

Engineering Aids assist construction engineers in developing final construction plans. They conduct land surveys; prepare maps, sketches, drawings and blueprints; estimate costs; perform quality assurance tests on common construction materials such as soils, concrete and asphalt; and perform other engineering technician functions.

This is a 5 year enlistment program.

### What they do

The duties performed by EAs include:

- conducting location surveys for roads, airfields, pipelines, ditches, buildings, drainage structures and waterfront construction;
- preparing hydrographic, topographic and triangulation drawings and maps;
- computing the volume of bulk materials (concrete, bituminous mixtures and earthwork) from drawings and specifications;
- laying out all types of construction work;
- operating and maintaining various types of precision surveying and laboratory test instruments and equipment;
- preparing architectural, mechanical, electrical, and civil drawings and sketches;
- designing grading and drainage systems;
- conducting concrete, soil and asphalt tests;
- conducting quality control inspections for all types of construction projects;
- prepare network analyses, charts and graphs.
- Reading and interpreting blueprints and preparing sketches for projects;
- making estimates of material, labor, and equipment requirements.

### Credit Recommendations

The American Council on Education recommends the following semester hour credits in the associate and vocational degree programs, 3 semester hours for both computer aided drafting and

### Career Path After Recruit Training

Enlistees are taught the fundamentals of this rating through formal Navy schooling. Advanced technical and operational training in these ratings are available during later stages of career development.

School	Present Location	Approximate Training Time	Subjects	Training Methods
Class "A" Technical School	Fort Leonard Wood, MO	Approximately 15 Weeks	Basic construction skills and theories required in the EA rating and basic combat skills.	Group and individual instruction.

Following completion of basic technical training, graduates can expect assignments to a Naval Mobile Construction Battalion (NMCB) in Port Hueneme, CA or Gulfport, MS, or to an Amphibious Construction Battalion (ACB) in San Diego, CA or Little Creek, VA. NMCB's operate on a rotating basis between homeport and overseas locations such as Spain, Okinawa or Guam. Seabees receive additional specialized combat and construction skills training during home port duty. Seabees construct buildings, roadways, utility systems and other shore facilities to support the Navy and Marine Corps operational and expeditionary forces worldwide.

surveying, 2 semester hours in soils testing, and 1 semester hour in concrete testing. An AA in Construction Technology can be earned from Coastline Community College.

### Qualifications and Interests

Important qualifications include, high level math and record keeping skills; the ability to do detailed work and perform repetitive tasks; an orientation toward tools, equipment and machines; manual dexterity; curiosity and resourcefulness; a talent for expressing ideas in writing; and a good memory. **The prospective EA must have satisfactorily completed a high school or college course in trigonometry with a minimum grade of "C."** Some college level training in engineering subjects is beneficial but not required. Helpful characteristics include speaking and writing skills and good physical condition. Normal hearing is required.

### Working Environment.

EAs may work in a variety of conditions, independently or as members of a large team. Their many different duties may be performed in climates ranging from tropical to arctic.

### Opportunities

Opportunities to enter the EA rating are excellent for highly qualified applicants.

About 300 men and women work as Engineering Aids in the Navy.

### Related Civilian Jobs O-Net SOC Code

11-3042.00 Training and Development Managers  
 11-9021.00 Construction Managers  
 11-9041.00 Engineering Managers  
 17-1021.00 Cartographers and Photogrammetrists  
 17-1022.00 Surveyors  
 17-3011.00 Architectural and Civil Drafters  
 17-3022.00 Civil Engineering Technicians  
 17-3031.00 Surveying and Mapping Technicians  
 17-3031.01 Surveying Technicians  
 17-3031.02 Mapping Technician  
 19-3022.00 Survey Researchers  
 47-1011.00 First-Line Supervisors/Managers of Construction Trades and Extraction Workers

Since Navy programs and courses are revised at times, the information contained on this rating card is subject to change.

(Revised 01/08 )