

# Deploying the LAI Lean Academy as a Special Elective

Lean Educator Conference April 25, 2008





 Desire: Find a way to expose MIT students to lean concepts while they're at school

#### Options

- Create a new regular length course on lean
- Scatter lean concepts throughout existing classes
- Offer a Lean Academy during the January period between semesters

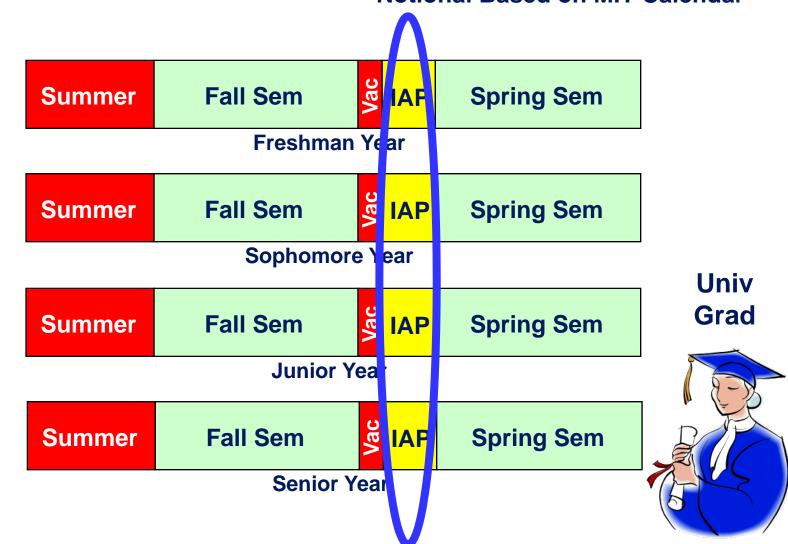


## **Undergraduate Value Stream**

**Notional Based on MIT Calendar** 



HS Grad



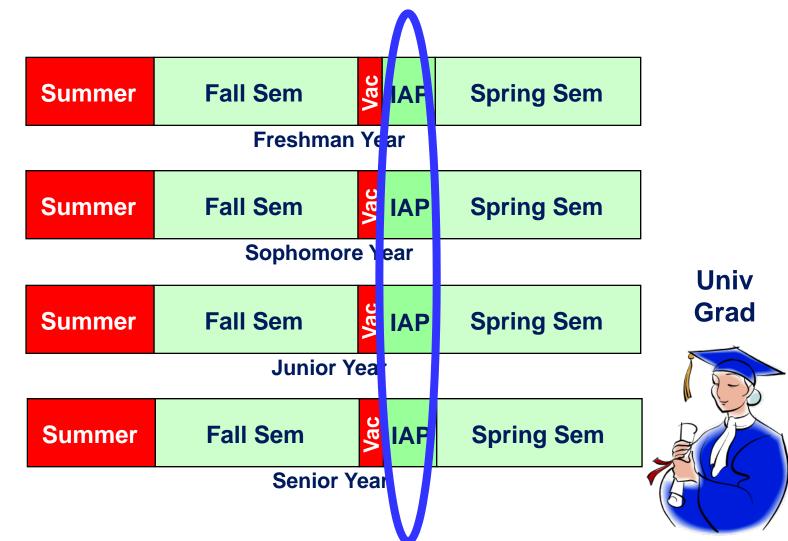


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## Lean Academy IAP Offering

- Elective course for 2 units of Pass/Fail credit
- 3 consecutive days in January, 8am-5:30pm
- 25 students total
  - 13 grad, 12 undergrad
  - 20 Aero/Astro Engineering, 3 Engineering Systems, 1 Mechanical Engineering, 1 Management
- Recruited through flyers, emails, announcements in sophomore course



#### IAP Course 16.687(U)/16.983(G)

#### Everything you didn't learn in Unified...

This intensive three day course will provide practical insight into Lean Six Sigma principles used throughout the aerospace industry and government sector.

