Engineering Institute
LANL ◆ UCSD

The 16th Los Alamos Dynamics Summer School

June 8th-August 7th, 2015
Los Alamos National Laboratory

Los Alamos Research Park
TA-3, Bldg. 4200

Student Projects
IMAC Abstracts-Due June 12, 2015
Student Presentation Drafts I- June 24, 2015
Student Presentation Drafts II - July 17, 2015
Student Presentation Drafts III - July 24, 2015
Student Final Presentations-Due August 6&7, 2015
-UNCLASSIFIED- LA-UR-15-28554-

Week 1 June 8-12
Student Orientation
GET Training
Administrative and Training Details
Tutorials: Statistics, DAQ*, ABAQUS*

Week 2 June 15-19
Tutorials: Signal Processing, Object Orientated
Programming*, Matlab*
Guest Lectures:
Remote Power Delivery-David Mascarenas
Making Effective Presentations: Rethinking
Slide Design -Phil Cornwell
Aerospace Structures-Nick Lieven
IMAC Abstracts Due

Week 3 June 22-26
Tutorials: Dynamics Systems, Machine Learning*
Guest Lectures:
Fullfield Stress Strain from Limited Measurements
-Pete Avitabile
-Pete Avitabile
-Dustin Harvey
Student Presentations

Week 4 June 29-July 2
Tutorials: System ID
Guest Lectures:
-Garrett Kenyon

Week 5 July 6-10
Tutorials: Embedded Systems
Guest Lectures:
-Heidi Hahn
-Jim Wren
Student Presentations

Week 6 July 13-17
Tutorials: Controls
Guest Lectures:
Nuclear Safeguards-Karen Miller
-Keith Worden

Week 7 July 20-24
Tutorials: Nonlinear Systems
Guest Lectures:
-Amy Larson
Applying to Graduate School-C. Farrar, M. Todd
-Guest Lecture
Student Presentations

Week 8 July 27-31
Tutorials: Verification and Validation

Week 9 August 3-7
Practice Sessions
Presentations
LADSS BBQ at Chuck's
Departure Processing/Lab Clean Up
Wrap Up

*optional tutorials

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For the most up to date schedule, please check the LADSS Outlook Calendar.

A G E N D A

Week 1, June 8-12

Monday, June 8

Orientation 03/4200/203 A & B (Los Alamos Research Park)

07:30 – 08:30 Badging-Students
08:30 – 08:45 Lunch Selection, Money Collection-All
08:45 – 09:00 Welcome-Dave Clark, NSEC
09:00 – 9:45   How to Get the Most from Your Internship- Emily Robinson, SPO
09:45 – 10:00 LA Chamber of Commerce Presentation-Nancy Partridge, LA Chamber of Commerce
10:00 – 10:10 Student Worker Safety & Security-Enrique Trujillo, SWSST Rep, PSI
10:10 – 10:20 *Break*
10:20 – 10:45 Taxation of Fellowships-Mike Cunningham, TPT
10:45 – 11:10 You and Your Safety-Ella Twary, DSESH-STO
11:10 – 11:20 Security-Andrew Wall-SEO-4
11:20 – 11:30 *Break, Distribute Lunches*
11:30 – 01:00 Lunch/Speaker: Kelsey Neal-2015 LADSS
01:00 – 02:30 Introduction to the 16th LADSS, Chuck Farrar, EI
02:30 – 03:30 *Break, Meet with Mentors*
03:30 – 05:00 Proceed to Labs, Lab Inspections-Ella Twary-DSESH-STO

Tuesday
08:00 – 04:00   GET Training - White Rock

Wednesday
08:00 – 09:00   Administrative and Training Updates 03/4200/300 Break Room
09:30 – 01:00   Begin Projects

Thursday
08:00 – 09:30   Tutorial: Statistics (Eric Flynn) 03/4200/203 A&B
01:00 – 03:00   Tutorial: *Data Acquisition: (Eric Flynn) 03/4200/301

