

# AKS INTERNSHIP PROGRAM OVERVIEW – ENGINEERING, SURVEYING, CONSTRUCTION SUMMER 2023



## OVERVIEW:

The AKS Internship Program provides an opportunity for students in civil engineering, surveying, and related fields to earn their Bachelor's degree in four years while graduating with up to nine months of work experience that introduces the student to different career paths and unique opportunities within the industry.

Our philosophy is that the best professionals have an understanding of field work, how projects are constructed, and how design translates to real projects in the field. As a company, our focus is on quality so we want you to learn how to do things right and understand the reasons behind it. The AKS Internship Program will immerse you in up to three years of a combination of surveying, construction, and engineering. Specific assignments may vary depending on workload and staffing needs.

## APPLICATION TIMELINE:

|                                |                       |
|--------------------------------|-----------------------|
| Applications accepted          | October 3, 2022       |
| Last day applications accepted | February 28, 2023     |
| Notification to candidates     | week of April 3, 2023 |

Following initial screening of received application materials, selected candidates will be invited to interview with the AKS team. Final notification to candidates will occur no later than the first week of April.

## PROGRAM REQUIREMENTS:

- Must be currently enrolled in a 2- or 4-year accredited program with a declared major in civil engineering, forest engineering, environmental engineering, construction management, land surveying, or other related field.
- Must have completed at least one year of higher education prior to start of internship.
- Enter the AKS Internship Program as early as your freshman year. Sophomores and juniors who enter the program may have a modified intern curriculum.
- Maintain a minimum 3.0 cumulative GPA.
- Must have a valid drivers license.
- Complete application and provide three references.
- Commit to working full-time as a paid intern for a minimum of 12 weeks per year, generally during the summer months.

## LEARNING OBJECTIVES:

- Establish a fundamental understanding of construction and how engineering designs translate into constructable projects in the field.
- Enhance your understanding of coursework and how it relates to real work experience.
- Develop a holistic view of design and the various factors that influence it, including other related disciplines.

Depending on your assignment, the learning objectives are as follows:

*Field Surveying:*

- Identify what constitutes reliable field data that is acceptable as a base for engineering design and construction.
- Learn how to collect the field information used to create base maps, establish property boundaries, and perform construction staking.
- Understand how field data is processed in the office before it is ready for design and construction.

#### Construction Inspection:

- Learn how final engineering plans are interpreted in the field by contractors.
- Understand the role of the engineer in the construction process by verifying the placement of construction stakes, helping to process construction payment requests, performing daily inspections, and preparing inspection reports.
- Read plans and specifications to verify construction is being completed correctly.

#### Engineering Design:

- Apply your knowledge of field work and engineering design to complete real-world design projects.
- Develop an understanding of the entire design process beginning with existing conditions, to developing preliminary and final designs, and ending with final construction project close out.
- Understand how client needs and jurisdictional requirements influence design and construction.

### PROGRAM DETAILS:

The intent of the program is to introduce you to how survey and engineering design relates to construction. Building this fundamental understanding of how designs translate into the field helps you become a better professional because you can see that a project is more than lines on paper. Furthermore, this program will introduce you to other complimentary disciplines with whom civil engineers work with on a daily basis. This exposure helps form a holistic view of design and the various factors that influence it. This program is designed to last up to three years, with each summer building on the lessons learned from the previous year. During the first summer, you will be invited into the office for Career Day to meet with our civil engineers, land use planners, forest engineers, arborists, construction inspectors, and natural resource professionals to learn about how these professionals all work together to accomplish projects. Subsequent years and those entering their senior year of school, will be offered the opportunity to do a one-on-one job shadow with a department of their choice. The program is structured to complement and prepare you for the coursework at school by providing insight into how the basic principles apply in the real world.

