graduate School of Operational and Information Sciences (GSOIS)
Dr. Gordon McCormick, Dean
School of International Graduate Studies (SIGS)
Dr. James Wirtz, Dean
The Mission of the Systems Engineering department is to provide a relevant, tailored, quality graduate systems engineering education in a manner that meets the needs of the United States Government in order to increase the combat effectiveness of U.S. and Allied armed forces and to enhance the security of the United States.

The Systems Engineering Department’s vision is to be the recognized leader in defense systems engineering education and research among both its stakeholders and its peer institutions. We will create a learning and research environment balanced in challenge and encouragement that develops each student’s full mastery of systems engineering principles and their ethical application in government, industry, and the community.

The close integration of teaching and research, combined with time proven “hands-on,” lab-oriented pedagogy, are critical to the success of engineering education.
Accreditation and Recognition

• WSCUC Accreditation (for all of NPS)
  – Regional accreditation done on 10-year cycle
  – Curriculum Review process recognized as a “best practice”
  – Educational Effectiveness is the major focus

• ABET Accreditation (for Engineering Programs)
  – One of only three ABET accredited SE Masters Programs in the US
  – Accreditation recertified in August 2020.

• Nationally ranked by *US News and World Report*
  – Manufacturing, Industrial, and Systems Engineering Graduate Programs
Systems Engineering Department by the Numbers

- 43 faculty and staff
- Blend of academic, military, and industry backgrounds to provide a broad perspective on systems engineering
- Operate 13 educational programs (4 resident/9 DL) with 500 students
- Ongoing and active research in model-based systems engineering, autonomous systems, total ship systems, systems-of-systems, system acquisition, more....
- Systems Engineering Department founded in 2002 – our 18th anniversary is in September 2020

<table>
<thead>
<tr>
<th>Position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>3</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>6</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>7</td>
</tr>
<tr>
<td>Professor of Practice</td>
<td>6</td>
</tr>
<tr>
<td>Lecturer</td>
<td>11</td>
</tr>
<tr>
<td>Research Associate</td>
<td>5</td>
</tr>
<tr>
<td>Laboratory Engineer</td>
<td>2</td>
</tr>
<tr>
<td>Administrative Support</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>
Our Faculty Teach and ...
Graduate DL Program Overview

• For organizations with a strategic vision to provide world-class systems engineering, systems integration and systems engineering management services
• Master degrees 16 courses by distance education using blended delivery approach over the internet (synchronous and/or asynchronous) either as full up curricula (311, 711, 721, 722) or as stackable certificates
• Typically degree programs offer as two courses per quarter and stackable certificate programs as one course per quarter
• PhD in SE (582) offered with one or two course option
• Each DL synchronous course offer as one continuous (3) hour session on one day per week (times/days vary)
• All synchronous sessions are delivered by ZoomGov and/or MS Teams web-conferencing and are recorded
Distance Learning Implementation

- Collaborative Learning Environment
  - Sakai web-based courseware
- Multiple Teaching Types for DL Education
  - Synchronous/Asynchronous Web Browser Based
    - *Zoom for Gov and/or MS Teams* used for teaching synchronously
      - Video, Voice, Chat, Desktop Sharing
    - *Sakai* used for teaching asynchronously
- SE Computer Lab Available Worldwide
- NPS Library Resources Available Worldwide
  - Books, Journals, Databases all on-line
- On-Site Face-to-Face Classrooms
  - Classroom facilities located in Washington, DC (Pax River, MD) and San Diego, CA
Critical Thinking – the art of analyzing and evaluating your thinking with the aim of continuously improving it

Design Thinking – a creative problem-solving approach that fosters innovative solutions

Model-Based Systems Engineering – an analytical approach that helps manage complexity
SE/SEM DL Masters Curricula
- 311 – Systems Engineering
- 312 – Aviation Systems Engineering (USN-TPS grads)
- 711 – Systems Engineering Management – System Integrated Development
- 721 – Systems Engineering Management – Product Development

DL Certificates Curricula
- 282 Systems Engineering Fundamentals Certificate
- 242 Reliability and Maintainability Engineering Certificate
- 232 Lead Systems Integrator Certificate
- New Stackable Certificate Program

