

2021 -2022 CORE SKILL REQUIREMENTS  
OCEAN ENGINEERING  
SUBSPECIALTY 1103  
CURRICULUM 472

1. The Ocean Engineering Subspecialty Code (1103) will identify an officer with a broad, graduate level technical education in Ocean Engineering. The officer will have an in-depth understanding of near shore and ocean facilities and infrastructure; provide technical expertise for engineering, maintaining, and installing ocean, littoral, and underwater systems; provide ocean engineering and construction expertise; and provide specialized engineering for condition assessments of marine facilities. Specific capabilities and requirements include the following:

a. The ability to formulate and solve engineering and technical problems. Competence in research, design, development, procurement, and maintenance of large-scale infrastructure. Ability to prepare and present technical briefings, project plans, and reports.

b. The ability to use techniques, skills, and modern engineering tools for Ocean Engineering practice, including the ability to analyze and interpret relevant data.

c. The ability to apply knowledge acquired in academic disciplines specifically to the concept formulation, design, acquisition, construction/modernization, maintenance, and industrial support near shore and ocean infrastructure.

d. Billet subspecialty coding is to be based on the minimum education/training/experience level required for optimum performance. Ocean Engineering (1103) Subspecialty Codes are justified when, in addition to the general criteria stated in reference (c), the following specific criteria are satisfied:

2. Subspecialty Coding Restrictions: Billets assigned to Civil Engineer Corps Officers.

3. Applicable Officer Designator: 5100.

4. Applicable Billet Designator: 5100.

5. Significant Experience Criteria:

a. Ocean Engineering (1103) S-coded billets are not justified.

b. Ocean Engineering (1103) S-coded officers are not authorized.

c. Ocean Engineering (1103) R-coded billets are not justified.

d. Ocean Engineering (1103) R-coded officers are not authorized.

6. Baccalaureate Criteria:

- a. Ocean Engineering (1103) E-coded billets are not justified.
- b. Ocean Engineering (1103) E-coded officers are not authorized.

7. Elective Level Criteria:

- a. Ocean Engineering (1103) H-coded billets are not justified.
- b. Ocean Engineering (1103) H-coded officers are not authorized.

8. Functional Education Criteria:

- a. Ocean Engineering (1103) F-coded billets are not justified.
- b. Ocean Engineering (1103) F-coded officers are not authorized.
- c. Ocean Engineering (1103) G-coded billets are not justified.
- d. Ocean Engineering (1103) G-coded officers are not authorized.

9. Master's Criteria:

- a. Ocean Engineering (1103) P-coded billets are justified when the billet's primary duties require expertise in Ocean Engineering at a Master's degree level of knowledge.
- b. Ocean Engineering (1103) P-coded officers are authorized when the officer satisfies all Ocean Engineering (1103P) ESRs. Utilization and obligations are required in either case.
- c. Ocean Engineering (1103) Q-coded billets are justified when the billet's primary duties require expertise in Ocean Engineering at a Master's degree level of knowledge AND work experience in Ocean Engineering in planning, operations, maintenance, and repair of buildings, property, equipment, and major infrastructure.
- d. Ocean Engineering (1103) Q-coded officers are authorized when:
  - (1) The officer has a 1103P code AND
  - (2) The officer serves at least 18 months in an 1103P or higher coded billet.

10. Post-Master's (Engineer) Criteria:

- a. Ocean Engineering (1103) N-coded billets are not justified.
- b. Ocean Engineering (1103) N-coded officers are not authorized.
- c. Ocean Engineering (1103) M-coded billets are not justified.

d. Ocean Engineering (1103) M-coded officers are not authorized.

11. Doctorate Criteria:

- a. Ocean Engineering (1103) D-coded billets are not justified.
- b. Ocean Engineering (1103) D-coded officers are not authorized.
- c. Ocean Engineering (1103) C-coded billets are not justified.
- d. Ocean Engineering (1103) C-coded officers are not authorized.

12. CEC Community Manager and the Budget Submitting Office have agreed to allow billets to be coded for Ocean Engineering (1103) and officers to be educated for this Curriculum.

13. Sponsor and Subject Matter Expert:

Sponsor:

Chief of Civil Engineers (NAVFAC)

Subject Matter Expert:

NAVFAC Total Force (NAVFAC)

APPROVED: \_\_\_\_\_

Director, Warfighter Development (OPNAV N71)

10/27/21  
(Date)