## 2020-21 CORE SKILL REQUIREMENTS FOR RESIDENTAL CURRICULUM 368

Computer Science (CS) Subspecialty: 6203 Curriculum#368

Billet subspecialty coding is to be based on the minimum education/training/experience level required for optimum performance. Cyber Systems and Operations/6208 subspecialty coding is justified when, in addition to the general criteria stated in NAVPERS 15839 series (Manual of Navy Officer Manpower and Personnel Classification) Part B, the following specific criteria are satisfied:

- 1. <u>Description of CSR Competencies</u>. The listed CSRs are a set of quantifiable skills, traits and experiences that a subspecialist must possess to perform acceptably in a coded billet for the Computer Science and System Design/6203.
- a. CSR-1: Plan, develop, and manage large DoD and naval software projects, to include specification of requirements, design, and technical documentation, implementation, risk analysis, testing, acquisition, quality-assurance, maintenance, process metrics, and measures of effectiveness.
- b. CSR-2: Assess interoperability and dependencies of hardware and software for future network capabilities.
- c. CSR-3: Develop, operate, manage, maintain or and assess network systems and architectures at multiple security levels, and ensure cross-domain security and usability. Recommend and implement solutions to network problems.
- d. CSR-4: Model, design-and implement network infrastructures for distributed and mobile systems. Apply distributed multicore and multi-processor systems in High Performance Computing (HPC) and cloud computing configurations to support DoD and naval requirements.
- e. CSR-5: Make recommendations concerning military application of future cyber capabilities to enhance operations. Determine requirements from local to enterprise level, particularly with respect to integration with tactical systems and cloud computing, and find viable solutions for denied and-degraded communication scenarios.
- f. CSR-6: Devise and employ measures to preserve and protect friendly/DoD cyberspace capabilities, networks and net-centric capabilities. Plan and carry out actions that protect and defend information systems by ensuring availability, integrity, authentication, confidentiality and non-repudiation.
- g. CSR-7: Develop and input cyber-relevant requirements into research, development, and acquisition processes for military systems.

Enclosure (5)

- h. CSR-8: Ensure operationally relevant data are collected, processed, stored, protected, organized, made accessible, and merged with related data sources to deliver relevant information to decision makers at all levels of command. Devise automated data extraction, parsing and management capabilities to identify and deliver relevant data sets for generation of operational knowledge.
- CSR-9: Identify requirements and solutions for improved Human-Computer Systems Interface and operational efficacy of information and decision-enabling systems and tools.
- j. CSR-10: Employ cyber systems to enable the commander to make operational decisions and direct force with the utmost speed, accuracy and efficiency, such that adversaries cannot disrupt friendly actions or respond appropriately or effectively.
- k. CSR-I1: Design, construct, operate and evaluate DoD and naval autonomous systems including unmanned vehicles sensor systems; analysis tools for security, forensics and intelligence, and delivery of autonomous sensor-obtained data for DoD and Navy mission requirements.
- 2. Applicable Officer Designator(s):
  - a. 1110/1120/1160/1170/1310/1320/1230/1440/1510/1800/1810/1820/1830/1840/XXX7 (FTS) codes within the applicable designators are authorized.
- 4. Applicable Billet Designator(s):
  - a. 1110/1120/1310/1320/1230/1440/1510/1800/1810/1820/1830/1840
- 5. Educational and Significant Experience Criteria. Coded billets are authorized when the functions of the billet include the CSR competencies listed above in (in paragraph 1). For additional clarification regarding definition of suffixes, refer to the NAVPERS 158391, Vol 1.

Note: 'Proven' requires at least 18-month experience tour in subspecialty coded billet or billet using the CSR of a related subspecialty.

Subspecialty Code Suffixes Authorized for 6203					
Billet	Officer	Suffix	Definition	Notes	
X	X	C	Proven Doctor of Philosophy	4, 10, 11	
X	X	D	Dactor of Philosophy	8.9	
		F	Proven Master's Degree that does not meet all ESR's		
	· · · · ·	G <sub>1</sub>	Master's Degree that does not meet all ESR's		
		H	Master's Degree desired, not required		
		L,	Certificate degree at the Master's level		
		М	Proven Post Master's Degree graduate education		

N	Post Master's Degree graduate education	<u> </u>
P	Master's Degree in approved Navy subspecialty	1,2,3,12
Q	Proven Master's Degree	4.5 6.7
R	Proven Significant Experience	112441
. 5	Significant Experience obtained through OJT	<del></del>

Note 1: P-coded Billets are authorized when the function of the billet include at least four of the duty competencies (CSRs) listed above.

Note 2: The Officer completes Computer Science and System Design Master's Degree/6203 ESRs.

Note 3: Full Subspecialty will not be given if thesis or capstone project not completed. The Officer will receive the G Subspecialty code.

Note 4: When the function of the billet include competencies (CSRs) listed above and requires previous significant experience.

Note 5. The Officer attends a civilian institution and earns a Master's degree but does not meet the ESRs for the P-code.

Note 6: They complete Computer Science and System Design/6203 ESRs and have done at least 19 months in a master's degree coded billet or higher - must have a P code prior to Q coded tour.

Note 7: G-coded Officers cannot obtain Q codes. They will be authorized F codes.

Note 8: Are authorized when the function of the biller include detailed knowledge beyond that attainable through master's degree of other pre-doctoral program and Research.

Note 9: Are authorized when the officer completes Computer Science and Systems Design Doctorate Degree/6203 ESRs.

Note 10: The Officer attends a civilian institution and earns a Doctorate degree.

6. Major Area Sponsor and Subject Matter Experts

2.	Major Area Sponsor:	OPNAV N2N6C1,	
b.	Subject Matter Expert:	Navy Information Forces,	

APPROVED:	FCC/C/OF/Curriculum Sponsor)	$\frac{2\sqrt{2c\sqrt{2c}}}{\text{Date}}$
APPROVED:	Major Área Sponsor	\$\frac{\frac{16}{20}20}{\text{Date}}
APPROVED:	Drestos OPNAV N711	3 AUGZ020