DL Doctorate Curricula
- 582 Ph.D. in Systems Engineering

Degrees
- MS in Systems Engineering (ABET)
- MS in Engineering Systems
- MS in Systems Engineering Management
- MS in Product Development (721 only)
- Ph.D. in Systems Engineering

Over 2500 graduates since department was founded in 2002
## DL Masters Curricula Details

<table>
<thead>
<tr>
<th>Curricula Requirements &amp; Features</th>
<th>311</th>
<th>711</th>
<th>721</th>
<th>722</th>
</tr>
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<tbody>
<tr>
<td>Undergraduate GPA</td>
<td>2.2</td>
<td>2.2</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Undergraduate Engineering, Technical or Scientific degree</td>
<td>Yes</td>
<td>No</td>
<td>Preferred</td>
<td>No</td>
</tr>
<tr>
<td>College Calculus</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Engineering, Acquisition, Product Development or related experience</td>
<td>3 years</td>
<td>3 years</td>
<td>5 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Curriculum tailorable feature</td>
<td>Domain</td>
<td>Domain</td>
<td>Electives</td>
<td>Electives</td>
</tr>
<tr>
<td>On campus and industry trip feature</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>DAU equivalencies (see notes)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Supports stackable certificate concept</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Up to 12 quarter transfer credits</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Capstone Assessment</td>
<td>Project</td>
<td>Project</td>
<td>Thesis</td>
<td>Project</td>
</tr>
<tr>
<td>Cohort starts per year</td>
<td>Quarterly</td>
<td>Quarterly</td>
<td>Fall</td>
<td>Fall</td>
</tr>
<tr>
<td>Degree Earned</td>
<td>MSSE/ES</td>
<td>MSSEM</td>
<td>MSSEM/PD</td>
<td>MSSEM</td>
</tr>
</tbody>
</table>
An Executive Graduate Education Program for Defense

Offered in partnership with MIT’s “Educational Consortium for Product Development Leadership in the 21st Century” (PD21)

A Distributed Learning Program with Unique Joint Focus

Joint Services
Joint Engineering & Management
Joint Government & Industry

OPEN TO ALL QUALIFIED MILITARY OFFICERS, FEDERAL GOVERNMENT CIVILIANS AND A LIMITED NUMBER OF DEFENSE CONTRACTOR CIVILIANS
Curriculum Design

Leadership in Product Development

Thesis Research

Core Courses
- System Architecture
- Systems Engineering
- Systems & Project Management

Fundamental Courses
- Marketing Mgt.
- Finance & Managerial Accounting
- Engineering Risk Benefit Analysis
- Systems Optimization
- Organizational Processes
- Operations Management

4 Elective Courses
• **Industry Visits**
  - **Northeast:** MIT, Lincoln Labs, EMC, NUWC-Newport, Raytheon, Army Natick Soldier System Center, Draper Labs, iRobot
  - **Northwest:** Boeing, Microsoft, Nordstroms, ISE, NUWC-Keyport, BC Shipyards, Sage Fly-Fishing, Starbucks, Amazon
  - **Silicon Valley:** Lockheed-Martin, Apple, Sun Microsystems, Cisco, Brocade Networks, Intel, Northrop-Grumman, Google, Tesla
  - **Southwest:** Honeywell, Raytheon and Boeing
  - **Hawaii:** Hilo Hattie, Naval Shipyards, Nova Drydock, A/F Space Ops, TIC, PACOM, MITRE, NOAA, UofHI, Pelatron, Navatek, Seal Delivery Team-1, Kona Scientific, Haleakala Solar,
  - **Midwest:** Chicago Board of Trade, Boeing, Motorola Mobility, Product Development Technologies, Northrop-Grumman, Ford
  - **International:** Amsterdam, Singapore and Rome

• **Symposia/Sponsor events:**
  - MIT- PD21 consortium and various SE related research symposia
  - INCOSE, INFORMS & other professional symposia/conferences
  - NPS - Systems Engineering Educational Continuum (SEEC)
NPS PD21 alumni, John Gwin, (earned MSSEM in 2017) Senior System Engineer at NSWC Panama City, FL is awarded the 2019 MAVERICK award from USSOCOM at the Special Operations Forces Industry Conference (SOFIC) in Tampa, FL for changing the requirements on the Seal Delivery Vehicle, which resulted in budget and schedule improvements for the MK-11 SDV Program.