These principles come alive through a plant tour and interactive game. The knowledge gained will provide you a competitive edge for internships and future employment.





What: 16.687/16.983. 2 units of P-D-F

When: Wednesday Jan 23-Friday Jan 25

Instructors: Earl Murman, Annalisa Weigel, Allen Haggerty and speakers from industry

Enrollment is limited to 30 students.

Email Prof. Murman, murman@mit.edu, by December 21 to reserve your spot in this popular course.

#### ...but need to succeed in the aerospace industry.





8:00-	Wed Jan 23	Thu Jan 24	Fri Jan 25
0.00	Why Am I Here? (with	lcebreaker & Day 1 Recap	Icebreaker & Day 2 Recap
8:30—	continental breakfast) - 45 min	Enterprise Simulation - Segment I - 90 min	Accounts Payable VSM - 60 min
9:00—	Break - 15 min The Start of Your Lean	• <sup>-</sup>	
9:30—	Journey - 60 min		Break - 15 min Variability Simulation - 45 min
10:00-	Break - 15 min	Break 15 min Lean Supply Chain Basics - 45	
10:30—	Northrop Grumman Talk - 45 min	min	Break - 15 min Quality Tools Part 1 - 45 min
11:00-	Break - 15 min	Enterprise Simulation II - Lean Thinking Refresh and Change	
11:30—	Lean Thinking - 60 min	Planning - 75 min	Break - 15 min Quality Tools Part 2 - 45 min
12:00-		Lunch - 45 min	
12:30-	Break - 15 min New Balance Plant Tour,	t t	Lunch - 45 min
1:00-	Lawrence MA Lunch on Bus	Enterprise Simulation - Segment II - 60 min	Pratt & Whitney Talk - 30 min
1:30—	Schedule 12:30 -1:15 - Travel		Break - 15 min
2:00-	1:15-1:30 - Check in 1:30-2:30 - Intro and Tour	Lean Engineering Basics - 45 min	People - 75 min
2:30—	2:30-2:50 - Q&A, refreshments 2:50-3:00 - Board bus	Break 15 min	
3:00—	3:00-3:45 - Travel	Enterprise Simulation III - Refresh and Change Planning -	Break - 15 min
3:30—		60 min	Lean Implementation - 90 min
4:00—	Break - 15 min Video - 30 min	Enterprise Simulation - Segment III - 45 min	
4:30—	Break - 15 min	Accounts Payable I-15 min	
5:00-	VSM Exercise - 45 min	Wrap up - 15 min	Wrap up - 15 min
0.00		Case Study Homework	Graduation

lean.mit.edu/ednet

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#### **Student Feedback**

- A real success!
- Positive
  - Plant tour and seeing lean in "real life"
  - Lego simulation to bring theoretical concepts to life

#### Constructive

- Spread over 4 days (or more) instead of 3 too much information in too short a time
- Volume of PowerPoint charts was overwhelming



Date: February 11, 2008 4:54:56 PM PST To: Earll Murman <murman@mit.edu> Subject: Lean Academy Class

Prof. Murman,

I wanted to thank you one more time for having the lean class as an undergraduate offering last IAP. Last week at the career fair, I was able to talk about it and it really got the employers' attention. One person from Boeing told me to write it in a bigger font on my resume. Hope everything is well in Seattle.

Sincerely, -Dember



Simulation opened valle value did vou get from this course?" Write your answer on an index card, and hand it to the Department Head twho for this course) when he shakes your hand

# wrse was extremely useful

The Lean course was extremely useful for me. I had heard about these topics but the speakers, plant town and simulation made the learning real. I immensely enjoyed the Enterprise simulation. The course will prove useful to me. in my job scand, and future employment.

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#### **Future Plans?**

- Offer the Lean Academy during the January period in 2009
  - Seek Department sponsorship to cover expenses
- In discussions with other units about tailored offerings