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| OFFICE OF APPRENTICESHIP  BULLETIN | **NO.**  2024-91 |
| **DATE**  June 07, 2024 |

**TO:** NATIONAL APPRENTICESHIP SYSTEM STAKEHOLDERS

OFFICE OF APPRENTICESHIP STAFF

STATE APPRENTICESHIP AGENCIES

**FROM:** JOHN V. LADD

Administrator, Office of Apprenticeship

**SUBJECT:** New National Occupational Framework (NOF) Apprenticeable Occupation: Penetration Tester

1. **Purpose.** To inform the staff of OA, State Apprenticeship Agencies (SAA), Registered Apprenticeship program sponsors, and other Registered Apprenticeship partners of the following new National Occupational Framework (NOF) to an apprenticeable occupation: Penetration Tester
2. **Action Requested.** OA staff should familiarize themselves with this bulletin and the attached Work Process Schedule and Related Instruction Outline, as a source for developing apprenticeship standards and/or providing technical assistance.

Penetration Tester will be added to the List of Occupations Recognized as Apprenticeable by OA located on www.apprenticeship.gov. A suggested Work Process Schedule and Related Instruction Outline are attached.

1. **Summary and Background.**
   1. Summary – The occupation Penetration Tester was submitted by Mr. Zachary Boren, Senior Policy Program Manager on behalf of Urban Institute, were processed by Joseph L. Olivere and approved by the OA Administrator on June 3rd, 2024.

The National Office has approved a new National Occupational Framework (NOF), developed in partnership with the Urban Institute. This NOF has met industry standards and approval; it covers job titles and occupational pathways, related functions and performance criteria, as well as academic, workplace and personal competencies for job success. While use of NOFs in developing standards utilizing the competency-based training approach is voluntary, no additional vetting of a Work Process Schedule (WPS) utilizing the NOF should be required where a program aligns to the occupational framework described in a NOF, beyond the basic requirements set forth in 29 CFR Part 29. While on-the-job learning (OJL) is ordinarily outlined in the WPS, sponsors who utilize a NOF must develop the Related Instruction Outline, which should be included in the standards. Within certain limits, the sponsors of NOF apprenticeship programs are permitted to customize the job functions or competencies contained in a NOF for the Penetration Tester occupation.

However, OA encourages the use of all core competencies to be included in the approved WPS.

* 1. Background –

***New/Revised Occupation Background -*** Under 29 CFR section 29.4, an occupation for a RAP must meet the following criteria to be determined apprenticeable:

1. Involve skills that are customarily learned in a practical way through a structured, systematic program of on-the job supervised learning.
2. Be clearly identified and commonly recognized throughout an industry.
3. Involve the progressive attainment of manual, mechanical, or technical skills and knowledge which, in accordance with the industry standard for the occupation, would require the completion of at least 2,000 hours of on-the-job learning to attain; and
4. Require related instruction to supplement the on-the job learning.
5. **New NOF Apprenticeable Occupation.** The occupation Penetration Tester was submitted for an apprenticeability determination.

Penetration Tester  
O\*NET-SOC CODE: 15-1299.04

RAPIDS Code: 3030

Type of Training: Time-based, Hybrid, Competency-based

Term Length: Time-based 2500, Hybrid 2,500 – 3000, Competency-based 1.25 years

Penetration testers evaluate network system security by conducting simulated internal and external cyberattacks using adversary tools and techniques. They attempt to breach and exploit critical systems and gain access to sensitive information to assess system security.

Penetration Testers perform the following duties:

* Gathers information about known threats to the organization and industry to identify current vulnerabilities.
* Develops testing methodologies, such as wireless, data networks, application, and telecommunication security tests.
* Tests the security of the network by using social engineering strategies.
* Identifies any systemic root causes of security system weakness using penetration test results.
* Writes reports for appropriate audiences (e.g., executives, third-party stakeholders, technical staff, and developers)
* Makes recommendations on design or technical features of products or services with technical personnel.

1. **Inquiries.** If you have any questions, please contact Joseph L Olivere, Apprenticeship and Training Representative, Division of Standards and Quality at (202) 693-5179.
2. **Attachments.**

