



## Program Goals

### Stockton University Environmental Internship Program



The primary goal of this internship program is to provide students with real-world experiences and on-the-job training that will help them pursue careers in environmental concentrations such as restoration, remediation, and conservation, while completing important projects for the NJ Department of Military and Veterans Affairs (NJ DMAVA)

#### **Specific learning objectives of the program.**

**At the end of this internship, students will have made significant strides in:**

- Understanding available career opportunities in the environmental sciences
- Determining the specific career tracks that fit their interests
- working with Geographic Information Systems (GIS) software and applying it in a number of environmental situations, including: map generation, converting tabular data into spatial data, querying data and showing changes in land use over time
- Calculating source and site-wide hazardous air pollutant (HAP) emissions
- Following simple sampling protocols, including documenting activities during a sampling event (for quality control and quality assurance purposes)
- Organizing and managing both small and large data sets.
- Communications skills, including writing formal reports, memos, preparing presentations and giving formal presentations
- Managing both Invasive and protected species
- Working as part of a team as well as working independently as an individual
- Time management – managing classes, homework, studying, and personal time, while still upholding his/her commitment to the internship program
- Understanding local, state, regional and federal environmental regulations
- Creating and updating resume

#### **Possible activities in which students will be involved:**

- Observe EPAS (Environmental Performance Assessment System) inspections
- Observe ECOP (Environmental Conditions of Property) inspections

- Observe UST (Underground Storage Tank) removal
- Attend training events (Asbestos Awareness, Environmental Boot Camp 4-day course, Spill Prevention and Contingency Plan, etc)
- Attend pre-bid meetings (when relevant)
- Work with state environmental specialists and environmental contractors to complete various projects that incorporate the above for NJDMAVA
- Beach surveys – Locate and document protected plant species and remove invasive plant species. Mark plant locations using GPS
- Formal report writing (water sampling report, air emissions report, ozone depleting chemical (ODC) report, PCB containing light ballast report, rare species report)
- Website management – developing and updating content to use on program website
- Spatial data management (maps, tables etc) in ArcMap
- Creating geodatabases
- Collect water samples for lead and copper analysis
- Travel to NJARNG installations across the state
- Presenting at conferences and seminars

**Specific on-the-job training student interns will receive:**

- GIS - how to create figures in ArcMap to use in our formal reports. These figures include:
  - 1930, 1954, and 2015 side by side aerial photos for land use comparisons
  - Landscape data figures showing map of available habitats for protected species
  - Sample locations on floor plans
  - Emissions sources on site maps
  - ODC location on floor plans
  - Protected bird species sightings on site maps
- GIS - georeferencing
- GIS - Creating and managing geodatabases
- Formal Report Writing – how to develop a formal report including methods, results, action plans, tables, figures, and appendices.
- Emissions Calculations – how to calculate emissions from sources such as boilers, generators, and storage tanks. These calculations will be used to calculate total facility emissions, to determine if a site is in compliance with state and federal regulations.
- Invasive plant species identification and removal strategies
- Protected plant species identification
- GPS techniques – how to mark protected plant species location
- Resume writing and application techniques