The program may look different depending on the year you enter the program. For example, as a freshman you would benefit from a full summer of each work assignment. A sophomore or junior may experience a condensed program with a combination of assignments. Though dependent on workload and staffing needs, here are some **examples** of what job assignments could look like:

Field Surveying - You will learn that the foundation of good design is reliable field information by working on a survey field crew. You will learn how to collect the field information used to create base maps, establish property boundaries, and perform construction staking. This can be a physically challenging assignment that could have you working up to 60 hours per week in a variety of weather conditions and terrain. However, the lessons learned from this experience will prove to be invaluable as you move forward in building your career. Example job responsibilities may include:

- Perform physically demanding work as needed including packing equipment, pounding hubs, and brush-cutting sight lines
- Perform survey/utility research
- Maintain good communication with coworkers and clients
- Operate a company-owned vehicle with a valid driver's license and clean driving record

- Adhere to AKS work flows, standards, and procedures

Construction Inspection - Learn how final engineering plans translate to the field by working with a construction inspector. You'll verify the placement of construction stakes, help process construction payment requests, conduct daily inspections, coordinate with contractors, and learn how to read plans and specifications to verify construction is being completed correctly. Your hours may vary from 40 – 50 hours per week depending on the construction activities of your assigned projects. Job responsibilities typically include:

- Read and interpret construction plans and specifications
- Inspect and document the construction progress of streets, earthwork and utilities to assure compliance with contract documents, specifications and building codes
- Prepare Construction Inspection reports
- Manage construction related issues either directly or working with the AKS Project Manager
- Review field staking
- Complete projects and special assignments as requested
- Represent AKS through communication with contractor, municipal agents, and client
- Measure and quantify construction work/materials with emphasis on documentation
- Review contractor billing to client and verify billed quantities
- Attend construction meetings

Engineering Design – Working under the direction of a civil engineer, apply your knowledge from the previous summers and combine it with the engineering knowledge learned in class by working as an engineering technician. Learn how to complete designs, perform engineering calculations, conduct math checks, and work with the design team to develop construction plans. Job responsibilities may include:

- As skills allow, complete AutoCAD Civil 3D tasks including setting up sheets, importing points, generating contours and profiles, creating horizontal/vertical alignments, completing site/corridor models, performing volume calculations, subdivision plat prep, produce project related graphics for technical reports, presentations, etc.
- Perform street and utility design per jurisdictional standards and conditions of approval, maintaining good communication with the planning/engineering staff of the jurisdiction to minimize delays or issues.
- Survey/utility research
- Complete projects and special assignments as requested

You may participate in the AKS Intern Program for up to three years. Commitment to the program is for one year at a time. Once initially accepted into the program, simply let us know if you are interested in returning the next year. Your continued participation in the program is subject to review and approval by AKS which will be discussed at your final evaluation.

Scholarships for participants may be awarded at AKS' discretion following successful completion of the first summer internship.

## MENTOR/SUPERVISOR

You will be assigned a mentor to serve as a point of contact throughout the internship. You will meet with your mentor on a regular basis to answer questions and provide a framework for how your work ties into the bigger picture. In addition, you will be assigned a direct supervisor to work with during your summer job assignment. The direct supervisor may change depending on the job assignment.

## EVALUATION PROCEDURES

You will receive weekly feedback from your supervisors and will have a formal evaluation at the end of the internship. A key part of the AKS culture is providing immediate and honest feedback so that you can work most effectively.

During the final evaluation, we will discuss your plans for the next summer. A scholarship may be awarded. However, if performance did not meet our expectations or it was not a good fit, you may not be encouraged to return.

## COMPENSATION

This program is a paid internship. You will be expected to work full time and will be compensated on an hourly basis with time and a half paid for overtime. Overtime is considered time worked over 40 hours in one week. The typical pay rate is \$18 – 21 per hour.

## HOW TO APPLY

Submit your completed application along with the requested materials online prior to the application deadline here: <https://aksengineeringforestry.applytojob.com/apply/wNeD7IkJy4/Engineering-Internship-Summer-2023>