Course Title:	**Network Security**
Course Code:	**COMP715**
Descriptor Start Date:	**31/01/2025**
POINTS:	**15.00**
LEVEL:	**7**
PREREQUISITE/S:	**ENEL611**
COREQUISITE/S:	**None**
RESTRICTION/S:	**None**

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

Provides an in-depth understanding of LAN, WAN and Wireless security focusing on the configuration of network devices, security protocols, and security of computer and network devices. Provides an understanding of cybersecurity operations, and the use of cybersecurity tools and services to monitor and defend against cyberattacks.

LEARNING OUTCOMES

1. Implement networks with up-to-date security technologies
2. Undertake a network device level security audit and recommend corrective steps
3. Analyse all layers of network designs for outlining security vulnerabilities, proposing mitigating architectural approaches and making system level configuration recommendations

CONTENT

- Device (router and switch) security and hardening
- IOS security configurations
- AAA Access Control
- LAN security
- SNMP security
- Secure routing and anti-spoofing
- Securing with VLANs
- Virtual Private Networks (VPNs): SSL and IPSec
- Firewalls
- IDS and IPS
- Wireless management and security
- Cybersecurity concepts
- Cybersecurity tools and operations

LEARNING & TEACHING STRATEGIES

- Readings, Exercises
- Lectures
- Student presentations
- Class discussion
- Guest speaker/lecturer, site visit if appropriate
- Laboratory sessions
- Online learning modes: online tutorial(s)
- Student self-study

ASSESSMENT PLAN

Assessment Event	Weighting %	Learning Outcomes
Mid-semester Test	20.00	1-2
Practical Lab Assessment	30.00	1-3
Final Controlled Assessment	50.00	1-3

Grade Map **MAP1**

A+ A A- Pass with Distinction
B+ B B- Pass with Merit
C+ C C- Pass
D Fail

Overall requirement/s to pass the course:

To pass this course, students must achieve a minimum overall grade of C-.

LEARNING RESOURCES

Course handouts.

For further information, contact: Te Ara Auaha - Faculty of Design & Creative Technologies

Principal Programme:	**AK3697, Bachelor of Computer and Information Sciences**
Related Programme/s:	**AK3698** **AK1041** **AK3001** **AK3003** **AK3756** **AK3706**

Disclaimer: Course descriptors may be amended between teaching periods/semesters