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# **NAVSEA Naval Engineering Education Consortium (NEEC) Program Description and Guidance Document**

Prepared by  
Chief Technology Officer  
NAVSEA Warfare Centers



## **Naval Undersea Warfare Center Division Newport, Rhode Island**

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## **PREFACE**

The NAVSEA Naval Engineering Education Consortium (NEEC) Program Description and Guidance Document, produced by the Chief Technology Officer of the NAVSEA Warfare Centers (Code HQ 0UT), documents the NEEC program objectives, the program structure and activities, and the roles and responsibilities of NEEC participants at all levels of the program.

This technical document updates information provided in NUWC-NPT Administrative Publication 12,306, published in 2020.

The NAVSEA Headquarters NEEC Director, Sally Sutherland-Pietrzak (Code HQ 0UT), gratefully acknowledges the efforts of all those who contributed to the original version of this guide, from initial input through many reviews and revisions. Special thanks are due to the NEEC directors at the Warfare Centers for their valuable contributions.

**Reviewed and Approved: 9 September 2021**



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**14. ABSTRACT**

This publication describes the Naval Sea Systems Command (NAVSEA) Naval Engineering Education Consortium (NEEC) program objectives, structure, process, and activities and provides guidance to the Warfare Centers on the roles and responsibilities of NEEC participants at all levels of the program. Through grants to selected projects, the NAVSEA NEEC program funds academic research intended to attract students to Navy-related engineering programs at the Warfare Centers to ensure that a workforce of qualified scientists and engineers will be available to address Navy engineering and science challenges of the future. The NEEC program generates and sustains a "technology knowledge base" to support all aspects of the engineering of current and future ships, submarines, and their complex systems. Project-based research and development performed in the academic environment under this program is designed to encourage working relationships between researchers in academia, their students, and Navy engineers. The appendix describes three applicable internship and student programs. The 10 participating NAVSEA Warfare Centers are Naval Surface Warfare Center (NSWC) Carderock Division, NSWC Corona Division, NSWC Crane Division, NSWC Dahlgren Division, NSWC Indian Head Division, NSWC Panama City Division, NSWC Philadelphia Division, NSWC Port Hueneme Division, Naval Undersea Warfare Center (NUWC) Division Newport, and NUWC Division Keyport.

**15. SUBJECT TERMS**

Naval Engineering Education Consortium (NEEC) Pathways Internship Science, Technology, Engineering and Mathematics (STEM) Internship	Naval Research Enterprise Intern Program (NREIP) Science, Mathematics, and Research for Transformation (SMART) Student Student Temporary Employment Program (STEP)
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## LIST OF ABBREVIATIONS AND ACRONYMS

3D	Three-Dimensional
AM	Additive Manufacturing
BAA	Broad Agency Announcement
BH	Branch Head
CD	Carderock Division
CO	Corona Division
CTO	Chief Technology Officer
DD	Dahlgren Division
Div.	Division
DoD	Department of Defense
DON	Department of Navy
EPA	Educational Partnership Agreement
ERP	Enterprise Resource Planning
FFRDC	Federally Funded Research & Development Center
GPA	Grade Point Average
HBCUs	Historically Black Colleges and Universities
HQ	Headquarters
HR	Human Resources
IH	Indian Head Division
METCAL	Metrology & Calibration
MI	Minority Institution
NAVSEA	Naval Sea Systems Command
NEEC	Naval Engineering Education Consortium
NISE	Naval Innovative Science and Engineering
NREIP	Naval Research Enterprise Intern Program
NSWC	Naval Surface Warfare Center
NUWC	Naval Undersea Warfare Center
ONR	Office of Naval Research
OPM	Office of Personnel Management
OPSEC	Operational Security
PD	Port Hueneme Division
PI	Principal Investigator
PIEE	Procurement Integrated Enterprise Environment
PR	Purchase Request
ROM	Rough-Order-of-Magnitude
SCEP	Student Career Experience Program
SMART	Science, Mathematics, and Research for Transformation
SOW	Statement of Work
STEM	Science, Technology, Engineering and Mathematics
STEP	Student Temporary Employment Program
SWaP	Size, Weight, and Power-Consuming
UARC	University Affiliated Research Center
Univ.	University
WAWF	Wide Area Workflow
WC	Warfare Center

# **NAVSEA NAVAL ENGINEERING EDUCATION CONSORTIUM (NEEC) PROGRAM DESCRIPTION AND GUIDANCE DOCUMENT**

## **1. INTRODUCTION**

The Naval Sea Systems Command (NAVSEA) and the NAVSEA Warfare Centers have a requirement to ensure that a workforce of qualified scientists and engineers will be available to address Navy engineering and science challenges of the future. To meet this requirement, the Naval Engineering Education Consortium (NEEC) was established to fund academic research and attract students to Navy-related engineering programs at the Warfare Centers. The NEEC program will generate and sustain a “technology knowledge base” to support all aspects of the engineering of current and future ships, submarines, and their complex systems. Project-based research and development (R&D) performed in the academic environment under this program is designed to encourage working relationships between researchers in academia, their students, and Navy engineers.

