

Master of Cyber Security Self-Study Resource List



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Disclaimer

The following is a list of resources which may be helpful for students in their upcoming Master of Cyber Security courses.

They are intended to act as self-paced, self-study *optional* preparatory materials for that may be useful to you when preparing to take courses in one of the four fields of study: Cyber Defence / Leadership / Cyber Criminology or Cryptography.

Note: these resources do NOT form part of the required reading or official learning resources for any of our courses. Please consider the following before deciding if they are appropriate for you:

- These resources are hosted on non-UQ servers, some contain advertising, and UQ accepts no responsibility for the safety or availability of the web sites, or the accuracy of the information they contain
- There may be differences in techniques and processes taught on these sites compared to UQdelivered course work, and these are not a substitute for the course delivery

Please also note that no technical support will be provided for use of these resources. Any questions should be directed to the original source of the information.



Cyber Defence

Khan Academy Computing Courses

Try and Hour of Code with Khan Academy

Computers

The Internet & Networks

Computers and the Internet

Algorithms

Computer Networking

http://www.firewall.cx/networking-topics.html

Introductory C Programming

https://www.cprogramming.com/tutorial/c/lesson1.html

https://www.journaldev.com/25129/introduction-to-c-programming

https://en.wikipedia.org/wiki/The C Programming Language (Book recommendation)

https://deitel.com/c-how-to-program-8-e/ (C programming text commonly used in undergraduate courses)

Web Programming

https://www.w3schools.com/

Introduction to Unix

https://www.tutorialspoint.com/unix/unix-getting-started.htm

Palo Alto Networks

Palo Alto Network VMs

9.0.1 VMware Workstation Pod Setup – see Appendix document



Leadership

The Second Economy: The Race for Trust, Treasure and Time in the Cybersecurity War 1st ed. Edition

by Steve Grobman (Author), Allison Cerra (Author), Christopher Young (Foreword)

https://www.amazon.com/Second-Economy-Trust-Treasure-Cybersecurity/dp/1484222288



Cyber Criminology

Links to UQ Library and Student Services Resources

Workshops

Assignment Writing

Library Services for Students

Student Support

Effective Argument and Critical Thinking

Oxford Guide to Effective Argument and Critical Thinking Swatridge, Colin 2014 (Book - UQ Library Link)

Writing Tips

Rimer - Writing Tips - See Appendix document



Cryptography

Here are a few books for cryptography together with their UQ library links where more detailed information of the books can be found.

The code book: the science of secrecy from ancient Egypt to quantum cryptography by Simon Singh.

A good Introduction of crypto in non-technical way

UQ Library Link: https://search.library.uq.edu.au/primo-

<u>explore/fulldisplay?docid=61UQ_ALMA2196872690003131&context=L&vid=61UQ&lang=en_US&search_scope=61UQ_All&adaptor=Local%20Search%20Engine&tab=61uq_all&query=any,contains,the%20code%20book&sortby=rank&facet=rtype,exclude,newspaper_articles,lk&facet=rtype,exclude,reviews,lk&offset=0</u>

Handbook of Applied Cryptography,

by Menezes, Alfred J; van Oorschot, Paul C; Vanstone, Scott A.

UQ Library Link: https://search.library.uq.edu.au/primo-

<u>explore/fulldisplay?docid=TN_cdi_proquest_ebookcentral_EBC1605633&context=PC&vid=61UQ&lang=en_US&search_scope=61UQ_All&adaptor=primo_central_multiple_fe&tab=61uq_all&query=any,contains,Handbook%20of%20Appli_ed%20Cryptography&offset=0 (Available online)</u>

Applied cryptography: Protocols, algorithms, and source code in C

by Bruce Schneier.

UQ Library Link: https://search.library.uq.edu.au/primo-

explore/fulldisplay?docid=61UQ ALMA2183587970003131&context=L&vid=61UQ&lang=en US&search scope=61UQ All&adaptor=Local%20Search%20Engine&isFrbr=true&tab=61uq all&query=any,contains,Applied%20Cryptography: %20Protocols,%20Algorithms%20and%20Source%20Code%20in%20C&sortby=date&facet=frbrgroupid,include,12249 55134&offset=0

Quantum Computation and Quantum Information

by Nielsen, Michael A.

UQ Library Link: https://search.library.uq.edu.au/primo-

explore/fulldisplay?docid=61UQ ALMA2180920710003131&context=L&vid=61UQ&lang=en US&search scope=61UQ All&adaptor=Local%20Search%20Engine&isFrbr=true&tab=61uq all&query=any,contains,Quantum%20Computation %20and%20Quantum%20Information&sortby=date&facet=frbrgroupid,include,1226265259&offset=0



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