## U.S. Army Futures Command Army Software Factory Catalog FY2023

1. This catalog is intended to provide you with information on Fiscal Year 2023 - 2024 United States Army Futures Command, Emerging Technology Opportunities (AFC ETO): the Army Software Factory. After course completion, candidates will receive an Additional Skill Identifier (ASI), which provides assignment opportunities for high demand, low density, positions as an Emerging Technology Leader. Enlisted Soldiers attending the Army Software Factory (ASWF) program will incur a 60-month Service Remaining Requirement (SRR).

The obligation is IAW AR 601-280 (Army Retention Program), 16 June 2021. B., AR 614-200 (Enlisted Assignments and Utilization Management), 25 January 2019. C., DA PAM 601-280 (Army Retention Programs Procedures), 16 October 2019. D., Director of Military Personnel Management Memorandum, Subject: "Exception to Policy to AR 614-200, paragraph 4-6 and Table 4-1, for Changes to Service Remaining Requirements for Training in Army Futures Command Emerging Technology Opportunities", 3 December 2021.

This catalog is descriptive in nature and should not be interpreted as a regulation or policy. This information will assist you in determining your preferences in choosing a program. Qualifications, academic achievements, program sponsor guidance, and other key factors will be taken into consideration during selection. This catalog is for Active-Duty personnel; separate announcements will be made for opportunities specific to National Guard and Reserve Soldiers.

- 2. General guidance for applicants of AFC Emerging Technology Opportunities
  - a. You are not eligible to compete if:
    - (1) You will be a student during the time your requested program is in session.
    - (2) You owe or will not complete an incurred utilization assignment by the start of your requested program.
    - (3) You do not have 12 months on current station prior to start date of selected program.
    - (4) You are currently on Assignment Instructions or a Request for Orders to PCS (excluding PME that concludes prior to the start date of program).
    - (5) Not able to meet service obligation requirements due to remaining time in service eligibility (e.g., MRD, RCP, etc.).

- (6) You have derogatory information in the performance section of your permanent records within the past three years or a Type I offense (IAW HQDA EXORD 193-14, Annex B) at any point.
- b. Applicants are responsible for updating their iPERMS account and record brief.
- c. Application must be submitted at: https://forms.gle/K3omUPyo2Sa8zAzu7.
- d. All References will receive a link to complete a Letter of Reference online for the applicant.
- e. Supporting documentation must be sent to cohort-applications@swf.army.mil.
- d. Applications or information received after the suspense date will not be accepted or included in the application packet. Any application packet that is not complete, as defined in this catalog, may result in missing the submission suspense date and candidate may not be considered for the opportunity.

# <u>U.S. Army Futures Command – Army Software Factory</u> (Austin Community College Rio Grande Campus, Austin, TX)

## 1. Program Description:

- a. Overview. The Army Software Factory Program is an immersive, in-person software development program in Austin, Texas. The Army Software Factory collaborates with academic and industry partners to execute this program. The program is open to most grades and occupational specialties of Soldiers. The program is focused on arming Soldiers with modern software skills to solve Army problems using software while harnessing the innovative spirit of the USA.
  - (1) Participants will be assigned to one of the following tracks: software engineering, user interface / user experience design, platform engineer or product management. The first phase consists of a four-to-five-month technical accelerator (aka a technical boot camp) to baseline foundational skills for the selected track. In the second phase, product teams are formed within the cohort and each participant is paired with subject matter experts to further develop the foundational skills built in the first phase. The teams use agile software development processes and Soldier-centered design to scope and solve existing Army problems via full-stack development. This phase is complete based on meeting the standard to attain the ASI. The end of phase two also marks the end of the formal "apprentice training portion" of the program used to calculate the service obligation (where applicable). This initiates the third phase where participants advance their skills mastery from "junior" up to "senior," leveraging application team work on Army problems, and iterate as needed. This phase will include collaborations with industry and/or academia. The third phase may also include a short internship with local industry partners. A select group of

participants may also become the subject matter experts for the second phase of future cohorts.

