Network and Web Security

Prerequisites

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Course web page: https://331.cybersec.fun

Course content



Topics

- Threat modelling
- Pentesting
- Network security
- Web application security: server-side
- Browser security
- Web application security: client-side
- Secure sessions and authorization
- Web based fingerprinting and tracking

Exam

- Each exam question will be roughly half written, half practical
- You will submit the written answers electronically via Answerbook web app
- You will perform practical tasks such as code review and pentesting, and report results on Answerbook
- Advice
 - Allocate time to answer written questions well (easier points)
 - Last part of of practical question is hard, and designed to be solved only by less than 10% of students

Imperial College

Pre-requisites

- Highly beneficial to have knowledge of
 - Computer networking
 - Linux shell
 - Web applications
 - At least one scripting language
- Students without a Computer Science background have managed to enjoy and pass the course
 - But some have also struggled and failed
- Additional effort will be necessary if pre-requisites are missing
 - Independent reading on computer networks
 - Familiarise with Linux shell commands
 - Self-study JavaScript and PHP
 - Aim to be able to read code and understand it, you don't need to build complex applications using those languages for this course
 - Play around building a small web application
 - In PHP, and make it talk to a database, even sqlite