



THE UNIVERSITY *of* TENNESSEE



Lean Enterprise Summer Program

DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING



utlean.utk.edu

What Is Lean Enterprise?



Lean Enterprise is...

- A comprehensive international experience, with intensive intercultural interaction inside and outside the classroom.
- An opportunity to develop knowledge in Lean with practical applications, through hands on experience in operations problem solving.

Modules

Module	Week
• Fundamentals of Lean Enterprise Systems	1
• Designing & Modeling of Lean Systems	2 & 3
• Analysis of Lean Systems	3 & 4
• Reliability of Lean Systems	4
• Project oriented week and presentations	5

General Dates

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	30		1		2		3		4		5		6
On-Line session		On-Line session		On-Line session		On-Line session		Early Check-In (extra cost) Travel Day		Check-in		Late Check-in	
	7		8		9		10		11		12		13
Opening Ceremon		Classrm session		Classrm session		Classrm session		Visit					
		Project		Project (not all)		Project							
	14		15		16		17		18		19		20
Classrm session		Classrm session		Classrm session		Classrm session		Visit					
Project		Project		Project		Project							
	21		22		23		24		25		26		27
Classrm session		Classrm session		Classrm session		Classrm session		Visit					
Project		Project		Project		Project							
	28		29		30		31		1		2		3
Classrm session		Classrm session		Project		Presentations		Presentations		Check-out (JUL 5)		Late Check-out	
Project		Project		All day		All day		Closure reception					

- Classes, visits and project visits are subject to change.
- Nobody can stay beyond August 3rd in residence halls.







CITY OF KNOXVILLE

www.ci.knoxville.tn.us



What Does It Include

- Teaching
- Class materials
- Industrial fieldtrips & transportation to project companies.
- Meals - \$400 USD for consumption
 - Card valid as well for grocery shopping.
- Lodging – 28 nights (Between July 4th and August 3rd)
 - Apartment Residence Hall (Andy Holt)
 - 2117 Andy Holt Ave., Knoxville, TN 37916

