

The Institute of Navigation

Navigation Apprenticeship/Scholarship

Attention College Students in the Dayton Section area:

The I.O.N. Navigation Apprenticeship/Scholarship is an opportunity for outstanding college students to work with a "Navigation Mentor" of their choice to build their science and engineering knowledge while developing problem-solving skills. We hope you will apply for the 2022-2023 Navigation Apprenticeship/Scholarship.

The winner(s) will receive a college scholarship of up to \$2500 and exercise his/her inventive and innovative skills working with the mentor on a navigation-related project, ranging from product design or research to laying the groundwork for a business plan.

Administered by the Institute of Navigation, the Navigation Apprenticeship/Scholarship is an experiential and monetary award presented to one or two college students each year. Should you be selected as a Navigation Apprentice, you will work with a navigation mentor you select to learn about navigation system research and development first-hand. The apprenticeship can be tailored to your interests and experience. Apprenticeships may be arranged to meet your schedules and goals. It will take place over the summer prior to the scholarship award and/or during the fall academic term of the scholarship award. The winner(s) are announced in May of the application year. *The scholarship will be awarded once the student has been enrolled in the college or university of his/her choice for the award year.* The scholarship will be awarded directly to the college or university in equal amounts for each academic term during the award year.

The deadline for applications for the 2022-2023 ION Dayton Section Navigation Apprenticeship/Scholarship is April 8, 2022. All students who have completed at least one academic term of college, in a bachelor's or higher degree program, at the time of application, are eligible for the award.

Students interested in applying for the Navigation Apprenticeship/Scholarship should complete the application form and process provided on the last page of this document.

We look forward to seeing your application!

With best wishes,

Boyd Holsapple
Program Officer
Dayton Section

The Institute of Navigation (ION) Navigation Apprenticeship/Scholarship is an experiential and financial award launched in 2002 and granted to outstanding college students showing special achievement and promise in navigation-related inventions and/or innovations. Winners will work with a mentor—usually, but not necessarily, one of their faculty—to increase their understanding of the navigation sciences.

Frequently Asked Questions

What is the college Navigation Apprenticeship/Scholarship?

The Navigation Apprenticeship/Scholarship is an annual experiential and up to \$2500 scholarship award presented to students who have demonstrated navigation-related inventiveness and/or innovativeness. Applicants must have completed at least one academic term (or equivalent for quarter system) of college. Depending on the student's interests, he or she will arrange to work with a professor, scientist, engineer, or entrepreneur "navigation mentor" in order to learn about the process of developing and inventing navigation-related technology first-hand. The student and the navigation mentor will collaborate to tailor an apprenticeship to the student's interests and schedule. *The scholarship will be awarded once the student has enrolled in the college or university of his/her choice.* The scholarship will be paid directly to the college or university in equal payments over the 2022-2023 school year.

What is its purpose?

The Apprenticeship/Scholarship is designed to reward and encourage creativity and innovation by interested college students. The Navigation Apprentice is expected to serve as an inspirational role model for other students.

How many Navigation Apprenticeships/Scholarships are there?

Up to two Apprenticeship/Scholarships will be awarded each year in the region of the Dayton Section.

What does "up to \$2500 scholarship" mean?

The maximum total scholarship award each year is \$2500. If two scholarships are awarded, each scholarship amount will be \$1250. If only one scholarship is awarded, the amount will be \$2500. The number of scholarships awarded each year will be decided by the Dayton Section based on the number of qualified applicants. The Dayton Section and the I.O.N. National Office reserve the right to change the number of scholarships awarded at any time prior to announcing the Apprenticeship/Scholarship winner(s).

Who chooses the recipient of the Apprenticeship/Scholarship?

A panel of Dayton Section members selects the winner(s) of the Navigation Apprenticeship/-Scholarship.

What type of work is involved in the apprenticeship?

As each apprenticeship is specially tailored to the student recipient's interests and experience, the apprentice may work with the navigation mentor on a project selected from a variety of types. An apprenticeship may include, but is not limited to, assisting on the design and development of

a new product or technology, conducting research, meeting other professionals in the mentor's field, and attending technical meetings, such as the monthly Dayton Section luncheons.

