



The College of Graduate Studies and the College of Information Technology Cordially Invite You to a
PhD Thesis Defense

Entitled

*CYBERSECURITY CONTINUOUS LEARNING TOWARDS FULFILLING NATIONAL CYBERSECURITY
STRATEGIC PLAN MANDATES*

by

Saleh Hamad AlDaajeh

Faculty Advisor

Dr. Saed Alrabaee

College of Information Technology

Date & Venue

9:00 -12:00

Friday, 19 April 2024

Room E1-1036, E1 Building

Abstract

This dissertation delves into enhancing cybersecurity education by aligning academic curricula with national cybersecurity strategic plan (NCSP) objectives, emphasizing the crucial role of Higher Education Institutions (HEIs) in developing a skilled cybersecurity workforce. Analyzing ten NCSPs, it identifies strategic themes and gaps between national goals and HEI offerings. The study reviews NCSP guidelines, international cybersecurity indices, and literature, including the NICE-NIST framework, to develop a framework that bridges the educational gap, improving learning outcomes and arming students with vital skills, knowledge, and competencies. Furthermore, it introduces a platform for continuous cybersecurity learning, employing micro-credentials, blockchain technology, and AI-driven systems. Based on Qualification Reference Frameworks and UAE's governance, this platform addresses the cybersecurity professional shortage by advocating lifelong learning. It contrasts the UAE's Qualifications Framework with traditional models, incorporating Alternative Digital Credentials (ADCs) and leveraging blockchain and AI for personalized learning paths. Investigating international standards and competency frameworks, such as NICE-NIST and Bloom's taxonomy, the research contributes to cybersecurity capacity building, highlighting the impact of ADCs, blockchain, and AI in transforming education and training. This dissertation stands as a testament to the power of innovative educational strategies and technologies in developing a competent global cybersecurity workforce.

Keywords: National Cybersecurity Strategic Plans (NCSP), GQO+Strategies, Alternative Digital Credentials (ADCs), Cybersecurity Capacity Development, Life-long learning.