Where you will be staying
at



Get directions

My places



Suggested routes

Andy Holt Ave and Middle Dr 0.7 mi, 15 mins

Volunteer Blvd 1.0 mi, 20 mins

Middle Dr 0.9 mi, 19 mins

Walking directions to Alumni Memorial Bldg, 1408 Middle Dr, Knoxville, TN 37996



A 2117 Andy Holt Ave
Knoxville, TN 37916

1. Head northeast on Andy Holt Ave toward 20th St

0.4 mi

2. Turn right toward Middle Dr

46 ft

3. Turn left toward Middle Dr

43 ft

4. Turn right toward Middle Dr

0.1 mi

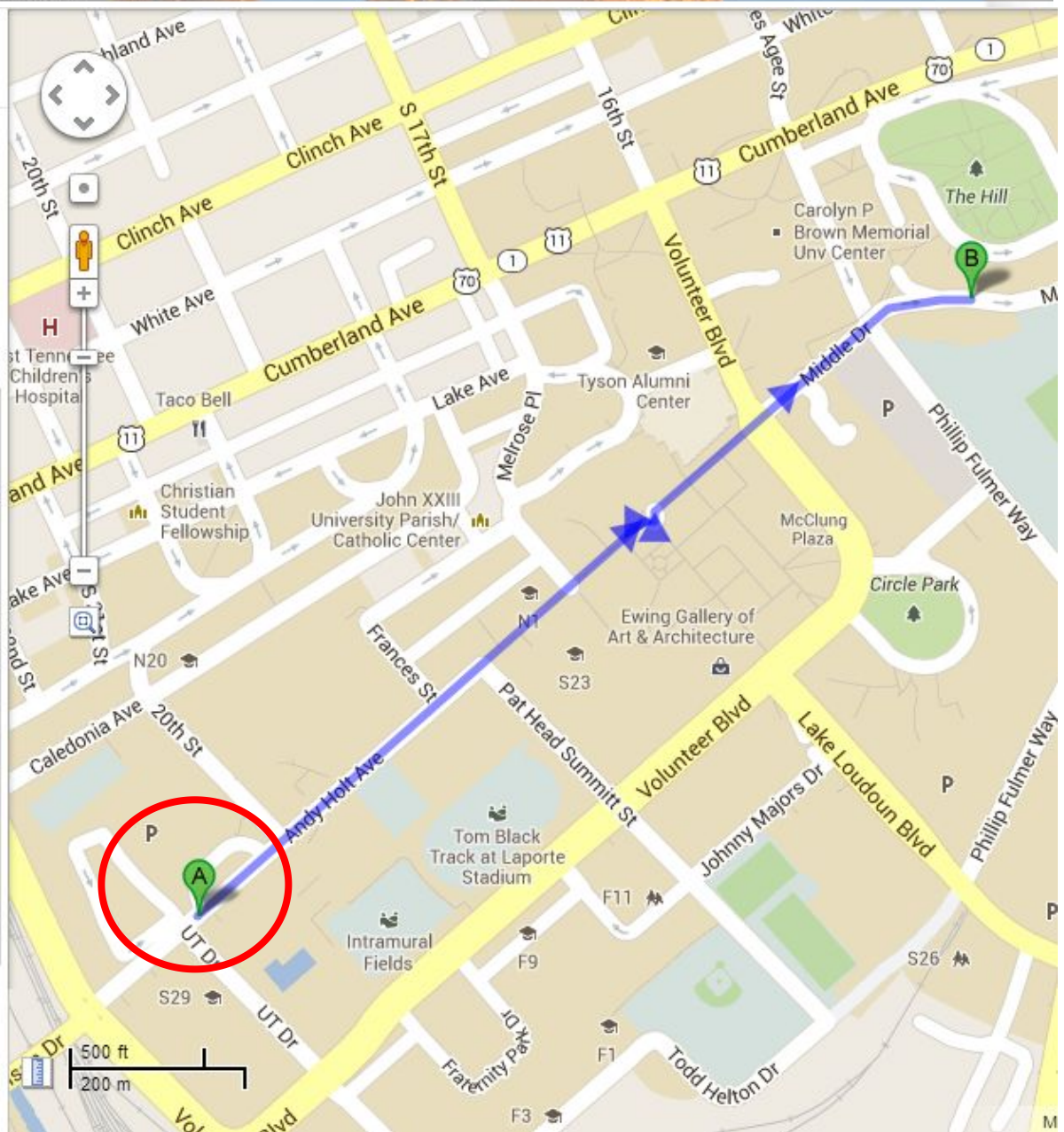
5. Continue straight onto Middle Dr
Destination will be on the right

0.1 mi

B Alumni Memorial Bldg
1408 Middle Dr, Knoxville, TN 37996

Save to My Maps

These directions are for planning purposes only. You may find



BT VOLUNTEER DINING



LEGEND

-  Current Dining Locations
-  NEW Dining Locations Fall 2012
-  Three Minute Walk Radius
-  Five Minute Walk Radius

At UT

- TRECS – access with your ID card.
 - <http://recsports.utk.edu/Programs/Facilities/treecs/index.php>



