**Application Security BSc/Masters Curriculum Design**

**Define stakeholders**

* OWASP University Supporters
* Application Security Trainers
* OWASP Project Leaders – Educational Projects

Resurrect OWASP Educational Committee

**International AppSec Standards for Educational Curriculum?**

How about ISO/IEC 27034?

UK – IISP, ISC2 & BCS Frameworks

There’s a set of QAA Benchmarks for Computer Science & Information Security

Is there a US standard (NIST??)

Any European/APAC standards?

Some thoughts for the Application Security BSc/MSc Curriculum summit discussions

It shouldn’t be about which language is taught or which SDLC techniques to use

**Intended Learning outcomes**

Question: - So is AppSec enough by itself

Whole BSc/MSc AppSec?

Combined BSc/MSc AppSec + Other topic

What would the others be Web Development/Testing?

Module Level AppSec (can it be one module)

Also need to follow ISC2 or BCS example embed within the full curriculum for Computer Science (Within introduction to programming)

Link to Dev/DevOps as well, joint award?

Course Level vs Module Learning Objectives

Not seen many examples of appsec courses or modules

One is (US Army Web App Security learning outcomes) <http://www.apus.edu/z/course-syllabus/ISSC411.pdf>

* Describe web based applications and associated threats and differentiate
* from mainframe, client server, applications
* Understand the role of web based applications in E-commerce transactions
* Describe social networking and evaluate associated risks
* Evaluate web application security vulnerabilities
* Identify web application security controls and risk mitigation techniques
* Develop a security strategy and solution for securing web based applications
* Assess web application security compliance requirements and objectives
* Design a web application Vulnerability and Security Assessment Test Plan

Another is Australia University of New South Wales

<https://www.cse.unsw.edu.au/~cs6443/outline.html>

* understand how modern web applications work;
* be able to assess the security of a web application using white/grey/black-box approaches;
* know the many common pitfalls and security vulnerabilities that affect web applications and associated infrastructure;
* understand how to defend against these attacks and how companies can implement a Secure Development Life Cycle (SDLC) to mitigate potential vulnerabilities;
* have a basic understanding of mobile application security concerns; and
* have practical knowledge of specialised security tools which assist in assessing the security of a web application.

**Intended Technical Coverage**

I seem to remember back in 2015 somebody produced a really detailed infographic on where to find OWASP Developer Resources

We need something like this to help map OWASP project resources to some of the curriculum learning outcomes as a community we have tons of resources

Matt/Tison recently shared a complete set of slide decks for an info sec course

<https://drive.google.com/drive/folders/0Bzb3QwFMHCXrZl9ZLXFIVGUxUGs?usp=sharing>

Perhaps the classic OWASP threads

Classic AppSec Programs seem to use OWASP Top 10 with a version of WebGoat

Builder – Secure Coding Techniques & Mitigation

Breaker – Web App Pen Testing - Testing Guide

Defender Approaches – Appsensor?

Where does DevOps/SecDevOps fit in?

Which OWASP Projects are linked/relevant