2012 Helicopter Program

www.ctspacegrant.org

For All Details

Date: June 17-23, 2012
Location: Central Connecticut State University
New Britain, CT

http://www.facebook.com/pages/Space-Grant-Helicopter-Workshop
for pictures from 2010-11

Sunday
Helicopter Flight Simulation: RC Helicopter Flight, RC Aircraft Flight
(Students will fly RC aircraft, indoors/outdoors)

Monday
Principles of Helicopter Flight I, Helicopter Aerodynamics,
VTOL Aircraft Design Construction Techniques
(Student teams will be instructed on the design and building of RC VTOL aircraft)

Helicopter Flight over Connecticut

Tuesday
Design of Experiments, Control Theory, Helicopter Wind Tunnel Testing Methods,
Principles of Helicopter Flight II
(Students will build a VTOL Remote Control Aircraft)

Wednesday
UAV Control and Design Methods,
Vertical Take Off and Landing, RC VTOL Design and Construction
Sikorsky Aircraft Tour (Blackhawk Mfg)

Thursday
Helicopter UAV Instruction and Demonstration
(Students will run wind tunnel tests on designs for a new K-MAX Scale UAV)
Helicopter Hover Testing (The K-MAX and conventional helicopters will be tested)
(Students will run tests using a hover test fixture for UAV helicopters)
KAMAN Aerospace Tour (K-MAX and SH-2G Mfg)

Friday
Aerospace Careers (Students will receive an overview of NASA related careers)
RC Aircraft Flight VTOL Competition (Students will fly their VTOL aircraft)
Time to tour Connecticut and New York

Saturday
Depart

Selected Students Will Receive
• RC helicopter
• Helicopter experience T-Shirt
• Helicopter flight
• Tour of KAMAN Aerospace, Sikorsky Aircraft, and New England Air Museum
• Practical knowledge of fixed and rotary wing engineering and design
• Room & board, transportation, and tuition
• Classroom instruction on aerodynamics, rotorcraft principles, wind tunnel testing, control theory, VTOL RC aircraft, etc.

Application Requirements
• Must be age 18 or over
• Must have completed freshman year
• Must be interested in aerospace
• Must be a US Citizen
• Must complete application at:
www.ctspacegrant.org
• Must apply for a travel grant in your state to cover transportation and the $1000.00 registration fee. The travel grant application is at the above web site for colleges within Connecticut.

Space Grant Helicopter Workshop Plane built by Group 1 (Kerr, Tomney, Meny), flown by Luke.

CT Helicopter Testing Workshop Group 1 Flight (ID)