PARSONS

CENTAR

Collaborative Engineering for Novel Technology and Advanced Research

Course Overview

The Collaborative Engineering for Novel Technology and Advanced Research (CENTAR) course addresses a critical challenge in government software development and software solutions. The slow, costly, and often inefficient process of creating and maintaining software code and support for government users is not capable of keeping pace with modern demands.

This innovative five-to-ten-day flexible program transforms users with limited coding experience into capable problem-solvers who can rapidly develop custom software solutions for unique operational challenges. Whether the solution requires a Single Page Application (SPA), automation script, data processing pipeline, or specialized tool, CENTAR develops hybrid problem-solvers who combine domain expertise with AI-enhanced development to build exactly what's needed when it's needed.

Students train in our state-of-the-art facility featuring a complete DevOps ecosystem including managed GitLab instances, JupyterHub environments, containerized development platforms, partitioned AI models, and full CI/CD pipelines. Our controlled environment provides hands-on experience with production-grade tools while maintaining security standards and development best practices. The curriculum is designed to be vendor and platform agnostic. Students learn to assess problems and build appropriate solutions ranging from simple automation to complex applications.

Certification

CENTAR instructors deliver a dynamic learning experience through AI-assisted problem-solving and practical scenarios. Students are challenged to identify real operational problems and develop custom software solutions, combining human creativity with AI-powered tools across multiple development deliverables throughout the course. Upon successfully completing all course requirements, participants earn a certificate demonstrating their proficiency in AI-assisted custom software development and modern DevOps methodologies.

CENTAR Quick Facts

- Future focused intensive certification course in AI-assisted custom software development for solving unique operational problems and challenges.

- Emphasis on solution-oriented development, enabling students to build SPAs, automation tools, data pipelines, or specialized applications as needed.

- Train at the speed of technology—work with modern frameworks and platforms while learning to assess problems and select appropriate technical solutions.

- State-of-the-art training facility with managed GitLab, JupyterHub, containerized environments, and complete CI/CD pipeline infrastructure.

- Flexible delivery options: available as 5-day, 7-day, or 10-day intensive course formats, or hybrid online/in-person delivery.

- Expert instruction from practitioners with extensive experience in custom solution development, DevOps, and AI-assisted programming.

"The best and most practical 'hybrid development' training I've received from the government or private sector." – JSOC Communicator

parsons.com/training-and-readiness

Skills Taught

Prepare	Analyze	Build	Automate	Deploy
•The CENTAR Framework	•Problem Assessment Methods	•Single Page Applications (SPAs)	•Workflow Automation	•CI/CD Pipeline Setup
•AI-Assisted Development Setup	•Solution Architecture Planning	•Custom Web Interfaces	•Task Scheduling Systems	•Cloud Platform Deployment
•Linux Development Environment	•Requirements Gathering	•API Development & Integration	•Data Pipeline Creation	•Infrastructure as Code
•GitLab Repository Management	•Technology Stack Selection	•Database Solutions	•Process Integration	•Monitoring & Logging
•JupyterHub Configuration	•User Experience Design	•Data Processing Scripts	•Monitoring & Alerting	•Automated Testing
•Container Platform Basics	•Data Flow Analysis	•Specialized Tools & Utilities	•Batch Processing	•Production Maintenance
•Python Development Fundamentals	•Performance Requirements	•AI-Powered Code Generation Requirements	•Report Generation	

Delivery

COA #1: 10-Day Comprehensive Program
Complete program covering problem assessment, solution design, and custom development using our managed GitLab and JupyterHub infrastructure for real-world project implementation.

COA #2: Hybrid Online/In-Person (7-Day)
2-day online foundation training covering Linux and Python basics, followed by 5-day intensive in-person custom solution development using our state-of-the-art DevOps facility.

COA #3: Accelerated 5-Day Course
Fast-track program focusing on AI-assisted development techniques and rapid custom solution deployment for users with existing technical background.

We offer the option to join an open enrollment course, or to create a contracted, dedicated course to meet your organization's customized operational requirements.

For contracted training and price quotes please send all inquiries to: togtraining.parsons@parsons.us

Al Merino / Vice President Technical Operations
6415 Brookstone Ln #104 & #201, Fayetteville, NC 28314
Albert.Merino@parsons.us / (910)-912-2375

More Info and Enrollment!

Missions and Skills Supported

Parsons TOG instructors bring specialized training and a wealth of experience in analyzing PAI across the Department of Defense, Intelligence Community, law enforcement, and the private sector. Our diverse clientele includes leading corporations, universities, and elite special operations units, all benefiting from our expertise in supporting a wide range of complex missions and problem sets.

- All Source & Open Source Intelligence
- Civil Affairs
- Counter-Terrorism
- Counter-Threat Finance
- Counterintelligence
- Digital Communications
- Force Protection
- Identity Management & Signature Reduction
- Information Operations
- Military Deception
- Operational Security
- Preparation of the Digital environment
- Public Affairs
- Targeting
- Threat Intelligence