- (2) Commanders and supervisors are also encouraged to submit their best candidates for this prestigious opportunity based on the outstanding potential and aptitude for service in the emerging technology environment.
- (3). In accordance with the Secretary of the Army's Memorandum dated 29 MAY 2020, AFC will oversee the development and operation of this new initiative.
- b. Purpose. The Army Software Factory's mission is to prototype a future force design and empower Soldiers to solve problems through software engineering at the edges of the battlefield while upskilling the Army's technical competencies. Supporting this mission are three enduring aspects of this effort outlined below. The end state is to provide the Army with a scalable organic capability that enables Soldiers to scope and develop software with maximum autonomy at the edges of the battlefield without undue reliance on contracted support while forging positive change across a series of legacy processes. Lines of effort are:
  - (1) Increase digital proficiencies across the Force, enabling Soldiers to dominate an information-centric battlefield.
  - (2) Solve current Army problems by leveraging Agile, DevSecOps cybersecurity practices, and cloud technology.
  - (3) Harness the innovative spirit of the country through the close collaboration with industry and academia.
- c. Tracks. There are four tracks participants can apply for, as described below.
  - (1) Product Manager: Product Managers are charged with balancing user needs, organizational outcomes, and technical feasibility in order to build value quickly while still considering the big picture. Our teams are flat and balanced, with Developers, Designers, Product Managers, and Platform Engineers working in concert, empowered to build the software we know our soldiers need. As product manager you will write user stories to describe new features Designers have identified through user interviews, oversee the product's backlog, and validate what the Developers have delivered. You work to keep the team unblocked and de-risked using hypothesis-driven development.
  - (2) User Experience / User Interface Designer: UX/UI Designers ensure application teams are building products that meet user needs. Sometimes referred to as an "Empathizer in Chief", UX/UI Designers act as the main conduit to the user. Designers cover a wide variety of skills to be successful including user research, experience and interaction design, as well as visual design. By practicing Soldier Centered Design (SCD), designers act as an intelligent filter for

user feedback and ensure that their teams tackle the highest user priorities. As a part of a Balanced Team with Product Managers and Engineers, designers work collaboratively with their teammates to determine design priorities, refine a backlog and roadmap, and validate the technical complexity of their designs.

- (3) Software Development Engineer: Software Development Engineers design, develop and deploy apps with a focus on high availability, low latency and scalability. Software Development Engineers implement user stories from the backlog and write tests before they write production code. Testing first gives engineers confidence and ensure software is free of bugs or security vulnerabilities. Since engineers work with a balanced-team approach, they provide inputs on complexity and architecture decisions to the product team members. Software Engineers also practice eXtreme Programming (XP), in which pairs of engineers work together on the same line of code to share context and knowledge transfer.
- (4) Platform Engineer: Platform Engineers play a major role in developing, managing, configuring, and securing platforms on which all applications rely. They automate the installation, configuration and maintenance of services on the Army Software Factory platform. Platform Engineers manage system-level performance tuning to optimize for reliability and efficiency and guide software releases and activations for new features and platform configuration. You will ensure all applications that are deployed are secure, reliable, and resilient.
- d. Program Outline. Below is a tentative schedule for the program. AFC will design the final syllabus and schedule for the program in consultation with relevant stakeholders to best fit the needs of the participants and the U.S. Army. The overall concept is outlined in the figure below.
  - (1) Phase 1: Technical Accelerator. The pipeline begins with a six-month (approximate) technical accelerator for each track.
  - (2) Phase 2: Product Teams. 1-on-1 vendor/Subject Matter Expert (SME)-led pairing begins immediately following the technical accelerator. This methodology is akin to learning a foreign language by pairing personnel who are extremely proficient in all elements of that foreign culture. In this phase participants are broken out into product development teams of approximately six personnel or join the platform team. The product teams consist of a Product Manager (PM), User Interface / User Experience (UI/UX) Designer, and Software Development Engineers. Each cohort member pairs with a full-stack software engineer, UI/UX designer, or PM trained in enabling others to learn. The focus is not on classroom academics, but rather on learning while solving an Army problem. This pairing can last up to six-months and is based on each cohort member's individual progression. The cohort members operate as part of a modern software team to learn both coding and the right way to scope and manage agile software projects. Throughout this time, the participants conduct consultant-like

site visits across the Army to scope the problem and iterate solutions and develop a software solution that solves an Army problem with the highest level of modern rigor.

