

2017 National Summer Transportation Institute

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.



**Monday-Friday
August 14-18, 2017
UB North Campus**

About NSTI

Students will participate in discussions, hands-on design competitions, and trips to study local and regional transportation hotspots. This program also provides student 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



Apply or learn more at
engineering.buffalo.edu/nsti

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

Contact Information

Dr. Qing He
Department of Civil, Structural and Environmental Engineering
Department of Industrial and Systems Engineering
University at Buffalo
313 Bell Hall
Buffalo, NY 14260
P: 716.645.3470
F: 716.645.3302
E: qinghe@buffalo.edu

2017 National Summer Transportation Institute

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

