



Philadelphia Water Department, Green Infrastructure Implementation Graduate Internship Opportunities Summer 2017

Philadelphia Water Department's Green Stormwater Infrastructure Implementation Program unit (GSIIIP) is looking for student interns for the summer of 2017 (May-September). The GSIIIP unit works collaboratively with city agencies, public and private partners, and other stakeholders, to implement green stormwater infrastructure (GSI) projects that help to meet and exceed the stormwater management goals of the *Green City, Clean Waters* program. Information about the mission and activities of the unit can be found here: www.phillywatersheds.org and <http://philadelphiawater.org/gsi/planning-design/>

Four positions are available within different groups that are part of the GSIIIP unit. Please refer to the following pages for specific proficiencies and example tasks for each group.

Requirements for all positions:

Applicant must be enrolled as a full-time undergraduate or graduate student during the entire year of 2017.

Candidates with experience related to stormwater management design, green infrastructure, and water resources will be given priority. Must have solid computer and software skills, strong organizational and communication skills, high level of motivation, and be able to work effectively independently and collaboratively. Applicants of all levels of experience will be considered. Candidates should have an interest in stormwater management design, green infrastructure, and water resources. Both field work and office work may be required. Valid US driver's license preferred though a personal vehicle is not required.

Policy & Partnerships

The Policy & Partnerships group is seeking a highly qualified graduate student intern for the summer of 2017 (May-September). Applicants must be a current graduate student in an accredited Planning and/or Policy program.

Job Description:

The intern will be part of the Green Stormwater Infrastructure Policy & Partnerships team, which develops programmatic policies and processes for the implementation of PWD's *Green City, Clean Waters* program. The team also coordinates green infrastructure partnerships, addresses agency policy/regulatory and funding needs, and creates internal work plans relevant to meeting Philadelphia Water Department's goals.

Proficiencies:

- Knowledge of environmental planning, government administration and urban public policy issues
- Strong professional/business writing and communication skills
- Database management skills
- Interest, knowledge and/or experience in stormwater management, watershed planning, etc. a plus
- Skills in Microsoft Office required
- Skills in GIS and Adobe Creative Suite preferred

Example Tasks:

- Help with process of implementing green infrastructure projects on public land (parks, streets, public safety facilities, libraries, etc.) at the direction of supervisory staff
- Draft factsheets, memos and presentations for agency partners and internal staff
- Review planning documents, city codes, ordinances and other relevant sources to summarize and make recommendations for use by staff
- Perform policy, legal, database and peer review research and analysis to inform staff decision-making
- Manage databases to populate and track capital projects
- At times attend meetings with other agencies to document meeting decisions and learn about city planning initiatives

Please provide a cover letter, resume, and 1-3 page writing sample (preferably showcasing a relevant topic in professional memo format).

Planning

The Planning group is seeking a highly qualified graduate student intern with experience in any the following academic departments: Planning, Policy, Urban Design, Landscape Architecture, Environmental Studies

Job Description:

Interns will work closely with the GSI Planning group, specifically with the Program Development staff, which is within the GSI Program Implementation Unit. GSI Planning Program Development staff work collaboratively with other city agencies, private partners, and stakeholders to develop and update programs aimed at supporting and incentivizing planning of GSI projects to meet and exceed the stormwater management goals of the *Green City, Clean Waters* program. The group also works closely with the GSI Policy & Partnerships, Design, GSI Program Support, Compliance Assurance, GSI Monitoring, and Construction groups.

Proficiencies:

- Experience related to stormwater management design, green infrastructure, and watershed planning, including the ability to generally understand stormwater concept plans
- Strong professional writing, communication, and research skills, specifically using peer-reviewed journals
- Skills in Microsoft Office required
- Skills in ArcGIS, Adobe Creative Suite preferred

Example Tasks:

- Assist in typology characterization for school and private non-residential properties within Philadelphia, using primarily a GIS analysis methodology
- Assist in program research and development for school and private non-residential properties
- Write content, create graphics, and design page layouts for external or internal audiences in coordination with internal staff
- Conduct a review of municipal and public utility energy retrofit programs to identify marketing strategies and incentive structures
- Assist in project data management and tracking

Please provide a cover letter, resume, a 1-3 page writing sample (preferably showcasing a relevant topic in professional memo format), and design work, as applicable.

Design

The Design group is seeking a highly qualified undergraduate or graduate student with experience in any of the following academic departments:

Environmental Engineering, Civil Engineering, Engineering, Landscape Architecture, Planning, Urban Design

Job Description:

The intern will work closely with the GSI Design staff within the GSI Implementation Program unit.

The GSI Design group's mission is to advance the ability of the Department to design and build GSI. The group's primary responsibilities are developing construction documents for GSI, developing resources and standards for GSI, and providing technical support to Planning and Construction. The GSI Design group also works closely with the GSI Planning, GSI Program Support, Compliance Assurance, GSI Monitoring, and Construction groups.

The candidate will assist the engineers within the GSI Design group with ongoing efforts to identify, design, and manage green infrastructure projects.

Interns may be involved with any of the following:

- Review consultant submittals – plan sets, calculations, and design reports
- Calculate and track project metrics
- Concept design development for GSI on Water/Sewer Projects
- CAD drafting
- Prepare/check project cost estimates
- Respond to technical inquiries from Planning Group
- Review project initiation documents
- Resource development

Please provide a cover letter, resume, a 1-3 page writing sample (preferably showcasing a relevant topic in professional memo format), and design work, as applicable.

Program Support

The Program Support group is seeking highly a qualified undergraduate or graduate student with experience in any of the following academic departments:

Environmental Engineering, Civil Engineering, Engineering, Landscape Architecture, Planning, Urban Design

Job Description:

The intern will work closely with the Green Stormwater Infrastructure (GSI) Program Support staff within the GSI Implementation Program in the GSI Unit. The GSI Program Support group facilitates implementation of GSI projects through procedural and technical support to the GSI Planning and GSI Design groups. The group's primary responsibilities are resource development, procurement and contract management, data management and entry, and research and innovation to streamline the GSI Implementation Program. The GSI Program support group also works closely with the GSI Planning, GSI Design, Compliance Assurance, GSI Monitoring, and Construction groups.

The candidate will assist engineers, landscape designer, and city planners in the unit with ongoing efforts to plan, develop, and promote green infrastructure programs; identify, design, and manage green infrastructure projects; and research and implement innovative green stormwater management techniques.

Interns may be involved with any of the following:

- Analysis of Life Cycle Cost of GSI Systems
- Site Design Review
- Concept Development for GSI Projects
- Developing Planting Plans
- Program Research/Analysis
- Data Administration
- Efficiency Analysis of Watering Protocols
- Landscape Contract Administrative Assistance
- CAD drafting
- Composing, Reviewing, and Proofreading documents
- GSI Feasibility Assessments

Please provide a cover letter, resume, a 1-3 page writing sample (preferably showcasing a relevant topic in professional memo format), and design work, as applicable.