

Cyber Security Skill Set Analysis for Common Curricula Development

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Abstract

The field of cyber security is getting diversified day by day, with new specialist responsibilities and roles at different levels of competence being required by the industry. The competencies can be mapped with required skills set in multiple cyber security certification programs. However, different certification programs use different curricula and terminology, which makes the offerings overlap in some aspect and be distinct in others. This makes it hard for new institutes and cyber ranges to decide upon their training offerings. The aim of this study is to identify commonalities in skill set requirement for multiple cyber security roles like penetration tester, security operation center analysts, digital forensic and incident responders and information security managers. The identified commonalities will be used for development of a standard common curricula to set skill set requirement for the achievement of specific competence levels in a specific cyber security field.

Index terms: Cyber Security, Skill Set, Curricula

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