



Advanced Manufacturing Composites Immersion Series 3-Day Course for Science & Engineering Students

Dates: August 12-14, 2015 **Time:** 8:30 am - 4pm each day

Location: University of Delaware, 201 Composites Manufacturing Science Laboratory,

Delaware Avenue & Academy Street, Newark, Delaware 19716-3144

Course Outline

August 12—Introduction to Composites

- 8:30 Welcome (DVIRC & University of Delaware)
- 8:45 Lecture: Introduction to Composites
- 10:00 Break
- 10:15 Lecture: CFRP in Automotive Applications
- 12:00 Lunch and Networking
- 1:00 CFRP Production Systems
- 2:15 Break
- 2:30 Materials and Supply
- 4:00 Adjourn

August 13—Manufacturing and Design of Composites

- 8:30 CFRP Manufacturing
- 10:30 Break
- 10:45 Material Characterization
- 12:00 Lunch
- 1:00 Design of Composites
- 2:30 Break
- 2:45 Material Testing
- 4:00 Adjourn

August 14—Lab and Hands-on Experience

- 8:30 Materials Characterization (Chemical and mechanical)
- 10:30 Break
- 10:45 Thermoforming of Thermoplastics
- 12:00 Lunch
- 12:45 Liquid Molding Processing
- 2:30 Break
- 2:45 Review of Results/ Discussions
- 3:15 DVIRC Debrief/Course feedback
- 4:00 Adjourn