

## CERTIFICATION STANDARDS & CORE PLUS DEVELOPMENT GUIDE ENGINEERING LEVEL I

| Type of Assignment   | Representative Activities  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
|--|--|--------------------|-----------|--|--|----------|---------|-------------|-----------|---|---|--|--|---|---|--|--|---|---|---|---|---|---|---|--|---|---|---|--|
| Functional Engineer  | <ul style="list-style-type: none"> <li>● Plans, organizes, conducts, and/or monitors engineering activities relating to the design, development, fabrication, installation, modification, sustainment, and/or analysis of systems or systems components for a functional specialty (i.e., reliability and maintainability, systems safety, materials, avionics, structures, propulsion, chemical/biological, human systems interfaces, weapons, Computer Engineer/Scientist, etc.).</li> <li>● Demonstrates how systems engineering technical processes and technical management processes guide engineering activities for a functional specialty.</li> </ul>   |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| General Engineer   | <ul style="list-style-type: none"> <li>● Plans, organizes, conducts, and/or monitors engineering design, development, and sustainment activities for systems or systems components.</li> <li>● Demonstrates how systems engineering technical processes and technical management processes guide design, development, and sustainment activities.</li> </ul>   |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| Research Engineer or Scientist   | <ul style="list-style-type: none"> <li>● Plans, organizes, and conducts science and technology research and engineering activities supporting acquisition programs, projects, or activities.</li> <li>● Demonstrates how systems engineering technical processes and technical management processes guide science and technology research and engineering activities.</li> </ul>   |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| Technical Support (Applicable to Level 1 Only)                                     | <ul style="list-style-type: none"> <li>● Plans, organizes and conducts technical activities relating to the design, development, research, fabrication, installation, modification, sustainment, inspection, production, application, standardization, testing and/or analysis of systems or systems components for a technical specialty.</li> <li>● Demonstrates how systems engineering technical processes and technical support processes guide design, development and sustainment activities.</li> </ul>  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>Core Certification Standards</b> (required for DAWIA certification)             |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| Acquisition Training   | <b>ACQ 101</b> Fundamentals of Systems Acquisition Management  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| Functional Training  | <ul style="list-style-type: none"> <li>● <b>ENG 101</b> Fundamentals of Systems Engineering</li> <li>● <b>CLE 001</b> Value Engineering</li> <li>● <b>CLE 004</b> Introduction to Lean Enterprise Concepts</li> <li>● <b>CLM 017</b> Risk Management</li> </ul>  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| Education  | <ul style="list-style-type: none"> <li>● Baccalaureate or graduate degree in a technical or scientific field such as engineering, physics, chemistry, biology, mathematics, operations research, engineering management, or computer science</li> <li>● Note: Civilians serving as an 0802, 0856, or 0895 must meet the OPM education requirements in lieu of this education standard.</li> <li>● Note: Civilians serving in an 08XX Professional Engineering series position must meet the OPM education requirements in lieu of this education standard.</li> </ul>  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| Experience   | <ul style="list-style-type: none"> <li>● 1 year of technical experience in an acquisition position from among the following career fields/paths: ENG, S&amp;TM, IT, T&amp;E, PQM, FE, PM, or LCL</li> <li>● Similar experience gained from other government positions or industry is acceptable as long as it meets the above standards</li> </ul>   |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>Core Plus Development Guide</b> (desired training, education, and experience)   |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>Training</b>  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="background-color: #003366; color: white;">Type of Assignment</th> </tr> <tr> <th style="background-color: #003366; color: white;">Func Eng</th> <th style="background-color: #003366; color: white;">Gen Eng</th> <th style="background-color: #003366; color: white;">Res Eng/Sci</th> <th style="background-color: #003366; color: white;">Tech Supt</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; color: green;">✓</td> <td style="text-align: center; color: green;">✓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center; color: green;">✓</td> <td style="text-align: center; color: green;">✓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center; color: green;">✓</td> </tr> <tr> <td style="text-align: center; color: green;">✓</td> <td style="text-align: center; color: green;">✓</td> <td style="text-align: center; color: green;">✓</td> <td></td> </tr> <tr> <td style="text-align: center; color: green;">✓</td> <td style="text-align: center; color: green;">✓</td> <td style="text-align: center; color: green;">✓</td> <td></td> </tr> </tbody> </table> | Type of Assignment |           |  |  | Func Eng | Gen Eng | Res Eng/Sci | Tech Supt | ✓ | ✓ |  |  | ✓ | ✓ |  |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |  |
| Type of Assignment   |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| Func Eng   | Gen Eng  | Res Eng/Sci        | Tech Supt |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| ✓  | ✓  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| ✓  | ✓  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| ✓  | ✓  | ✓                  | ✓         |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| ✓  | ✓  | ✓                  |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| ✓  | ✓  | ✓                  |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>BCF 106</b> Fundamentals of Cost Analysis                                       |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>BCF 131</b> Applied Cost Analysis (R)   |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>CLB 009</b> Planning, Programming, Budgeting, and Execution and Budget Exhibits |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>CLB 024</b> Cost Risk Analysis Introduction                                     |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |
| <b>CLB 026</b> Forecasting Techniques  |  |                    |           |  |  |          |         |             |           |   |   |  |  |   |   |  |  |   |   |   |   |   |   |   |  |   |   |   |  |

