CORE SKILL REQUIREMENTS FOR: Systems Engineering Analysis - 6500

Billet subspecialty coding is to be based on the minimum education/training/experience level required for optimum performance. Systems Engineering Analysis - 6500 subspecialty coding is justified when, in addition to the general criteria stated in NAYPERS 15839 series (Manual of Navy Officer Manpower and Personnel Classification) Part 5, the following specific criteria are satisfied:

CSR-1. Billet coded for Systems Engineering Analysis.

CSR-2. Experience with the Systems Engineering Process to develop functional requirements, manage the design of systems and sub-systems, and assure final design integration. Be able to apply an understanding of Systems Engineering to make technical and cost trade-offs, evaluate human-in-the-loop issues, and conduct project management.

CSR-3. Experience with mathematical modeling, quantification of uncertainty and random phenomena that affect systems performance and effectiveness, resource allocation, probability and statistics, optimization techniques, simulation, campaign analysis, and tactical analysis techniques.

CSR-4. Participation in quantitative analyses dealing with alternative choices in tactical and strategic warfare to improve operation of existing complex defense systems and able to apply analysis to influence planning, budgeting, procurement and integration of warfare systems.

CSR-5. Comprehension of the scientific, mathematical and engineering principles behind existing and future military systems as they apply to the successful integration of sensor and weapons technologies with platforms.
1. **Subspecialty Coding Restrictions:** Billets assigned to: Unrestricted Line Officers only.

2. **Applicable Officer Designators**
   
   a. 111X  CDR Erik Eslich  
   b. 112X  CDR Alan Nelson  
   c. 113X  CDR Bryan Johnson  
   d. 114X  CDR Michael Tollison  
   e. 13XX  CDR Patrick Hansen

3. **Applicable Billet Designator**
   
   a. 1000  
   b. 1050  
   c. 111X  
   d. 112X  
   e. 113X  
   f. 114X  
   g. 13XX

4. **Significant Experience Criteria**
   
   a. Systems Engineering Analysis/6500 S-coded Billets are not authorized.
   
   b. Systems Engineering Analysis/6500 S-coded Officers are not authorized.
   
   c. Systems Engineering Analysis/6500 R-coded Billets are not authorized.
   
   d. Systems Engineering Analysis/6500 R-coded Officers are not authorized.

5. **Baccalaureate Criteria**
   
   a. Systems Engineering Analysis/6500 E-coded Billets are not authorized.
   
   b. Systems Engineering Analysis/6500 E-coded Officers are not authorized.

6. **Elective Level Criteria.** Systems Engineering Analysis/6500 H-coded Billets are authorized when: Billets desire a master's
level of knowledge in Systems Engineering Analysis but it is not essential for optimum performance.

7. **Functional Education Criteria.** System Engineering Analysis/6500 F and G-coded billets and officers are not authorized.

8. **Masters Criteria**

   a. Systems Engineering Analysis/6500 P-coded Billets are authorized when:

      (1) Billet requires the educational skills required for a master’s degree in Systems Engineering Analysis.

      (2) The functions of the billet include the CSR competencies listed above.

   b. Systems Engineering Analysis/6500 P-coded Officers are authorized when: the Officer completes a master’s degree program that meets all Systems Engineering Analysis/6500 ESRs.

   c. Systems Engineering Analysis/6500 Q-coded Billets are authorized when the billet requires:

      (1) All educational skills required for a master’s degree in Systems Engineering Analysis.

      (2) The functions of the billet include the CSR competencies listed above.

      (3) Incumbent to have successfully completed a tour in a Systems Engineering Analysis P-coded billet.

      (4) Supervision of other Systems Engineering Analysis/6500P coded billets.

   d. Systems Engineering Analysis/6500 Q-coded Officers are authorized when: Officer with a P-code completes at least 18 consecutive months in a master’s degree coded billet or higher.

9. **Post-Masters Criteria**

   a. Systems Engineering Analysis/6500 N-coded Billets are not authorized.

3  Enclosure (2)
b. Systems Engineering Analysis/6500 N-coded Officers are not authorized.

c. Systems Engineering Analysis/6500 M-coded Billets are not authorized.

d. Systems Engineering Analysis/6500 M-coded Officers are not authorized.

10. **Doctorate Criteria**

   a. Systems Engineering Analysis/6500 D-coded Billets are not authorized.

   b. Systems Engineering Analysis/6500 D-Coded Officers are not authorized.

   c. Systems Engineering Analysis/6500 C-coded Billets are not authorized.

   d. Systems Engineering Analysis/6500 C-Coded Officers are not authorized.

11. Community managers and the Budget Submitting Office have agreed to allow billets to be coded for Systems Engineering Analysis/6500 and Officers to be educated for this Curriculum.
<table>
<thead>
<tr>
<th>Designator</th>
<th>OCM</th>
<th>FOC</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>111X</td>
<td>BUPERS-311</td>
<td>CDR Erik Eslich <a href="mailto:erik.j.eslich@navy.mil">erik.j.eslich@navy.mil</a></td>
<td>28 Jan 15</td>
</tr>
<tr>
<td>112X</td>
<td>BUPERS-312</td>
<td>CDR Alan Nelson <a href="mailto:alan.a.nelson@navy.mil">alan.a.nelson@navy.mil</a></td>
<td>23 Jan 15</td>
</tr>
<tr>
<td>113X</td>
<td>BUPERS-311D</td>
<td>CDR Bryan Johnson <a href="mailto:bryan.l.johnson@navy.mil">bryan.l.johnson@navy.mil</a></td>
<td>8 Dec 14</td>
</tr>
<tr>
<td>114X</td>
<td>BUPERS-311E</td>
<td>CDR Michael Tollison <a href="mailto:michael.tollison@navy.mil">michael.tollison@navy.mil</a></td>
<td>23 Jan 15</td>
</tr>
<tr>
<td>13XX</td>
<td>BUPERS-313</td>
<td>CDR Patrick Hansen <a href="mailto:patrick.hansen@navy.mil">patrick.hansen@navy.mil</a></td>
<td>10 Dec 14</td>
</tr>
</tbody>
</table>

12. Major Area Sponsor and Subject Matter Experts:

Major Area Sponsor: VADM Joseph P. Aucoin, Deputy Chief of Naval Operations, Warfare Systems (N9)

Subject Matter Expert: RADM Richard P. Breckenridge, Director, Warfare Integration (N9I)

Subject Matter Expert: Mr. Michael Novak, Deputy Director, Warfare Integration (N9IB)

Action Officer Subject Matter Expert: LCDR Christopher Gahl (N96), Christopher.gahl@navy.mil

APPROVED: ___________________________ 2/5/15
SME

APPROVED: ___________________________ 6/24/15
MAJOR AREA SPONSOR

APPROVED: ___________________________ 8/5/2015
N12

Enclosure (2)