### **1.1 PURPOSE**

This publication describes the NEEC program objectives, structure, process, and activities and provides guidance to the Warfare Centers on the roles and responsibilities of NEEC participants at all levels of the program. The appendix describes three applicable internship and student programs.

### **1.2 PARTICIPATING WARFARE CENTERS**

The 10 participating NAVSEA Warfare Centers are

- Naval Surface Warfare Center, Carderock Division
- Naval Surface Warfare Center, Corona, Division
- Naval Surface Warfare Center, Crane Division
- Naval Surface Warfare Center, Dahlgren Division
- Naval Surface Warfare Center, Indian Head Division
- Naval Surface Warfare Center, Panama City Division
- Naval Surface Warfare Center, Philadelphia Division
- Naval Surface Warfare Center, Port Hueneme Division
- Naval Undersea Warfare Center Division, Newport
- Naval Undersea Warfare Center Division, Keyport.

Other Navy commands and facilities are encouraged to participate, using their own internal funding.

### **1.3 PROGRAM OBJECTIVES**

The objectives of the program are to

1. Hire students that successfully participate in the program into the civilian workforce;
2. Acquire research results generated by academic researchers and the assigned students who may be motivated to seek future civilian employment with the Navy;
3. Develop strong relationships between key academic institutions and the Warfare Centers.

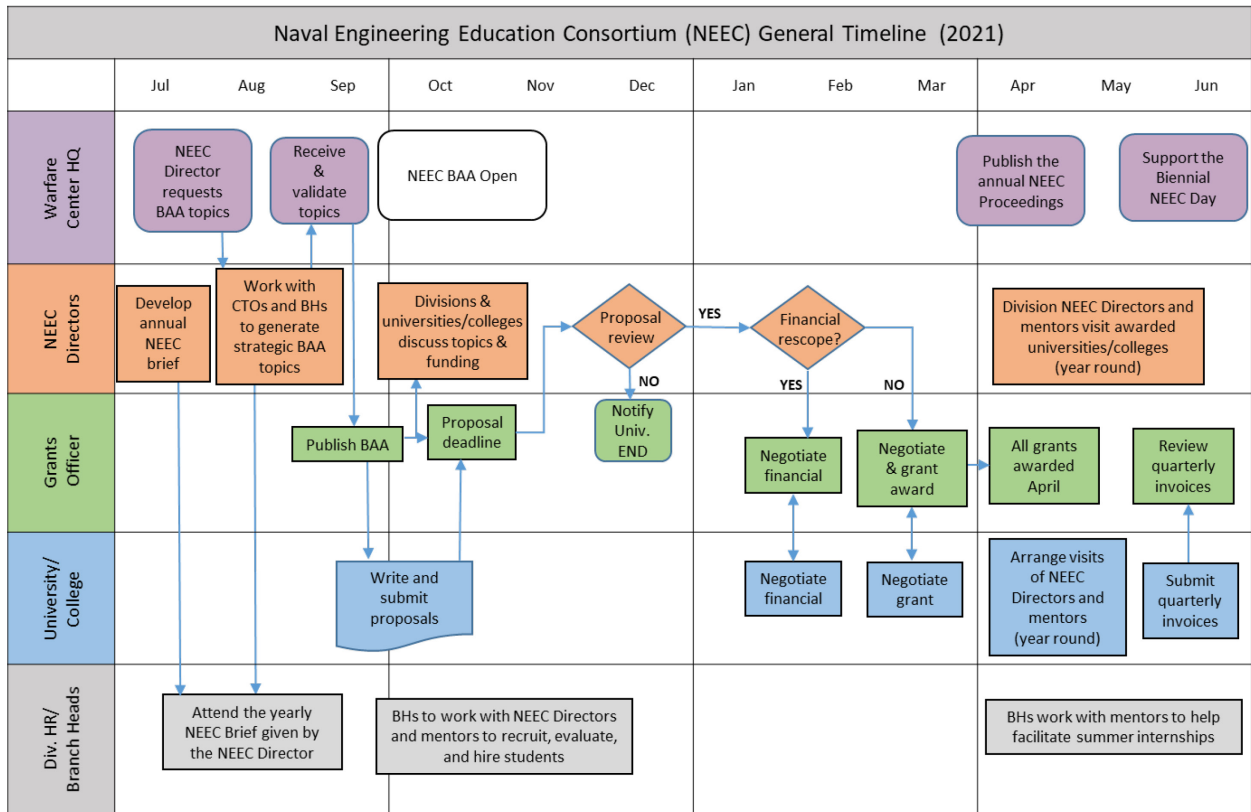


## 2. PROGRAM STRUCTURE AND ACTIVITIES

To work with universities and colleges, the NEEC program will solicit proposals through a Broad Agency Announcement (BAA) that will be posted annually on the Grants.gov website. The BAA will identify technical naval topics of interest for which universities and colleges may submit proposals. The proposals will be evaluated, and the schools submitting selected proposals will be awarded grants for one year with options for second and third years.