|   |   |   |   |   |
|---|---|---|---|---|
| <b><u>CLB 029</u></b> Rates   |   | ✓ |   |   |
| <b><u>CLC 008</u></b> Indirect Costs  | ✓ | ✓ | ✓ |   |
| <b><u>CLC 011</u></b> Contracting for the Rest of Us                                | ✓ | ✓ | ✓ | ✓ |
| <b><u>CLC 056</u></b> Analyzing Contract Costs                                      | ✓ | ✓ |   |   |
| <b><u>CLC 060</u></b> Time and Materials Contracts                                  | ✓ | ✓ | ✓ |   |
| <b><u>CLE 009</u></b> ESOH in Systems Engineering                                   | ✓ | ✓ |   | ✓ |
| <b><u>CLE 015</u></b> Continuous Process Improvement Familiarization                | ✓ | ✓ | ✓ | ✓ |
| <b><u>CLE 021</u></b> Technology Readiness Assessments                              | ✓ | ✓ | ✓ | ✓ |
| <b><u>CLL 011</u></b> Performance Based Logistics (PBL)                             | ✓ |   |   |   |
| <b><u>CLM 013</u></b> Work-Breakdown Structure                                      | ✓ | ✓ | ✓ | ✓ |
| <b><u>CLM 021</u></b> Introduction to Reducing Total Ownership Costs (R-TOC)        | ✓ | ✓ | ✓ |   |
| <b><u>CLV 016</u></b> Introduction to Earned Value Management                       | ✓ |   |   | ✓ |
| <b><u>EVM 101</u></b> Fundamentals of Earned Value Management                       | ✓ | ✓ | ✓ |   |
| <b><u>ISA 101</u></b> Basic Information Systems Acquisition                         | ✓ |   |   | ✓ |
| <b><u>LOG 101</u></b> Acquisition Logistics Fundamentals                            | ✓ | ✓ |   | ✓ |
| <b><u>LOG 102</u></b> Fundamentals of System Sustainment Management                 | ✓ | ✓ |   | ✓ |
| <b><u>PQM 101</u></b> Production, Quality, and Manufacturing Fundamentals           | ✓ | ✓ |   |   |
| <b><u>STM 101</u></b> Introduction to Science and Technology Management             |   | ✓ | ✓ | ✓ |
| <b><u>TST 102</u></b> Fundamentals of Test and Evaluation                           | ✓ | ✓ | ✓ | ✓ |
| <b>Education</b>  |   |   |   |   |
| None specified  |   |   |   |   |
| <b>Experience</b>   |   |   |   |   |
| One (1) year of technical experience (in addition to core certification experience) |   |   |   |   |

**Notes:**

- 1** The Core Certification Standards section lists the training and/or education and experience REQUIRED for certification at this level for this career field within 24 months of assignment.
- 2** "(R)" following a course title indicates the course is delivered as resident-based instruction.
- 3** When preparing your IDP, you and your supervisor should consider the training, education, and experience listed in this Core Plus Development Guide if not already completed.