Who are the mentors?

Mentors may be professors or national leaders in science, technology, and engineering, working in the area of the Dayton Section. In practice, many students arrange to work with a mentor from their school or a company involved in navigation-related work. Such requests will be evaluated and approved on a case-by-case basis.

Can the apprentice work on his or her own project, or must he or she work on an existing project?

Because each apprenticeship is unique, the apprentice may choose to work on his or her own project or a current project in development at the mentor's organization. The project may be augmented by tours of local navigation research and development organizations and attendance at ION Dayton Section meetings.

Where does the apprenticeship take place?

The apprenticeship will normally take place in the mentor's department or organization. Requests to conduct the apprenticeship at other locations will be evaluated and approved on a case-by-case basis.

How long is the apprenticeship?

The apprenticeship should be designed to take 40-80 hours, spread over a period of up to six months, including the summer before the award and first academic term of the award period. It can be tailored to meet the student's schedule and needs. It is not intended to create hardships for students with summer jobs or classes.

Is the apprenticeship mandatory?

Yes, the apprenticeship is a mandatory element of the award. Winners who do not make a concerted effort to complete the apprenticeship prior to the end of the first academic term (or equivalent) of the award period may lose the scholarship for the second academic term (or equivalent).

Where does the student stay during the apprenticeship?

Room and board are not provided as part of the apprenticeship program.

Who is eligible?

All college students in a bachelor's or higher degree program with at least one term of college experience, residing or attending school in the region of the Dayton Section at the time of application, are eligible for the apprenticeship. Applicants may be of any age but must be American citizens or permanent residents.

Will winning the Apprenticeship/Scholarship affect the student's college financial aid package during the award year?

Since there is a cash award, the Apprenticeship/Scholarship may have a bearing on the student's financial aid package for college. However, as each college or university has its own financial aid policies, the student should confirm this directly with his or her school.

How do I apply?

Students interested in applying for the Navigation Apprenticeship/Scholarship should complete the application form and process provided on the last page of this document.

What is the "Dayton Section Area"?

The "Dayton Section Area" is not formally defined but is considered to be the region from which our regular meeting attendees come. Practically, it would be anywhere within a three- or four-hour drive from Dayton. We often have attendees from Athens, Columbus, and Cincinnati, Ohio, as well as those residing closer to Dayton.

The 2022-2023 Institute of Navigation Apprenticeship/Scholarship Application Form

I. Please type or print the following information:

Applicant Name: _____

Number of College Terms Completed: _____

College: _____

College Address: _____

College Department Telephone & Fax: _____

Home Address: _____

Home Telephone & Fax: _____

Email: _____

II. Applicant Signature: _____

III. Please submit the following with this application form.

A. **Personal Statement.** In 750 words or less, describe your interest in navigation technology, creative problem-solving, relevant experience, why you want the apprenticeship/scholarship, and what you hope to gain from the experience. Identify your mentor and describe the apprenticeship project or activity.

B. **Two (2) letters of recommendation** from college faculty members and/or others who are qualified to comment on your invention-related accomplishments, ability to work independently, and how the experience may influence you. Recommenders must state their professional affiliation and the nature of their relationship with you. Recommenders cannot be family members.

C. Official copy of college transcript. This may be a copy released to the student, but it must originate from the registrar's office. If you have less than two years college experience, a high school transcript must also be provided together with the college transcript.

D. **(OPTIONAL) Up to two 8.5" x 11" pages of photos/diagrams of your work**, if applicable, and a recent photograph of yourself. Articles on your accomplishments are also acceptable. Please note that we may use these materials for public education activities, such as a feature on the program's ION web site.

IV. Send **ONE (1) UNBOUND ORIGINAL and FOUR (4) STAPLED COPIES** of the application form, personal statement, letters of recommendation, and other materials to:

Boyd Holsapple
4158 Swimming Pool Road
Yellow Springs, Ohio 45387

All materials must be received on or before April 8, 2022. If you have questions, please contact Boyd Holsapple, program officer, at Boyd.Holsapple@gmail.com.