Each university/college chosen will work with a specific Warfare Center (WC). Each WC has its own NEEC director and mentors. It is recommended that proposers contact the individual WC NEEC directors, prior to the BAA closing, on specific topics of interest.

The BAA will generally be released in the late summer (early September) and typically will close at the end of October. Proposers will be notified (grants awarded or not) after January. All grants will start on April 1st. Details of the process are shown in figure 1.



**Figure 1. NEEC General Timeline**

## 2.1 BROAD AGENCY ANNOUNCEMENT (BAA)

The BAA is a tool used by U.S. government agencies to solicit proposals from outside groups for basic and applied research. In the case of NEEC, the Government agency is the group of NAVSEA Warfare Centers, and the BAA is administered by the Naval Surface Warfare Center (NSWC), Indian Head Division (IH). The NEEC BAA is open only to universities and colleges. (For reference, see “NSWC IH BAA N00174-18-0001” at <https://www.grants.gov/web/grants/search-grants.html>.)

BAAs are broad in their subject matter and focus on advancing science. They are not intended for acquisition. Work funded under a BAA may include basic research, applied research, and some advanced technology development research that is not related to the development of a specific system or hardware procurement.

Proposals received in response to the announcement are evaluated through a scientific review process. An award under the BAA is treated as meeting the statutory requirement in the Competition in Contracting Act\* for full and open competition. Contracts and grants and other assistance agreements made under BAAs are for scientific study and experimentation directed toward advancing the state of the art and increasing knowledge or understanding in the topic of interest.

### 2.1.1 Technical Topics

The participating NAVSEA WCs will annually solicit research of interest through a process managed by NAVSEA HQ and administered by NSWC IH. Each WC may provide one or more technical topics that align with their WC program goals and mission areas. (It is recommended that proposers contact the applicable NEEC director—contact information will be provided in the BAA—to discuss their proposals prior to the BAA deadline.)

For example, NSWC Carderock Division (CD), given its mission, may be interested in proposals for research under the topic labeled CD1 in the list below. The other three examples are topics for research that might be solicited by NSWC Corona Division (CO), NSWC Dahlgren Division (DD), and NSWC Port Hueneme Division (PD), respectively. (Note that the first two letters of the topic labels match the WC Division abbreviations.) These examples of research topics are summarized as follows:

- CD1 – Unmanned Vehicles/Autonomous Systems Research and Development: Increase unmanned systems’ reliability, reduce life-cycle cost, incorporate platform commonality and modularity, advance warfighting effectiveness, improve maintainability, and promote operational flexibility.
- CO1 – Metrology & Calibration (METCAL) for Additive Manufacturing (AM)/3D Printing Technologies: Low-cost, low-SWaP (Size, Weight and Power-consuming), deployable, metallic or nonmetallic 3D printers with in-situ performance

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\*Competition in Contracting Act of 1984, Title 41, U.S. Code, Sec. 253, 1 January 2011, <https://www.gsa.gov/reference/statutes/41-usc-253>.

(measurement accuracy and calibration) monitoring sensors; standardization, qualification, and certification of AM processes and parts produced/printed thereof; inspection methods applicable to AM technologies.

- DD1 – Emerging Software Development: Includes Scalable Linux and real-time virtualization support for multicore hardware, automated testing, cyber security, model-based development, software certification, software verification, data analytics, computational science, big data exploitation techniques.
- PD1 – Resilient and Cybersecure Shipboard Control Systems: Hardware and software security for embedded systems and industrial control systems that provide resilience and cybersecurity for shipboard cyber-physical systems such as machinery control systems, propulsion systems, cooling systems, and electrical generation and distribution systems.

### **2.1.2 Grants**

The Government may make multiple awards. The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to the BAA and to make awards without discussions with proposers.

The funded amount and period of performance of each proposal selected for award may vary depending on the research area and the technical approach to be pursued by the offeror selected. The amount of resources made available to the BAA will depend on the quality of the proposals received and the availability of funds. Awards are made of approximately \$100K to \$150K per year.

### **2.1.3 Eligibility Information**

Organizational eligibility to submit proposals under this BAA is restricted as follows:

1. All responsible sources from academia may submit proposals under this BAA. Historically Black Colleges and Universities (HBCUs) and Minority Institutions (MIs) are encouraged to submit proposals and to join others in submitting proposals. However, no portion of the BAA will be set aside for HBCU and MI participation because of the impracticality of reserving discrete or severable items of research for exclusive competition among such entities.
2. Federally Funded Research & Development Centers (FFRDCs), including the Department of Energy National Laboratories, are not eligible to submit proposals under this BAA.
3. Navy laboratories and Warfare Centers as well as other Department of Defense (DoD) and civilian agency laboratories are not eligible to submit proposals under this BAA.
4. University Affiliated Research Centers (UARCs) are not eligible to submit proposals under this BAA.