(3) Phase 3: Sustained Factory. At the conclusion of the pairing experience, Army team members are now proficient in modern software development. They have accrued 12 months of cumulative academic and project experience. At this point they enter the final phase of their progression at the Software Factory and continue to work on Army problems. This phase may include collaboration with startups and/or academia for mutually beneficial codevelopment. It may also include short-term internship opportunities as proffered by local tech stakeholders (primes, start-ups, and non-traditional entities in the Austin area). The overall objective is to take a Soldier or Civilian from the "regular Army" and get them acclimated to modern software engineering. Cohort members are now able to pair together and augment other teams as needed. Select cohort members will become the paired expert for future cohorts during phase two as the program sets the conditions to transition from the vendor-led pairing to Army-led pairing. After a total of 12-months, participants embark on a utilization tour to continue employment as software development teams.

#### 2. Selection Process:

- a. All applications will be reviewed by a diverse board. The top applicants will be invited for a behavioral and technical interview. This may be virtual or in-person. There may be additional assessments as required. None of the assessments require expert knowledge in the specific tracks. However, research on the various tracks within the Army Software Factory is highly recommended.
- b. Final Order of Merit List and selection is built in coordination with HRC and to consider diversity of rank, MOS, skillsets and other factors.

### 3. Program Tenure/Location:

- a. During the Army Software Factory Program, cohort members will be assigned (via PCS) to the U.S. Army Software Factory in Austin, TX, with an in-person work location at the Austin Community College Rio Grande Campus.
- b. The Army Software Factory is not co-located with a typical garrison support structure. All Soldiers will live in the economy with BAH levels for Austin, TX. Additionally, there are not typical support items such as Military Treatment Facilities, Child Development Centers (CDC) or Army Community Services (ACS) within AFC or Austin, TX. This is a voluntary opportunity, and you should consider these factors before applying to the program.
- c. Follow-on Assignment Opportunity Detail. All fellows will be offered follow-on utilization opportunities provided successful completion of the program and Army

availability. This assignment is expected to be similar in nature, where Soldiers work as part of a software development team building software solutions for problems within the Army.

## 4. Eligibility Criteria:

- a. Officers and Warrant Officers:
  - (1) Meet the additional criteria in paragraph 4, c below.
- b. Noncommissioned Officers (NCO) and Enlisted:
  - (1) All applicants must have completed all requisite levels of NCOES for their rank to include their distributed leader course.
  - (2) Applicants are still eligible for consideration under the qualitative service and qualitative management program.
  - (3) GT score of 110 or higher.
  - (4) Meet the additional criteria in paragraph 4, c below.
- c. All Candidates:
  - (1) Active Component Soldiers, rank and MOS immaterial.
  - (2) Meet Army height and weight requirements and be in excellent physical condition.
  - (3) Not be pending any adverse actions or be at risk for promotion.
  - (4) Have extraordinary potential for future Army service.
  - (5) Have interpersonal skills and the ability to interact and form relationships with individuals from diverse backgrounds.
  - (6) Be able to begin the Army Software Factory (Emerging Technology Opportunity) on or about 30 Jan 2024.
  - (7) Currently have or are able to obtain a SECRET security clearance.
- 5. How to apply: The submission requirements are listed below:
  - a. Online application and self-certification.
  - b. Letters of recommendation (LOR) **must include**:

- (1) Commander (O-4 or above)
- (2) Supervisor (not required if your supervisor is your Commander)
- (3) Peer
- (4) Subordinate (E-4 and below applicants, who have never supervised, should have someone speak to their technical acumen)
- c. Your references will need to input your DoD ID number when filling out the form. References should submit their recommendations through the applicant portal site, listed above. Recommendations in other formats will not be considered.
- d. Soldier Record Brief, or Selection Board Record Brief
- e. Evaluations: Two (2) most recent Officer Evaluation Reports (OER) or Noncommissioned Officer Evaluation Reports (NCOER). Corporal and below must provide performance statement from first line supervisor covering last 12 months of assignment.
- f. DA Form 5500 or DA Form 5501 Army height/weight record (within the past six months) (attached to the online application).
- g. DA Form 705 APFT Card
- 6. Points of Contact:
  - a. Software Factory POC: Indira Williams at indira.g.williams.civ@army.mil.