Lectures



Department of Industrial & Systems
Engineering

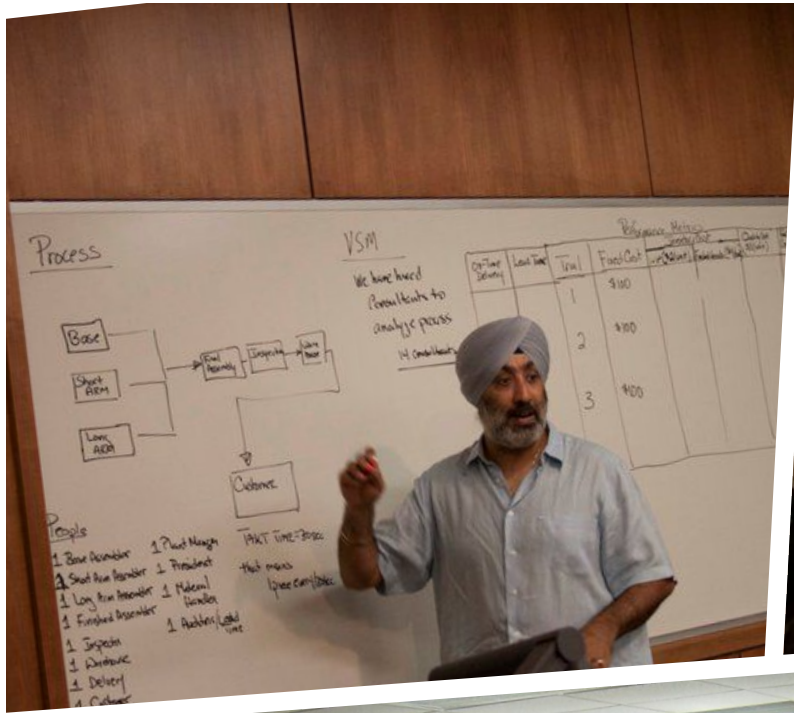
Schedule

- First week:
 - 1.5 hrs daily
 - Monday – Thursday 10:00 – 11:30 hrs. EST (subject to change)
 - Blackboard Collaborate.
- Second to fifth weeks:
 - Between 7 to 10 hours daily.
 - Lecture and project hours vary according to companies' schedules.

Schedule 2013

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	1	Start/TPS	2		3	Rmap/LEGO	4	VSM	5		6		7
Opening Ceremony/Orientation		Proj. Orient. AMB 27 14:00-17:00		Project		AMB 27 10:00-16:00		AMB 27 9:00-13:00 Proj. Orient.					
A3	8	DRIVES	9	DRIVES	10		11	SIMUL	12		13		14
Project		Project		Project		Visit		Project		Gatlinburg Aquarium (Ihouse)			
HSS 123 13:30-17:30		HSS 123 13:30-17:00		HSS 123 13:30-17:00		TOYOTA		HSS 123 13:30-17:00					
	15	SIMUL	16	KATA	17	SIMUL	18		19		20		21
Visit		Project		AMB 27 9:00-13:00 Project		Project		Visit		Splash Country (Ihouse)			
VW/BUSH		AMB 27 13:30-17:00				AMB 27 13:30-17:00		ORNL/Y-12					
Commun	22	HEALTH	23		24		25		26		27		28
Project		AMB 27 9:00-12:00 Project		Project		Presentations At UT		Presentations Closing ceremony					
AMB 27 13:30-17:00													

- 27 Alumni Memorial Building
- 123 Humanities and Social Sciences



Instructors

- Dr. Rapinder (Rupy) Sawhney
 - Weston Fulton Professor & Department Head



Instructors

- Isaac Mitchell
 - Lean Process Coordinator, East Tennessee Children's Hospital



Instructors

- MS Erick Arendt
 - PhD Student
 - Certified ProModel Simulation User

- MS Bharadwaj Venkatesan
 - PhD Student
 - Certified ProModel Simulation User



Instructors

- John Collier
 - Consultant from Center for Industrial Services at UT.



Instructors

- MS Enrique Macias de Anda
– PhD Student, Graduate
Teaching Assistant and
Coordinator of Lean Enterprise
Systems Summer Program.



Projects

- All teams will be multicultural, depending on the final enrollment.
- Definition of projects will be sent on June 16th. Send your affinity or interest by June 18th, selecting 4 projects that are more appealing to you.

Projects

- Team leaders (1 for every two teams) will select the members of the team.
- There is no guarantee that you will end up in the projects you selected (FCFS, GPA, English, origin and semester will be considered).

Projects 2011



Projects 2012

JOST



Fulton

FULTON BELLOWS, LLC



Homesteader

Energizer[®]