#### **2.1.4 Proposal Process**

Interested proposers may submit full technical and cost proposals in response to any of the topic areas identified in the BAA. Interested proposers may submit proposals under more than one topic of interest, and there is no limit to the number of technical proposals that a single interested proposer may submit. However, interested proposers may not submit the same technical proposal to more than one Warfare Center or activity identified in this BAA.

Proposers shall submit full proposals in accordance with the instructions detailed in the BAA. Proposals submitted under the BAA must be unclassified and also assigned a DoD distribution statement (stated on the cover) per DoD Instruction 5230.24.\* The technical proposals are limited to 10 pages. The cover page, table of contents, and resumes are excluded from the page count. Technical proposals shall include the following: Technical Approach and Justification; Project Schedule and Milestones; Reports; Management Approach; Qualifications; and Rough-Order-of-Magnitude (ROM) Cost Proposal.

Detailed instructions on how to submit a grant proposal through Grants.gov will be provided in the BAA.

#### **2.1.5 Evaluation Criteria**

Awards under the BAA will be made to proposers based on the evaluation criteria listed below and the program balance will provide the best overall value to the Government. NSWC IH reserves the right to request any additional necessary documentation once it makes the award instrument determination. NSWC IH reserves the right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions, and cost/price within a reasonable time, or if the proposer fails to provide requested additional information in a timely manner. The preliminary screening of each technical proposal will be performed by an evaluator at the WC or activity identified in the BAA for that topic to determine whether the proposal falls under the topic under which it was submitted.

After this screening process, evaluations will be conducted using the following evaluation criteria:

1. Technical evaluation criteria:
  - a. Overall scientific and technical merits of the technical proposal and statement of work (SOW);
  - b. Potential Naval relevance and contributions of the effort to the Navy's specific mission;
  - c. The proposer's capabilities, related experience, facilities, and techniques, or unique combinations of these, that are integral factors for achieving the proposal objectives; and

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\*"Distribution Statements on Technical Documents," DoD Instruction 5230.24.

d. The qualifications, capabilities, and experience of the proposed principal investigator (PI), team leader, and key personnel who will be critical to achieving the proposal objectives.

2. Student participation evaluation criteria:

- a. Educational value of the students' participation in the WC project;
- b. Number of participating students and the education levels they are pursuing.
- c. Eligibility of proposed students for Navy internship programs, as potential hires into the Navy's civil service, and for the requisite security clearance.

The primary bases for selecting proposals for award shall be technical, importance to agency programs, and student participation. Cost realism and reasonableness may be considered to the extent considered appropriate by the Government at its sole discretion.

## **2.2 GRANT AWARD PROCESS**

The Grants Officer will notify the recipients of grants to be awarded under the BAA in response to proposals chosen by the Warfare Center. The start of each award will be April 1st. (See figure 1 for an overview of the award process.)

The universities and colleges that are awarded grants will work with the NEEC director at the awarding WC; a Navy lab mentor will be assigned and serve as the conduit between the WC and the university or college. The roles and responsibilities of the NEEC personnel are explained in section 3.

### **2.2.1 Grant Funding**

Funding for the NEEC grants comes from either the WC allocation or direct sponsor funding. The WCs are allocated an annual NEEC budget from NAVSEA Headquarters based on the WC size (number of employees), i.e., larger WCs receive a larger budget. This budget is negotiated yearly. Funding may also come directly from a WC sponsor. There is no cap on the amount of funding received from sponsors. For direct sponsor funding, the individual WC must create its own purchase request (PR) in Enterprise Resource Planning (ERP); otherwise the process is the same.

The Office of Naval Research (ONR) administers the grant payment and closeout process. For a detailed description of the grant process, please visit the ONR website <https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award> . A high-level summary of the grant process taken from the website is provided below.

### **2.2.2 Grant Payment Process**

The DoD Wide Area Workflow (WAWF) in the Procurement Integrated Enterprise Environment (PIEE) serves as the DoD's primary system for electronically processing invoices. All NEEC grant recipients must register to participate in the WAWF program. The WAWF application allows the grant recipients to submit invoices and receive reports and vouchers in a secure web-based electronic environment.

NEEC grant recipients can help to ensure the success of their programs by following these general invoice guidelines:

- Ensure that allowable, allocable expenditures are promptly recorded in their financial management system.
- Have an internal system in place that identifies programs that are not recording an anticipated level of expenditures, and provide early notification to the agency of significant issues.
- Ensure that billings are done on the correct form utilizing the WAWF website, are complete and accurate, and are sent to the right place.
- Bill at least quarterly.
- For reimbursable billings, ensure that the billing process takes place in a timely fashion after the recording of costs.