Friday
08:00 – 09:30   Tutorial: Statistics (David Mascarenas) 03/4200/203 A&B
01:00 – 03:00   Tutorial: *Abacus: (TBD) 03/4200/301
05:00   IMAC Abstracts Due

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Week 2, June 15-19

Monday, June 15
08:00 – 09:00   Signal Processing (Eric Flynn) 03/4200/203 A&B
01:00 – 03:00   Matlab* (Dustin Harvey) 03/4200/301 NSEC Conference Room

Tuesday, June 16
08:00 – 09:00   Signal Processing (Eric Flynn) LARP Room 203 A&B
03:30 – 05:00   Lecture: Remote power Delivery (David Mascarenas) LARP Room 203 A&B

Wednesday, June 17
08:00 – 09:00   Signal Processing (Eric Flynn) 03/4200/203 A&B
01:00 – 03:00   Object Orientated Programming* (Eric Flynn) 03/4200/301 NSEC Suite
6:00pm   Pizza Party at Francois'

Thursday, June 18
08:00 – 09:00   Signal Processing (Eric Flynn) LARP Room 203 A&B
03:30 - 05:00   Lecture: TBD (Nick Lieven) LARP Room 203 A&B

Friday, June 18
01:30 - 02:30   Lecture: Making Effective Presentations: Rethinking Slide Design (Phil Cornwell) LARP Room 203 A&B

Week 3, June 22-26

Monday, June 22
08:00 – 09:30   Dynamic Systems (Pete Avitable) 03/4200/203 A&B
01:00 – 03:00   Machine Learning* (Dustin Harvey) 03/4200/301 NSEC Suite

Tuesday, June 23
08:00 – 09:30   Dynamic Systems (Pete Avitable) 03/4200/101 Viz Lab
03:30 – 05:00   Lecture: Fullfield Stress Strain from Limited Measurements (Pete Avitabile) 03/4200/101 Viz Lab

Wednesday, June 24
08:00 – 09:30   Dynamic Systems (DJ Luscher) 03/4200/301
03:00 – 05:00   Lecture: Pete Avitabile 03/4200/101 Viz Lab

Thursday, June 25
08:00 – 09:30   Dynamic Systems (DJ Luscher) LARP Room 203 A&B
03:30 – 05:00   Lecture: Dustin Harvey LARP Room 203 A&B

Friday, June 26
08:00 – 09:30   Dynamic Systems (Pete Avitable) 03/4200/101 Viz Lab
01:00 – 05:00   Student Presentations I 03/4200/101 Viz Lab

Week 4 June 29-July 2

Monday, June 29
08:00 – 09:00   System ID (Eric Flynn) 03/4200/101 Viz Lab

Tuesday, June 30
08:00 – 09:00   System ID (Eric Flynn) 03/4200/101 Viz Lab
03:30 – 05:00   Lecture: (Garrett Kenyon) 03/4200/101 Viz Lab

Wednesday, July 1
08:00 – 09:00   System ID (Eric Flynn) 03/4200/101 Viz Lab

Thursday, July 2
08:00 – 09:00   System ID (Eric Flynn) LARP Room 203 A&B

Friday, July 3   Holiday

Week 5- July 6-10

Monday, July 6
08:00 – 09:00   Embedded Systems (David Mascarenas) 03/4200/101 Viz Lab

Tuesday, July 7
08:00 – 09:00   Embedded Systems (David Mascarenas) LARP Room 203 A&B
03:30 – 05:00   Lecture: Design Thinking (Heidi Hahn) LARP Room 203 A&B

Wednesday, July 8
08:00 – 09:00   Embedded Systems (David Mascarenas) 03/4200/101 Viz Lab

Thursday, July 9
08:00 – 09:00   Embedded Systems (David Mascarenas) LARP Room 203 A&B
03:30 – 05:00   Lecture: (Jim Wren) LARP Room 203 A&B

