

Internship ID# SM14CPMSTRUCTURAL

NEW JERSEY DEPARTMENT OF TRANSPORTATION

INTERNSHIP OPPORTUNITY

Internship/Semester: Summer

Internship Type: Non-Credit

Intern Level: Undergraduate/Graduate School

Suggested Background and/or Knowledge:

Structural Analysis and Design

NJDOT Division/Unit/Program Area Offering the Internship:

Structural Design and Geotechnical Engineering

Description of NJDOT Division/Unit/Program Area Offering the Internship:

Analysis and design of Highway related structures such as bridges, sign structures, retaining walls etc.

Internship Location:

NJDOT Headquarters
E & O Building, 5th Floor
1035 Parkway Avenue
Trenton, New Jersey

Internship Project Description:

Review NJDOT and American Association of State Highway and Transportation (AASHTO) Standards for Structural Design. Perform calculations for the design of bridges, sign structures, and retaining walls. Analyze structures using engineering software.

Estimated Project Duration and Suggested Weekly Work Schedule:

3 months – 3 days per week - Hours negotiable

Internship Learning Objectives/Marketable Skills:

Get familiar with NJDOT Design Manual, AASHTO Specifications for design of structures

Intern will be trained in the following area(s):

Student will become familiar with the NJDOT and AASHTO Standards for the design of structures such as bridges, culverts, sign structures, and retaining walls. Will learn aspects of engineering design of structures using basic civil engineering knowledge. Use software for the design of structures. Prepare engineering computations for bridge quantities, construction cost estimates, and prepare sketches/drawings using MicroStation.