Expenditures Research programs are carefully reviewed by ONR, DoD, and others to monitor satisfactory program performance. One measurement that is always assessed is current information on billings and payments for expenditures recorded. Programs that do not reflect expenditures commensurate with expectations are subject to reduction of future funding levels or termination.

### **2.2.3 Closeout of Awards**

The ONR regional offices handle the final administrative closeout of grants and cooperative agreements for universities and nonprofits as outlined below.

Generally, award closeout is the process of documenting and assuring the fulfillment of the terms and conditions of the award, of certifying awardee compliance with applicable regulations and terms and conditions, and making final disposition of all award by-products, such as final vouchers, reports, patent disclosures, and property.

**2.2.3.1 When Does the Closeout Start?** Once the award is physically complete (i.e., the period of performance has expired), the "clock begins ticking" for submission by the awardee of final deliverables. The Grants Officer will prompt the awardee in accordance with the BAA with a letter or other communication (such as an email) indicating the requirement to submit final deliverables, or otherwise reminding the awardee of its closeout-related obligations.

**2.2.3.2 What Is Required?** Final deliverable requirements are usually identified in the individual award terms and conditions. They may appear as an appendix, a data requirements list, or as a simple attachment. The final deliverable requirements will generally include instructions relative to the distribution destination of these final deliverables, including numbers of copies and mailing addresses. In research and development, a final technical/performance deliverable may be, for example, a research report, data, software or, more rarely, a prototype of some sort.

**2.2.3.3 Specific Deliverables (Formats, Forms and Other Information).** Final technical performance closeout is generally due 60 to 90 days after the period of performance has expired, but the awardee should refer to the specific terms and conditions of the award and its governing regulations. Grantees must submit their final technical reports with a complete Report Documentation Page (Standard Form 298) as the last page of each copy of every scientific and technical report prepared under their grants. The form contains instructions for preparation.





### 3. ROLES AND RESPONSIBILITIES

The personnel in the NEEC program include the NAVSEA NEEC Director; the NEEC Grants Officer; the individual WC NEEC directors at NSWC Carderock, NSWC Corona, NSWC Crane, NSWC Dahlgren, NSWC Indian Head, NSWC Panama City, NSWC Philadelphia, NSWC Port Hueneme, NUWC Keyport, and NUWC Newport; the WC mentors, and the universities' and colleges' faculty and students. The roles and responsibilities of these personnel are described in the following subsections.

#### 3.1 NAVSEA NEEC DIRECTOR

The NAVSEA NEEC Director is responsible for managing the NAVSEA NEEC program, whose mission is to educate and develop the skills of world-class naval engineers and scientists to become part of the Navy's civilian science and engineering workforce. The NAVSEA NEEC Director will coordinate the NAVSEA-level activities of the program and work in collaboration with the WC NEEC directors at the 10 WCs. The specific responsibilities of the NAVSEA NEEC Director include the following:

- Budget: Work with NAVSEA HQ to acquire the appropriate budget for each WC NEEC program.
- BAA: Work with the Grants Officer to direct the development and scheduling of the BAA, to be published with topics relevant to the WCs' Technical Capabilities.
- Promote: Represent and promote the NEEC program to internal and external entities. Brief the NEEC program to the NAVSEA HQ leadership annually and support HQ actions.
- NEEC Annual Report: Publish annually a "NEEC Proceedings" document that outlines the current NEEC projects and highlights project accomplishments. Send a template of the required format to the WC NEEC directors for WC input to the report.
- NEEC Days: Support NEEC days at both the national and local (WC) levels.
- Meetings:
  - Lead a monthly meeting by phone conference with the WC NEEC directors to review project objectives and status.
  - Host the annual NEEC leadership (directors) meeting.
- Metrics: Develop and track NEEC program metrics as appropriate. Develop and update the NAVSEA websites with current NEEC information.
- Coordinate: Support the onsite WC NEEC directors as needed.

### **3.2 NEEC GRANTS OFFICER**

The NEEC Grants Officer is responsible for publishing the BAA and administering the funding. The specific responsibilities of the Grants Officer include the following:

- Publish the BAA with the topics provided by the HQ NEEC Director.
- Administer the BAA and facilitate the question and answer process.
- Coordinate the proposal review process with each WC (the WC will do the reviews).
- Administer notifications and awards. Once the proposals are chosen, the WC NEEC directors will notify the Grants Officer at NSWC IH. The Grants Officer will make the appropriate grant awards.
- Notify WC NEEC directors of their yearly grant options and award the option modifications.
- Participate in the monthly meetings with the WC NEEC directors.
- Attend the annual NEEC leadership (directors) meeting, the National NEEC Day, and local NEEC days when possible.

