The National Summer Transportation Institute (NSTI) program is a highly competitive scholarship program that provides 30 high school students with a great chance to investigate careers and educational opportunities in today’s transportation industry and beyond.

About NSTI

Students will participate in discussions, hands-on design competitions, and trips to study local and regional transportation hotspots. This program also provides students with a chance to spend time with industry role models and a diverse group of students.

Students may request to talk with university faculty from specific areas of interest, as well as staff members from admissions and student life. NSTI requires a separate application. Accepted students receive a scholarship package to cover lectures, lunches, field transportation, project supplies and access to UB computer labs. Students are responsible for their own travel to and from UB campus during the week.

NSTI scholarship funding is provided by a grant from the Federal Highway Administration.

Program Highlights

- One-week non-residential program
- High school students only (rising 9th grade to rising 12th grade)
- Participation is completely free and students will receive free field trip transportation and lunches
- Learn about transportation engineering through awesome hands-on activities and group projects.
- Tour the regional traffic operation center and transit authority in Greater Niagara Falls and Buffalo region
- Tour of Buffalo International Airport and Air Control Tower
- Cruise along Erie Canal in Lockport
- Spend time with professionals from transportation authorities and industry
- Leadership and communication training program
- College preparation and admission process
- Minority or underrepresented students are encouraged to apply

Contact Information

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Applications are due by 5:00 pm on Friday, June 30, 2017
TENTATIVE SCHEDULE

MONDAY, AUGUST 14
Morning
• Orientation
• Team
• University Campus Tour
  • SEESL lab, Driving Simulator, Student Union and Library
• Career Opportunities in Transportation
Afternoon
• Introduction to Basswood Bridge Design
• Project: Build a basswood bridge
• Daily Survey 1

TUESDAY, AUGUST 15
Morning
• Freight Transportation
• Tour of The Railroad Museum
• Tour of NITTEC traffic operation center
• Highway Transportation
Afternoon
• Collecting traffic count data in field (A. Bartlett, Q. He)
• Project: Traffic Simulation and Signal Optimization (A. Bartlett)
• Daily Survey 2

WEDNESDAY, AUGUST 16
Morning
• Tour of Air Control Tower
• Tour of Buffalo Airport
• Transportation Practice in NY State (S. Surdej)
Afternoon
• Wind Hazards on Transportation Infrastructure
• Construction and Transportation Infrastructure
• Project: Structures and Bridge Design
• Daily Survey 3

THURSDAY, AUGUST 17
Morning
• Social media and transportation
• Tour of Erie Canal
• Driving Simulator
Afternoon
• Navigation Systems
• Project: Railway Design Game
• Daily Survey 4

FRIDAY, AUGUST 18
Morning
• College Preparation and Admission Process
• PowerPoint Presentation Preparation
• Last Survey
Lunch and Closing Program
• UB NSTI Closing Ceremony and Farewells
• Student presentation

engineering.buffalo.edu/nsti