Thesis Title: Design, Certification, and Maintenance Criteria for Wet Combat Submersibles (classified)
The PD21 Program includes industry trips to learn how industry does systems engineering, product and service development, and learn other industry best practices.

- Amazon
- Starbucks
- Microsoft
- ProductCon
- (Netflix and others)
- NAVSEA Keyport
<table>
<thead>
<tr>
<th>Qtr</th>
<th>Yr/Qtr</th>
<th>Course Title</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FALL</td>
<td>Probability and Statistics for HSI</td>
<td>Effective Interpersonal and Team Communications</td>
</tr>
<tr>
<td>2</td>
<td>WTR</td>
<td>Fundamentals of Engineering Project Management</td>
<td>Fundamentals of Systems Engineering</td>
</tr>
<tr>
<td>3</td>
<td>SPRG</td>
<td>System Suitability</td>
<td>Contracting</td>
</tr>
<tr>
<td>4</td>
<td>SUM</td>
<td>System Verification &amp; Validation</td>
<td>Modeling &amp; Simulation in Acquisition</td>
</tr>
<tr>
<td>5</td>
<td>FALL</td>
<td>System Manufacturing, Development &amp; Production</td>
<td>Engineering Economics and Cost Estimation</td>
</tr>
<tr>
<td>6</td>
<td>WTR</td>
<td>Foundations of Cyberspace Operations</td>
<td>Management of Advanced Systems Engineering</td>
</tr>
<tr>
<td>7</td>
<td>SPRG</td>
<td>Systems Software Engineering</td>
<td>SEM Capstone Project</td>
</tr>
<tr>
<td>8</td>
<td>SUM</td>
<td>System Evolution &amp; Technology Assessment</td>
<td>SEM Capstone Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SE Certificate</th>
<th>Sponsor Required</th>
<th>Elective</th>
<th>Capstone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>
Winning team for the capstone competition. Soldier-borne sensors – the use of UAVs for over-the-hill reconnaissance. The team used a UAV to capture videos at Fort Ord, and then used over 50 human subjects to evaluate the ability of soldiers to use the video capture to obtain situational awareness.

2019 December grads:
MAJ Ronnie Bush
CPT Carlos Sheiloh
MAJ Earl Dean
CPT Eric Kim
MAJ Amy Miranda
Stackable Certificate Overview

• The SE Department is partitioning its DL program offerings into stackable certificates

• Stackable certificates will enhance the value proposition to sponsors and students
  – Sponsors can fund only those certificates for which they have an immediate need
  – Students will be able to earn a MS degree by adding together certificates

• Supports new Engineering & Technical Management career field initiative and aligns with competency based frameworks
  – Offers a customization approach to advanced education in systems engineering and systems engineering management
  – Provides workforce developers SE relevant options in fundamental, core and specialization areas in time sequenced fashion
• SE offers DL graduate certificates and degree programs that are tailorable to sponsors and their students
• Stackable certificates can meet master’s degree curricula requirements leading to MSSE, MSES or MSSEM degrees
• Certificates are identified by tiers and are typically taken in sequence but not necessarily as it varies by certificate
• Each tier certificate can be tailored dependent on the ultimate curricula (311 or 711) and degree desired
<table>
<thead>
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<tbody>
<tr>
<td>1</td>
<td></td>
<td>Fundamentals of Systems Engineering</td>
<td>Probability and Statistics for SE</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Fundamentals of Engineering Project Management</td>
<td>Capability Engineering</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>System Suitability</td>
<td>Engineering Economics and Cost Estimation</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>SE CERT Focus Course and/or 311 Elective</td>
<td>Systems Architecting and Design</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>SE Domain Specialty Track</td>
<td>Systems Integration and Development</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>SE Domain Specialty Track</td>
<td>Capstone Project</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>SE Domain Specialty Track</td>
<td>Capstone Project</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>SE Domain Specialty Track</td>
<td>Capstone Project</td>
</tr>
</tbody>
</table>