### **3.3 WC NEEC DIRECTOR**

The WC NEEC directors are responsible for managing the NEEC programs at their respective WCs. The specific responsibilities of the WC NEEC directors include the following:

- BAA Topics:
  - Generate science and technology topics that support mission of the WC, for publication in the annual BAA.
  - Work with the other WC NEEC directors to determine whether there might be mutual interest in supporting research under certain BAA topics.
  - Create and coordinate a panel to provide a fair review of all of the proposals.
  - Work with the WC CTO and their appropriate S&T community to choose the winning proposals based on the panel's evaluation and the funding available.
  - Communicate with interested proposers (universities/colleges) and provide guidance on potential NEEC projects.

- External Funding: If funding is available from other sources (aside from the allocated NAVSEA overhead funding), work with these potential sponsors to collect and collate topics to be included in the NAVSEA BAA; facilitate interactions with potential sponsors wherever possible.
- Mentors:
  - Find appropriate mentors for the winning proposals. The goal is to have mentors with a strong interest in the project and perhaps a connection to the school.
  - Solicit Naval Innovative Science and Engineering (NISE) Program funding, where appropriate, to support the project mentors.
  - Once the awards are made, support the mentors in creating and maintaining successful relationships with the students.
- University and College Engagement:
  - Establish an Educational Partnership Agreement (EPA) with each NEEC school.
  - Ensure that the schools invoice on a quarterly basis and review the invoices.
- Hiring:
  - Work with the WC Human Resources (HR) program to recruit at NEEC schools.
  - Encourage all mentors to seek out a diverse pool of students to participate in the program.
  - Work with the mentors and the WC hiring manager (branch head) for each project to evaluate all of the participating NEEC students as potential civil service hiring candidates.
- Briefings: Hold an annual briefing for the NEEC hiring managers for the WC: opportunity to discuss BAA topics and the types of engineers that are needed.
- Metrics:
  - Work with the mentors to collect appropriate metrics, including the titles of journal articles, conference presentations/posters, and patents.
  - Maintain a list of students, sorted by the level of their academic degrees (B.S., M.S., or Ph.D.), who are offered jobs, with the list annotated to show whether or not they accept the offers and, if applicable, their reason(s) for not accepting.
  - Update annually the employee status of former NEEC students.

- Meetings:
  - Support the monthly meetings with the NAVSEA NEEC Director and the other WC NEEC directors.
  - Attend the annual NEEC leadership (directors) meeting.
- NEEC Days:
  - Attend the National NEEC Day.
  - Host a local NEEC Day biennially (every other year).

### 3.4 WC MENTOR

The mentors are the WC NEEC program link with the universities and colleges (schools). The specific responsibilities of NEEC mentors include the following:

- Kickoff Meeting: Working with the WC NEEC director, set up a kickoff meeting with school personnel—deans, faculty, students—working on each project.
- Visit Schools: Visit participating schools at least once a year during the project to meet students and professors and visit their lab spaces and classrooms.
- Overview: Provide to each student and supervising professor a view of the “big picture” of the technology area of the research project, with a briefing on the overall WC program objectives and requirements that must be met with state-of-the-art technology, an outline of how the NEEC project is expected to help meet these requirements, and why it is important to the Navy to increase capabilities or advance the technology in the subject area.\*
- Engage the Students’ Professors:
  - Engage the professors in technical discussion on project progress.†
  - Remind the professors to invoice on a timely basis (quarterly).
  - Engage the professors in discussion about which students would be good candidates for hiring into the WC (or possibly a different WC).†

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\*Technical briefings meant to interest and educate students and professors without the requisite security clearance and “need to know” must be approved for public release by Operational Security (OPSEC) at the WC.

†Technical discussions must adhere to security classification guidance applicable to the project.

- Talk to Students: Discuss internships and employment opportunities with the students. Encourage the students to apply to the Naval Research Enterprise Intern Program (NREIP) internship program (see the NREIP information in the appendix).
- Leadership: Manage and lead the NEEC student interns during summer internships.
- Hiring: Work with WC hiring managers on behalf of talented students by requesting student resumes and liaising with HR to hire the students.
- NEEC Days: Attend local and national NEEC days.

### **3.5 UNIVERSITY OR COLLEGE PROFESSOR**

The university and college professors are the NEEC program's link with the WCs. The specific responsibilities of NEEC mentors include the following:

- Confirm and review the timeline and expected research for the NEEC project with both the participating students and the WC mentor.
- Visit the participating WC at least once during the project.
- Host the WC mentor at least once each year to review the project and meet with the students.
- Provide a report to the WC NEEC director with the names and email addresses of the students participating in the research project.
- Discuss with the mentors (1) the potential availability of student summer internships and (2) the tasks to be performed by the students during the 10-week internship.
- Communicate regularly with the mentor.
- Encourage participating students to apply for Navy internships. (Note that WC internships require that students must be able to obtain a U.S. secret clearance.)
- Help the Navy identify the right students for WC employment.
- Make progress on the project research.
- Attend the NEEC annual and local meetings.
- Submit invoices to the NAVSEA NEEC Grants Office quarterly; avoid any backlog of invoices.

