Cyber security cOmpeteNCe fOr Research anD InnovAtion

Cybersecurity Consultant – Overview

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The Road to the Cybersecurity Consultant

The feasibility study identified **19** Profiles that are missing a certification scheme.

To refine this list and decide upon the one that will be used as the first CONCORDIA cybersecurity skills course and certification scheme the following steps were implemented:

- Job attractiveness analysis
  (drilled down to **10** Profiles)
- CONCORDIA ecosystem survey
  (drilled down to **5** Profiles)
- Team survey

Cybersecurity Consultant

The Cybersecurity Consultant Role

Leadership

Understanding the project target client company

Understanding of laws and regulations on information security

Project management

Analyzing vulnerability of information system

Thinking skills

Establishing of plan for diagnosis and improvement of personal information security

Presentation

Establishing and grasping definition, range, and relation between targets of information security

Grasping and analyzing present condition of information system asset/risks

Understanding of standards and criteria related to information security

Evaluating and accrediting information system

Understanding of network, system, security and IT services application

Grasping present condition of network, server, and application system and ability to diagnose

Human network

Understanding and creating documents

Designing and establishing information security master plan

Understanding IT trends related to information security

Exerting efforts in developing relationships with domestic and foreign persons concerned

Customer service

Teamwork

Self-development

Understanding the project process method and tool

Grasping the scenario on anticipated threats

Understanding of the basic operation of network, server, and application system

Grasping industry trends related to information security

Understanding of IT on physical security

Privacy and morals

Learning and understanding of the technology manual on computation equipment and facilities

Sincerity and responsibility

Method of realizing statistics and analysis result on current situation

Knowledge and experience of management

Understanding of program sources and programming ability

Appearance and attire

Basic foreign language

Source: Analysis of the Competencies of Information Security Consultants: Comparison between Required Level and Retention Level, Indian Journal of Science and Technology, *Vol 8(21),* Se-Yun Kim, Seong Taek Park and Mi Hyun Ko

The Cybersecurity Consultant Role

analyses ICT system

define security policies

define technical requirements

develop information security strategy

educate on data confidentiality

execute ICT audits

execute software tests

identify ICT security risks

identify ICT system weaknesses

implement ICT risk management

keep task records

keep up with the latest information systems

solutions

manage IT security compliances

manage disaster recovery plans

monitor system performance

perform risk analysis

provide ICT consulting advice

report test findings

verify formal ICT specifications

Source: ESCO, ICT Security consultant profile

The Cybersecurity Consultant Role

Analyze ⌄

- Threat Analysis
- Exploitation Analysis
- All-Source Analysis
- Targets
- Language Analysis

Oversee and Govern ⌄

- Executive Cyber Leadership
- Acquisition and Program/Project Management
- Cybersecurity Management
- Legal Advice and Advocacy
- Strategic Planning and Policy
- Training, Education, and Awareness

Securely Provision ⌄

- Risk Management
- Software Development
- Systems Architecture
- Systems Development
- Systems Requirements Planning
- Technology R&D
- Test and Evaluation

Operate and Maintain ⌄

- Customer Service and Technical Support
- Data Administration
- Knowledge Management
- Network Services
- Systems Administration
- Systems Analysis

Protect and Defend ⌄

- Cyber Defense Analysis
- Cyber Defense Infrastructure Support
- Incident Response
- Vulnerability Assessment and Management

Collect and Operate ⌄

- Collection Operations
- Cyber Operational Planning
- Cyber Operations

Investigate ⌄

- Cyber Investigation
- Digital Forensics

Common NICE Cybersecurity Workforce Framework Categories

|		
630 →	**334**	**K**nowledge
374 →	**222**	**S**kills
176 →	**128**	**A**bilities
1007 →	**608**	**T**asks

The Cybersecurity Consultant Role

Analysis of the Competencies of Information Security Consultants: Comparison between Required Level and Retention Level

Se-Yun Kim[1], Seong Taek Park[1] and Mi Hyun Ko[2*]

ESCO
European Skills/Competences, qualifications and Occupations

European Commission

National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework

200 Knowledge

90 Skills
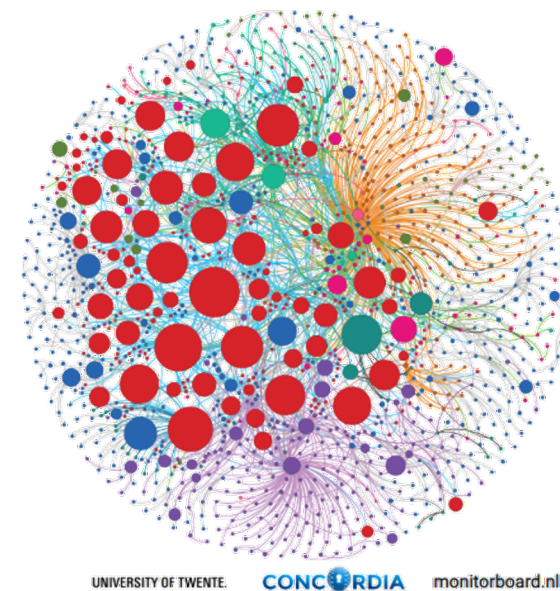
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Let's shape the Cybersecurity Consultant!

Analyze

Investigate

Oversee & Govern

Protect & Defend

Securely Provision (SP)

Protect and Operate (CO)

Operate and Maintain (OM)

http://concordia.monitorboard.nl/

Excel   PDF

Skills   Knowledge

Drag the items to the appropriate importance box

90 / 90 skills

Skill in administrative planning activities, to include preparation of functional and specific support plans, preparing and managing

Very Important   + Add skill

Items dragged here are ranked as very important

Important   + Add skill

Items dragged here are ranked as important

Not Important

Items dragged here are ranked as not important

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Thank You !