Friday, July 10
01:00 – 05:00   Student Presentations II 03/4200/101 Viz Lab

Week 6 July 13-17

Monday, July 13
08:00 – 09:00   Controls (Alex Scheinker) 03/4200/101 Viz Lab

Tuesday, July 14
08:00 – 09:00   Controls (Alex Scheinker) LARP Room 203 A&B
03:30 – 05:00   Lecture: Nuclear Safeguards (Karen Miller) LARP Room 203 A&B

Wednesday, July 15
08:00 – 09:00   Controls (Alex Scheinker) 03/4200/101 Viz Lab

Thursday, July 16
08:00 – 09:00   Controls (Alex Scheinker) LARP Room 203 A&B
03:30 – 05:00   Lecture: (Keith Worden) LARP Room 203 A&B

Friday, July 17
08:00 – 09:00   Controls (Alex Scheinker) 03/4200/101 Viz Lab

Week 7 July 20-24

Monday, July 20
08:00 – 09:00   Non Linear Systems (Mike Todd) 03/4200/101 Viz Lab

Tuesday, July 21
08:00 – 09:00   Non Linear Systems (Mike Todd) LARP Room 203 A&B
03:30 – 05:00   Lecture: (Amy Larson) LARP Room 203 A&B

Wednesday, July 22
08:00 – 09:00   Non Linear Systems (Mike Todd) 03/4200/101 Viz Lab
01:00 – 03:00   Applying to Graduate School (C. Farrar, M. Todd) 03/4200/101 Viz Lab

Thursday, July 23
08:00 – 09:00   Non Linear Systems (Mike Todd) LARP Room 203 A&B
03:30 – 05:00   Lecture: (TBD) LARP Room 203 A&B

Friday, July 24
01:00 – 05:00   Student Presentations III (Students, Mentors) 03/4200/101 Viz Lab

Week 8 July 27- 31

Monday, July 27
08:00 – 09:30   Verification and Validation (Francois Hemez) 03/4200/101 Viz Lab

Tuesday, July 28
08:00 – 09:30   Verification and Validation (Francois Hemez) LARP Room 203 A&B

Wednesday, July 29
08:00 – 09:30   Verification and Validation (Francois Hemez) 03/4200/101 Viz Lab

Thursday, July 30
08:00 – 09:30   Verification and Validation (Francois Hemez) LARP Room 203 A&B
03:30 – 05:00   Lecture: (Jim Wren) LARP Room 203 A&B

Friday, July 31
08:00 – 09:30   Verification and Validation (Francois Hemez) 03/4200/101 Viz Lab

Week 9 August 3-7

Monday, August 3   Open

Tuesday, August 4   **Practice Sessions-***LARP Room 203 A&B*
08:00 – 09:00   Group 1-
09:00 – 10:00   Group 2-
10:00 – 11:00   Group 3-
11:00 – 01:00   Lunch Break
01:00 - 02:00   Group 4-
02:00 - 03:00   Group 5-
03:00 – 04:00   Group 6-
04:00 – 05:00   Group 7-

Wednesday, August 5-Presentations- *all presentations are in 03/4200/101*
03:00 – 03:30   Presentation Group 1
03:40 – 04:10   Presentation Group 2
04:20 – 04:50   Presentation Group 3

Thursday, August 6 -Presentations- *all presentations are in 03/4200/101*
08:00 – 08:30   Presentation Group 4
08:40 – 09:10   Presentation Group 5
09:20 – 09:50   Presentation Group 6
10:00 – 10:30   Presentation Group 7
11:30 – 03:00   Departure Processing
03:00 – 05:00   Lab Clean up and Equipment Return
05:30   LADSS BBQ at Chuck Farrar's house

Friday-08:00-12:00 Summer School Survey Discussion and Wrap Up (301 Break Room)