### 3.6 STUDENTS

The students are the key to the success of the NEEC program. The specific responsibilities of NEEC students include the following:

- Review and understand the objectives of the project.
- Working at the WC for at least 10 weeks of each summer during the project is strongly recommended. See the appendix for a synopsis of the NREIP summer internship program. Please note that the deadline for applications is quite early in the fiscal year, usually in late October or very early November for a summer internship.
- Meet or have a conference call with the project's supervising professor and the Navy mentor to discuss the tasks to be performed during the 10-week period of the potential NREIP summer internship.
- Provide a resume to the WC mentor at least 1 year prior to the NEEC project completion date.
- Inquire about hiring status during the summer internship with the WC mentor.
- Attend the annual NEEC Day and be prepared to present current research work if asked. The opportunity to present research work and results is most important for those in the final year of a project.
- Work hard and learn as much as possible! Ask the hard questions! Challenge the status quo!

#### 4. NEEC WC POINTS OF CONTACT

Contact information for the NAVSEA NEEC Director and the Business POC is given below:

NAVSEA Headquarters NEEC Director: Sally Sutherland-Pietrzak  
NAVSEA Headquarters, Naval Undersea Warfare Center  
Sally.Sutherland@navy.mil

Business POC: Jessica D. Scalfaro, Grants Officer  
Naval Surface Warfare Center  
Indian Head Explosive Ordnance Disposal Technology Division  
Jessica.Scalfaro@navy.mil

The directors of the NEEC programs at the participating NAVSEA Warfare Centers are listed below:

Naval Undersea Warfare Center  
Division Newport – Elizabeth A. Magliula  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NUWC-Newport/>

Naval Surface Warfare Center  
Crane Division – Bryan D. Woosley  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Crane/>

Naval Undersea Warfare Center  
Division Keyport – Thai B. Tran  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NUWC-Keyport/>

Naval Surface Warfare Center  
Corona Division – Karon A. Myles  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Corona/>

Naval Surface Warfare Center  
Indian Head Division – Denisse Soto  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Indian-Head-EOD-Technology/>

Naval Surface Warfare Center  
Panama City Division – Matthew J. Bays  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Panama-City/>

Naval Surface Warfare Center  
Dahlgren Division – Kyle B. Lackinger  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Dahlgren/>

Naval Surface Warfare Center  
Philadelphia Division – Stephen A. Mastro  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Philadelphia/>

Naval Surface Warfare Center  
Carderock Division – Charlotte A. George  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Carderock/>

Naval Surface Warfare Center  
Port Hueneme Division – Ramon Flores  
<https://www.navsea.navy.mil/Home/Warfare-Centers/NSWC-Port-Hueneme/>

For updated contact information, check the NAVSEA website at <https://www.navsea.navy.mil/Home/Warfare-Centers/Partnerships/NEEC/>.





## **APPENDIX INTERNSHIPS AND STUDENT PROGRAMS**

NEEC students may be eligible for one or more of three internship programs that provide opportunities for Government-funded work at NAVSEA Warfare Centers:

1. Naval Research Enterprise Intern Program (NREIP),
2. The Science, Mathematics, and Research for Transformation (SMART) program, and
3. Pathways (which also includes information for recent graduates).

### **A.1 NAVAL RESEARCH ENTERPRISE INTERNSHIP PROGRAM (NREIP)**

The Naval Research Enterprise Intern Program (NREIP) provides an opportunity for undergraduate and graduate students to participate in research at a Department of Navy (DON) laboratory during the summer.

The goals of the NREIP are to (1) encourage college students to pursue science and engineering careers, (2) further their education via mentoring by laboratory personnel and participation in research, and (3) raise awareness of DON research and technology efforts, which can lead to employment within the DON.

The NREIP provides competitive research internships to approximately 200 college students each year: 139 undergraduate students and 61 graduate students. Participating students typically spend 10 weeks during the summer doing research at participating DON laboratories (there are usually 12 laboratories). Students receive a stipend.

#### ***A.1.1 Eligibility***

NREIP applicants must meet the following eligibility requirements:

- U.S. citizenship.
- Enrolled at an eligible university or college (there are approximately 166 participating institutions).
- A university or college junior, senior, or university graduate student in good standing when applying.
- Pursuing a major that is relevant to the research interests of the DON laboratories (science and engineering).
- Able to obtain an interim security clearance.

NREIP students will be selected based on academic achievement, personal statements, recommendation, and career and research interests.

### ***A.1.2 How To Apply***

For more information concerning NREIP and for application information, please visit <http://www.asee.org/nreip/details.cfm> .

## **A.2 SCIENCE, MATHEMATICS, AND RESEARCH FOR TRANSFORMATION (SMART) STUDENTS**

The Science, Mathematics, and Research for Transformation (SMART) Scholarship for Service Program was established by the Department of Defense (DoD) to support undergraduate and graduate students pursuing degrees in science, technology, engineering, and mathematics (STEM) disciplines. The program aims to increase the number of civilian scientists and engineers working at DoD laboratories.

