



CORE ENGINEERING SEQUENCE

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All Systems Go!

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Mahan Hall
West Point, NY 10996
www.dean.usma.edu/se



DEPARTMENT OF
SYSTEMS
ENGINEERING



All Systems Go!

The Department of Systems Engineering (DSE) offers three majors: systems engineering, engineering management and systems management as well as operations research that is cosponsored with the math department. In addition, DSE has a Core Systems Engineering Sequence (CES) which provides an excellent opportunity to learn more about the art and science of decision-making.

About The Core Engineering Sequence

DSE's Core Engineering Sequence (CES) is an excellent opportunity to learn more about the art-and-science of decision making. Supporting several critical secondary Army career specialties, the program's structure includes "systems thinking" and applying the Systems Decision Process (SDP) to analyzing a wide range of personal, military and financial problems. The program culminates with a capstone project.

Cow Year		Firstie Year	
Fall	Spring	Fall	Spring
SE300	SE350	SE450	
	SE300	SE350	SE450

The three course sequence must be completed in consecutive semesters, with the first class taken in the first or second term of the Cow year.

REAL WORLD PROBLEMS. REAL WORLD CLIENTS. REAL WORLD APPLICATION.

What Our Alumni say...

"As a former Core Sequencer, I can confidently say that my studies in the DSE have served me immensely during my Army career. On my most recent deployment to Afghanistan, I was tasked with training and advising Afghan Security Forces at their Operational Coordination Center (OCC). The OCC did not have maneuver units so the traditional military doctrine of MDMP (Military Decision Making Process) did not serve as a useful tool. Instead, I found great success by introducing the problem solving methodology as well as stakeholder analysis to my Afghan counterparts. The SDP was a very useful tool for me in training our Afghan counterparts and clearly is a universal problem solving tool easily adapted across language and cultural barriers." -CPT William Denn, USMA '06, FOB LIGHTNING, Afghanistan



Capstone Projects

- Ski Slope Water Conservation: winner of the best-in-track at the Capstone Conference
- Lighting control
- DCA recycling for cash
- USMA Library



Course Feedback

- "Freedom to challenge and shape yourself"
- "Applies to other courses"
- "Apply SDP to a real-world problem with real clients in the capstone"



AIAD

DSE offers a wide variety of AIADs that CES students may select from. In the summer of 2011, DSE sent nearly 100 cadets on an AIAD, many international.

About DSE...

- SE & EM are ABET accredited: www.abet.org
- EM program ranked #1 undergraduate program by ASEM 2005-2010
- SM course provides flexibility to manage time requirements to pursue goals and interests outside the classroom
- All programs provide opportunity to complete, present and compete a capstone project
- DSE offers a wide variety of AIAD opportunities
- Lean Six Sigma Green Belt course offered to cadets
- Graduate with Honors from SE or EM



Make a Decision.

Join Systems.

Contact us today to learn more:

CES Director

LTC Libby Schott - elizabeth.schott@usma.edu

2014 Academic Advisor

CPT Christy Licklider - christy.licklider@usma.edu

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