

WM9B9-15 Cyber Security Consultancy

21/22

Department

WMG

Level

Taught Postgraduate Level

Module leader

Harjinder Lallie

Credit value

15

Module duration

2 weeks

Assessment

Multiple

Study locations

University of Warwick main campus, Coventry Primary

Singapore Institute of Management, Singapore

Description

Introductory description

Cyber security consultants are required to apply analytical, decision-making and communication skills to provide reliable advice to clients. Quite often they report progress and outcomes to stakeholders which include those who are able to understand technical terms, descriptions and explanations, and those who are not always able to understand these. Consultants must possess strong leadership skills, enhanced project management skills, organisation and management skills and possess the knowledge and confidence to make effective leadership interventions within a cyber security context.

Module aims

The module, delivered in collaboration with one or more commercial partners, will expose participants to realistic experiences of the work that a cyber security consultant is involved with. The module will develop a thorough understanding of the cyber security consultancy lifecycle which typically involves presales, execution and closure. The module will be delivered over 5 months with a full lecture day each month followed in the late afternoon by the announcement of an industry-supplied consultancy project. Participants will work in their respective project teams to deliver the project and in so doing, will undertake tasks such as:

- Elucidating, organising and categorising client requirements.

- Undertaking role and work allocation.
 - Organising and managing the scheduling of the project to ensure successful and timely delivery.
 - Organising and managing finances related to the project both in terms of cost to client and internal costs.
 - Undertaking and delivering the project.
 - Reporting on the project at specified points.
- Participants will be expected to keep a shared portfolio of work, conduct professional 'minuted' meetings with their teams and utilise appropriate technology (for example Microsoft Teams) to support project progress and communication. At the end of each project delivery, participant teams will be reorganised in preparation for the next project.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

- The role of a consultant. The strategic context setting of Cyber Security; the culture of cyber security; roles in an enterprise; human factors in cyber security; roles and responsibilities within a cyber team; security professionalism; security culture and raising cyber awareness;
- Managing consultancy projects. The consultancy life-cycle; elucidating requirements; planning, developing, controlling and delivering consultancy projects; developing consultancy proposals; consultancy tools, skills and techniques; dealing with uncertainty such as vague specifications and rapidly changing environments.
- Cyber security in an organisation. Understanding the role and function of security policy in an organisation; types of security policy; acceptable use policies; security standards (e.g. ISO/IEC 27000); the role and function of security policy; governance and compliance requirements in law
- Managing cyber security projects from a system, application and physical security viewpoint. Identity management: authentication, access control and privilege management; securing mobile devices; managing BYOD; securing applications; Email, web and database security; social networks; DRM; database security; big data security; physical and environmental controls; physical protection of IT assets.

Learning outcomes

By the end of the module, students should be able to:

- Adapt and innovate to solve problems, and to manage in unpredictable situations making sound judgements in the absence of complete data
- Demonstrate the ability to work effectively as part of a diverse group using self-direction and initiative and applying planning, organisational and budgeting skills appropriately.
- Demonstrate effective relationship skills and professionalism (including negotiation, facilitation, communication and relationship-building skills).
- Present information effectively in both oral and written format and formulate and deliver logical and precise arguments to key decision makers in an organisation.

Research element

There is a strong emphasis on the development, growth and enhancement of individual research skills so as to provide participants with the high level research knowledge, skills and competencies needed to undertake an independent, original piece of research. The module content draws upon and highlights research within the domain and the module assessment requires participants to perform further research before preparing a response to the assessment task.

Interdisciplinary

Although the module is largely dedicated towards the development of discipline-specific technical, professional and analytical skills, there is a small emphasis on the interdisciplinary nature of the subject. The key transferable skills acquired in this module, namely: project management, budget management, time management and resource management, are key skills which applicable across a range of disciplines.

International

The module is designed in such a way that it can be taught anywhere in the world. Learning materials and examples will be drawn from a range of disciplines, cultures and countries covering the whole range of subjects and disciplines taught in WMG.

Subject specific skills

Participants will develop a detailed applied knowledge of the day to day work of a cyber security consultant and the process of managing consultancy projects.

Transferable skills

Self-awareness, communication, teamwork, sustainability, intercultural awareness, professionalism, organisational awareness.

Study

Study time

Type	Required
Lectures	13 sessions of 1 hour (9%)
Tutorials	27 sessions of 1 hour (18%)
Online learning (independent)	30 sessions of 1 hour (20%)
Assessment	80 hours (53%)
Total	150 hours

Private study description

No private study requirements defined for this module.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A

	Weighting	Study time
Portfolio of consultancy reports	100%	80 hours

The assessment will involve the completion of a sequence of group based industry-inspired consultancy projects. The assessments will be released at the end of a day-long set of lectures each month. Participants will work in a group to complete a series of project related tasks such as elucidating requirements, budgetary planning, resource planning and time management. The outcome of each project will be a deliverable taking the form of a report and/or presentation. The deliverables will be compiled in the form of a reflective portfolio which forms the final assessment submission.

Participants will receive an individual mark based on the group performance overall and the individual reflective portfolio.

Assessment group R

	Weighting	Study time
Consultancy Project	100%	

Participants will be required to complete an individual consultancy report which answers the questions posed in a case study and defined remit

Feedback on assessment

Feedback will be provided as annotated commentary within the submitted work. High level feedback will be provided on a standard WMG feedback sheet. Students will have an opportunity to get further feedback and support directly from the module tutor.

Availability

Courses

This module is Core for:

- Cyber Security Management (New Degree)