This is a summer program for college students pursuing a bachelor's, master's, or doctoral degree in a STEM discipline. The students receive a full scholarship from the DoD that includes living expenses, tuition, and fees; and they commit to working at a NAVSEA Warfare Center on completion of their degrees. The DoD pays the full scholarship plus a stipend during the full-time summer internship at a NAVSEA WC.

### ***A.2.1 Eligibility***

SMART Scholarship applicants must meet the following eligibility requirements:

- U.S. citizenship.
- A student in good standing with a minimum cumulative grade point average (GPA) of 3.0 on a 4.0 scale (as calculated by the SMART application).
- Pursuing an undergraduate or graduate degree in one of the disciplines listed on the SMART Scholarship website.
- Committed to accept postgraduate employment with the WC providing the internship or with another interested WC under certain conditions.
- Able to obtain an interim security clearance.

### ***A.2.2 How To Apply***

For more information concerning the SMART Scholarship program and the application guidelines, please visit <http://smartscholarship.org/> .

## **A.3 PATHWAYS**

### ***A.3.1 Pathways Internship Program***

The Pathways Internship Program replaces the Student Career Experience Program (SCEP) and Student Temporary Employment Program (STEP). The Pathways program is designed to provide students enrolled in a wide variety of educational institutions, from high school to graduate level, with opportunities to work in Government agencies and explore federal careers while they are still in school *and* are being paid for the work performed. Students who successfully complete the program may be eligible for conversion to a permanent job in the civil service.

Additional information about the Pathways Internship Program can be found at USAJOBS online (<https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/students/>). Key provisions of the program are summarized in the following subsections.

***A.3.1.1 Eligibility.*** Applicants must currently be students in good standing in

- An accredited high school or college (including 4-year universities/colleges, community colleges, and junior colleges);
- A professional, technical, vocational, or trade school;
- An advanced degree program; or
- Another qualifying educational institution in pursuit of a qualifying degree or certificate.

***A.3.1.2 Program Administration.*** The Pathways Internship Program is primarily administered by each hiring agency. Agencies may hire interns on a temporary basis for up to 1 year for an initial period or for an indefinite period to complete the educational requirement. Interns may work either part-time or full-time. Each agency must sign a Participant Agreement with the intern that sets forth the expectations for the internship. The intern's job will be related to the intern's academic career goals or field of study.

Agencies provide the U.S. Government Office of Personnel Management (OPM) with information regarding their internship opportunities and also post information publicly on the USAJOBS website (<https://www.usajobs.gov/Help/working-in-government/unique-hiring-paths/students/>) about how to apply for specific positions.

### ***A.3.2 Pathways Recent Graduates Program***

The Pathways Recent Graduates Program affords developmental experiences in the Federal Government intended to promote possible careers in the civil service to individuals who have recently graduated from qualifying educational institutions or programs. To be eligible, applicants must apply within 2 years of degree or certificate completion (except for veterans precluded from doing so due to their military service obligation, who have up to 6 years after

degree completion to apply). Successful applicants are placed in a dynamic, developmental program with the potential to lead to a civil service career in the Federal Government. The program lasts for 1 year (unless the training requirements of the position warrant a longer and more structured training program). Key provisions of the Pathways Recent Graduates Program are summarized in the following subsections.

**A.3.2.1 Eligibility.** Applicants must meet the following eligibility requirements:

- Recent graduates who have completed, within the previous 2 years, a qualifying associate's, bachelor's, master's, doctoral, professional, vocational, or technical degree or certificate from a qualifying educational institution.
- Veterans unable to apply within 2 years of receiving their degree, due to a military service obligation, have as much as 6 years after degree completion to apply.

**A.3.2.2 Program Administration.** The Recent Graduates Program is administered primarily by each hiring agency. Each agency must sign a Participant Agreement with the recent graduate that sets forth the expectations for the program.

Agencies provide the U.S. Government OPM with information regarding their opportunities and also post information publicly on USAJOBS (<https://www.opm.gov/policy-data-oversight/hiring-information/students-recent-graduates/#url=graduates>) about how to apply for specific positions.

**A.3.2.3 Training and Development.** After hiring, the recent graduates are trained with respect to the program in the following ways:

- Orientation program.
- Mentorship throughout the program.
- Individual development plan to create and track recent graduates' career planning, professional development, and training activities.
- At least 40 hours of formal, interactive training in each year of the program.

**A.3.2.4 After Program Completion.** Positions in this program offer opportunities for career advancement. Recent graduates hired into the program may be converted to a permanent position (or, in some limited circumstances, a term appointment lasting 1–4 years). To be eligible for conversion, the recent graduates must have

- Successfully completed at least 1 year of continuous service in addition to all the requirements of the program,
- Demonstrated successful job performance, and
- Met the qualifications for the position to which the recent graduate will be converted.

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