Personal Care

Projects 2013

CENTER for INDUSTRIAL SERVICES

Fulton

FULTON BELLOWS, LLC

THE UNIVERSITY of
TENNESSEE 
INSTITUTE for
PUBLIC SERVICE



PHARMA
PACKAGING
SOLUTIONS



TECHMER *PM*
POLYMER MODIFIERS

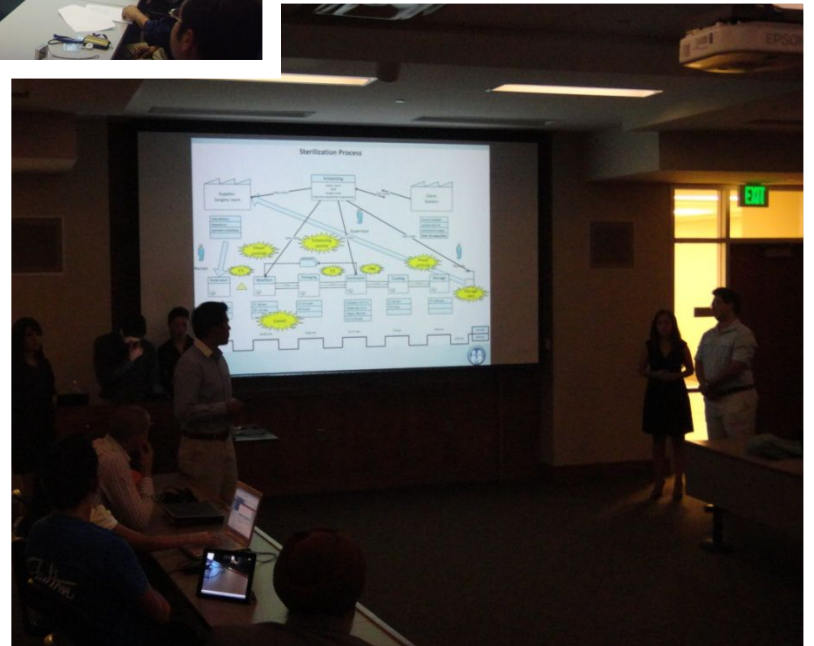


TENNESSEE COLLEGE
OF APPLIED TECHNOLOGY
KNOXVILLE











Visits



And more...



Final Ceremony



CLASS
of 2011



CLASS OF 2012



CLASS OF 2013



Contact

- Enrique Macias de Anda
 - Office - (865) 974-3333
 - Cellphone- (865) 226-9182
 - E-mail - emaciasd@utk.edu
- Departament (8:00 to 17:00 hrs)
 - (865) 974-3333
- Your International Programs office



Questions





 light the **TORCH**

**Come to the
LEAN
ENTERPRISE
SYSTEMS
SUMMER
PROGRAM**

**and light up
the TORCH
of your**

FUTURE

Arrival

- Try to arrange the same itinerary as your co-nationals.
- Vans with UT logo will be scheduled at the airport on Saturday and Sunday. Send you flight itineraries to your representatives.
- If you arrive in another day, taxis are available at the airport.
- **IMPORTANT:** Please send your ticket itinerary to your international programs coordinator, and include the days you'll stay in Knoxville.

Arrival

- Documents
 - Always carry with you your B1/B2 VISA, your passport and **INSURANCE**.
 - Supporting documents:
 - If available, a letter or any document that proves that you are a student at your university.
 - Welcome and customs letters, pick them up with your International Programs representative by showing proof of insurance and flight itineraries.
 - Check the website of U.S. Customs and Border Protection.

Arrival

- Customs checkpoint
 - Will be at the first airport you arrive into the U.S.
 - Fill out the forms (carry a pen with you at all times) on the plane (specially I-94)
 - Address: **2117 Andy Holt Avenue, Knoxville, TN 37916**
 - At the check point, show your letters ONLY if the customs officer asks for some proof.
 - Purpose of travel (trip): “Lean Manufacturing Summer **Workshop** at UTK”.
 - If you have any issues, please give me a phone call to 865 226 9182 or call the department at 865 974 3333.

Residence Hall

- Roster

- A maximum of two people will be assigned per apartment.
- Women will be assigned individual rooms, and men may or may not get individual rooms, depending on availability.
- Please select your partner by May30th and send an e-mail message to utlean@utk.edu.
- ***IMPORTANT:*** *if you are arriving on July 4th (early arrival) or departing on August 3rd (late departure) an additional cost will be charged per night per person, payable at the front desk. Your stay includes 28 nights only.*

Topics

- Fundamentals of Lean Enterprise Systems
 - Introduction to Lean
 - Lean Goals
 - Reduce Lead Time
 - Reduce Variation
 - Change Through People
 - Benefits of Lean
- Designing & Modeling of Lean Systems
 - Lean Concepts
 - Toyota Production System
 - Value Stream Mapping
 - Current State
 - Future State
 - A3 forms
 - Lego Simulation
- Analysis of Lean Systems
 - Pro-model Simulation
 - Lean matrix
 - Simulation Towards Lean
- Reliability of Lean Systems
 - DRIVES model
 - Theory of Constraints
 - Quality & Delivery Assessment
 - Project Management
 - Root-Cause Analysis
 - Lean Six-Sigma
 - Releanability