**Tier I**
- SE Certificate

**Tier II**
- SE Core Certificate

**Tier III**
- SE Domain Certificate

**Tier IV**
- SE Capstone
<table>
<thead>
<tr>
<th>Qtr</th>
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<th>Course Title</th>
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<td>Probability and Statistics for HSI</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>System Suitability</td>
<td>Engineering Economics and Cost Estimation</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>SE CERT Focus Course and/or 711 Elective</td>
<td>Human Factors in Systems Design</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>SEM Domain Specialty Track</td>
<td>Risk Analysis &amp; Management of Engineering Systems</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>SEM Domain Specialty Track</td>
<td>Management of Advanced Systems Engineering</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>SEM Domain Specialty Track</td>
<td>Capstone Project</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>SEM Domain Specialty Track</td>
<td>Capstone Project</td>
</tr>
</tbody>
</table>

**Tier I**
- SE Certificate

**Tier II**
- SEM Core Certificate

**Tier III**
- SEM Domain Certificate

**Tier IV**
- SEM Capstone
SE Certificates

- 130 SE Capstone (Capstone)
- 131 Systems Capability & Design (Core)
- 132 System of Systems Engineering (Domain)
- 133 Model-based Systems Engineering (Domain)
- 134 Aviation Systems (Domain)
- 135 Systems Test & Evaluation (Domain)
- 136 Directed Energy Systems (Domain)
- 137 System Safety Engineering (Domain)
- 138 Digital Engineering (Domain)
SEM and Existing Certificates

SEM Certificates

• 170 SEM Capstone (Capstone)
• 171 Systems Integrated Development (Core)
• 172 Systems Technology & Advancement (Domain)
• 173 Systems Program Management (Domain)

Existing Certificates

• 282 Systems Engineering (Fundamentals)
• 232 Lead Systems Integration (Domain)
• 242 Reliability & Maintainability Engineering (Domain)
### Systems Engineering DL Programs

#### A New Stackable Approach to Customization

<table>
<thead>
<tr>
<th>Tier</th>
<th>Program</th>
<th>Certificate</th>
<th>Quarter</th>
<th>Course</th>
<th>Type</th>
<th>Cohort</th>
<th>Tuition</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>SE Fundamentals</td>
<td>282 Certificate</td>
<td>4 quarters</td>
<td>3 + 1 focus course</td>
<td>Project-based</td>
<td>Stackable</td>
<td>25-30 per cohort</td>
<td>Tier I ~ 100 students</td>
</tr>
<tr>
<td></td>
<td>SE/SEM Core</td>
<td>131-SCD/171-SID</td>
<td>4 quarters</td>
<td>4 courses</td>
<td>Project-based</td>
<td>Stackable</td>
<td>25-30 per cohort</td>
<td>Tier II ~ TBD</td>
</tr>
<tr>
<td></td>
<td>Core Certs</td>
<td>DL</td>
<td>4 quarters</td>
<td>4 courses</td>
<td>Project-based</td>
<td>Stackable</td>
<td>25-30 per cohort</td>
<td>Tier III ~ TBD</td>
</tr>
<tr>
<td></td>
<td>Domain Certs</td>
<td>232/242/130s/170s</td>
<td>DL</td>
<td>4 quarters</td>
<td>Project-based</td>
<td>Stackable</td>
<td>25-30 per cohort</td>
<td>Tier III- Other Depts</td>
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<tr>
<td></td>
<td>Data Science/Others</td>
<td>DL</td>
<td>4 quarters</td>
<td>4 courses</td>
<td>Project-based</td>
<td>Stackable</td>
<td>25-30 per cohort</td>
<td>Tier V- Final</td>
</tr>
<tr>
<td></td>
<td>SE/SEM Capstone</td>
<td>130-SEC/170-SEMC</td>
<td>DL</td>
<td>4 quarters</td>
<td>Project-based</td>
<td>Stackable</td>
<td>25-30 per cohort</td>
<td>Tier IV- Final</td>
</tr>
<tr>
<td></td>
<td>SEM Masters</td>
<td>711/721/722</td>
<td>DL</td>
<td>8 quarters</td>
<td>Thesis/Project</td>
<td>Stackable</td>
<td>~100 students</td>
<td>~15 students</td>
</tr>
<tr>
<td></td>
<td>SE Masters</td>
<td>311/312</td>
<td>DL</td>
<td>8 quarters</td>
<td>Capstone Project</td>
<td>Stackable</td>
<td>~200 students</td>
<td>~200 students</td>
</tr>
<tr>
<td></td>
<td>PhD in SE</td>
<td>582</td>
<td>Resident/DL</td>
<td>12 quarters</td>
<td>Dissertation</td>
<td>Stackable</td>
<td>~200 students</td>
<td>~100 students</td>
</tr>
</tbody>
</table>

