TECHNICAL WORKFORCE HIGHLIGHT: FEBRUARY 2026

ENGINEERING AND TECHNICAL MANAGEMENT (ETM) WORKFORCE DEVELOPMENT

ETM

The ETM workforce has a vital role in developing, fielding, and sustaining high-quality, innovative, affordable, supportable, and effective DoW systems and ensuring that products are delivered on time, are cost-effective, and meet mission needs. This requires developing and implementing products and services with an integrated technical approach across the total life cycle. It also includes providing the systems, software, and people to drive warfighter-centric solutions and expedite transition of technology to the user, as well as early production planning and systematically examining producibility. The ETM workforce has the strategic perspective, technical competence, and critical thinking needed to operate within various product domains and other engineering and technical disciplines.

❖ WORKFORCE DEVELOPMENT

The DoW is investing in the existing workforce by developing and modernizing training and education. Training addresses technical skills needed to transition technology into usable capabilities. The Office of the Under Secretary of War for Research and Engineering (OUSW(R&E)) technical workforce development efforts are guided by Secretary of War priorities. OUSW(R&E), ETM workforce leaders from across the Department, and the Warfighting Acquisition University collaborate to develop competencies, training, and credentials for the ETM workforce.

ETM COMPETENCIES

CORE (TIER 2)

Leading Change	Mission & Systems Thinking	Requirements Definition & Analysis	Technical Management	Design Considerations
Product Realization	Digital Literacy	Software Literacy	Technical Perspective on Defense Contracting	

SPECIALTY (TIER 3)

Technical Considerations in Acquisition Strategy	Mission Engineering Approach	Mission Engineering Documentation	Systems Engineering Management	Technology Transition/ Transfer
Stakeholder Requirements Definition	Requirements Analysis	Implementation	Integration	Software Assurance
Verification & Validation	Transition	System of Systems / Family of Systems	Architecture Design	Surveillance Activities / Facilities
Cyber Acumen for Engineering	Adversity-Driven Requirements Derivation	Analysis of Adversity & Adverse Effects	Adversity-Driven Design	Technology Protection
Adversity-Driven Design Realization	Industrial Workforce Planning	Quality Management	Materials Management	DevSecOps
Software Engineering/ Design	Digital Environment Development	Digital Environment Operations & Support	Process Capability & Control	Technology & the Industrial Base
Modeling, Simulation, & Analysis	Manufacturing Planning, Scheduling, & Control		Software Configuration Management	
Adversity-Driven Verification & Validation	Technology Portfolio Management		Mission Capability Analysis, Definition, & Characterization	

❖ TRAINING

ETM training is based on targeted proficiency levels for ETM competencies. The recommended order to complete these courses is below. Completion of ETM 1060 is recommended prior to ETM 2060; all other ETM 1000-level courses are required prior to their corresponding 2000-level course.

ETM CERTIFICATION TRAINING

FOUNDATIONAL

- **ACQ 1010** — Fundamentals of System Acquisition Management
- **ETM 1040** — Technical Management Fundamentals

Complete Remaining 1000-level Courses in Any Order

- **ETM 1010** — Leading Change Fundamentals
- **ETM 1020** — Mission & Systems Thinking Fundamentals
- **ETM 1030** — Requirements Definition & Analysis Fundamentals
- **ETM 1050** — Design Considerations Fundamentals
- **ETM 1060** — Product Realization Fundamentals
- **ETM 1071** — Digital Literacy Fundamentals
- **ETM 1081** — Software Literacy Fundamentals
- **ETM 1090** — Technical Perspectives on Defense Contracting Fundamentals

PRACTITIONER

- **ETM 2010** — Leading Change for Practitioners
- **ETM 2070** — Digital Literacy for Practitioners
- **ETM 2080** — Software Literacy for Practitioners
- **ETM 2020** — Mission & Systems Thinking for Practitioners
- **ETM 2030** — Requirements Definition & Analysis for Practitioners
- **ETM 2050** — Design Considerations for Practitioners
- **ETM 2040** — Technical Management for Practitioners
- **ETM 2060** — Product Realization for Practitioners
- **ETM 2090** — Technical Perspectives on Defense Contracting for Practitioners

Orange = Online Training (OLT)
Gray = Virtual Instructor-led Training (VILT)

TYPICAL ROLES

ETM workforce members hold a variety of positions that may include, but are not limited to, Engineer/Chief Engineer, Architect, Software Developer, Specialist (Quality, Reliability, etc.), Production Controller, Researcher/Scientist, Technical Management, and Analyst.

❖ CREDENTIALS

Defense acquisition credentials:

- Provide job-specific, specialty, and point-of-need training;
- Allow the workforce to customize their knowledge base throughout their career; and
- Are transferable across Components.

OUSW(R&E) is collaborating with the Warfighting Acquisition University, Military Services, and Defense agencies to develop more than 30 credentials applicable to the ETM workforce. Several ETM and interdisciplinary credentials are available now with more on the way. Credentials currently available can be accessed through Warfighting Acquisition University's iCatalog.

ETM CREDENTIALS IN DEVELOPMENT

Digital Acquisition for All Functional Areas (CACQ 015)	Manufacturing Surveillance (CENG 020)*
Intermediate Mission Engineering (CENG 006)*	Intermediate Digital Engineering for SEs (CENG 028)
Software Engineering Intermediate (CENG 008)	DevSecOps Continuous Development in DoD (CENG 034)*
Intermediate SE Management (CENG 017)	DevSecOps Continuous Delivery in DoD (CENG 035)*
Intermediate SE Product Development (CENG 018)	Modern Software Configuration Mgmt Strategies (CENG 036)*
Securing the DevSecOps Pipeline (CENG 037)*	

*Some learning assets available to the workforce now!

For more information, scan the QR code or email osd-sea@mail.mil, ATTN: Workforce

AVAILABLE ETM CREDENTIALS

Program Protection (CCYB 001)	Technology Portfolio Management (CENG 013)
Cybersecurity for Program Managers (CCYB 002A)	Intermediate SE Requirements & Architecture (CENG 016)
Fundamental Secure Cyber-Resilient Engineering (CCYB 003)	Quality Surveillance (CENG 026)
Intermediate Secure Cyber-Resilient Engineering (CCYB 004)	Basics of DoD Software Modernization (CENG 031)
Digital Engineering for DoD Consumers (CENG 001)	Introduction to DoD DevSecOps (CENG 032)
Data Analytics for DoD Acquisition Managers (CENG 002A)	DSO Pipeline Construction & Management (CENG 033)
Artificial Intelligence Foundations for the DoD (CENG 003)	R&M Engineering Technical Activities (CENG 038)
Agile DoD Team Member (CENG 004A)	Life Cycle R&M Engineering Programmatic Activities (CENG 039)
Technology Project Management (CENG 012)	Defense Standardization (CENG 040)

The list of available learning assets for ETM and interdisciplinary credentials currently in development is available on SE&A's website, https://www.cto.mil/sea/workforce/.

Workforce members can register for these learning assets through Warfighting Acquisition University's iCatalog, https://icatalog.dau.edu/.