All curricula leading to a master’s degree are designed for stackable certificate completion or can be taken as a full up DL degree program.
582- PhD in Systems Engineering

• Candidates can apply to start any quarter
  – Rolling admissions process
  – $2500 per course without books ($200 extra book fee)
• Program tailored to the individual
• Nominally $30K for degree (12 course segments)
  – Minimum of six (6) courses above the masters
  – Typically six (6) dissertation related segment
    • Possible to complete with published minimum of three (3)
  – Option for 1 or 2 courses per quarter (2-5 years)
  – Must pass comprehensive exams before commencing dissertation research
  – Limited campus visits as required
    • Typically to meet with advisors and take exams
SE Distance Learning (DL) Tuition Pricing

**Open Enrollment**
- $2500 per course
- $200 book fee
- all DL programs
- active duty NAV/MC officers free
- pay if in seat 1st day

**Cohort Price (tiered)**
- $2000 per course
- $200 book fee
- fixed@25 seats/$50K
- duration of program
- sponsor assume attrition
- extra benefits offered

**Short Courses**
- Not for Credit
- fixed@25 seats w/books
- 1-day = $15K
- 2-day = $25K
- 3-day = $30K
- or special requests?

**Partner Price (tiered)**
- $2000 per course
- $200 book fee
- offered@50 plus all DL
- @49 opt for Open price
- or enroll more students
- extra benefits offered
• What is an SE iTech Outreach Seminar?
  – A Systems Engineering Innovation & Technology Outreach Seminar for Research, Education and Practice

• What is purpose of SE iTech Outreach Seminar?
  – The SE iTech Outreach Seminar offers two-hour lectures on SE related Innovation and Technology topics important to our SE sponsors and stakeholders delivered onsite or by virtual methods at key Navy & DOD commands or regional areas @ No Cost
  – It offers the engineering and technical management workforce a relevant learning opportunity led by SE faculty sharing cutting-edge engineering and engineering management innovations and technology advances in research, education and practice

• How are SE iTech Outreach Seminars scheduled?
  – SE leadership picks topics of interest and locations based on technology trends, faculty interests and/or workforce concentrations
  – SE sponsors and stakeholders can request specific topics for their commands or workforces
SE Education Benefits for Sponsors

- a **shortened timeframe** to develop educated leaders for the engine that drives SE **innovations**
- more **satisfied** customers through **systems-oriented** design, management and engineering
- immediate **application** of learned knowledge and skills to current, as well as future, programs or projects
- **retention** of key leadership talent in a highly competitive market environment
- utilization of **state-of-the-art** SE concepts and tools
- opportunity to **tailor** the curriculum and the educational experience to corporate needs
- access to the **latest advances** in systems engineering
Highly ranked & accredited graduate programs
Knowledgeable, skilled, and experience in delivery of DL education content
Large DL student body (average 350-400 enrolled)
Large and diverse faculty with relevant experience for SE of large, complex weapon systems in the DoD
Focus on critical thinking, design thinking and MBSE
Highly tailorable SE and SEM degree programs with new emphasis on time sequenced stackable certificates
Open tuition price $2500 per course but tiered pricing to $2000 per course for sponsors doing more business
Active research in department – rich, relevant projects
Visit SE DL website at https://nps.edu/web/seet/distant
People to Know

• Chair, SE Department: Ron Giachetti– regiache@nps.edu
  – 831-656-2670

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  – Distance Learning, Director of Programs and Business
  – 831-402-6086

• DepAssoc Chair MOE: Warren Vaneman - wvaneman@nps.edu
  – Distance Learning, Program Manager
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• Education Technician: Heather Hahn - hlhahn@nps.edu
  – Academic administrative support for students and sponsors
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• GEAC Student Support: - GEACStudCoord@nps.edu
  – Program support for students
  – 831-656-3579

What to Expect from Us: Availability, Help, Advice, Action