IT7301 Ethical Hacking

Course Aim
To examine Information Technology security from the hacker’s point of view to allow students develop countermeasures to stop security breaches. This will give students an insight into how to secure systems and to be work ready in the field of Information Technology with a focus on security.

Short Title
none

Faculty
EDICT

Polytechnic Level
IT6003 (ITB5003) & IT6004 (ITB5004) & IT6008 (ITB5008)

Credits
15

Pre-requisites
None

Co-requisites
None

Anti-requisites
None

Learning Outcomes
On successful completion of this course, students will be able to:

1. Explain the motivation, concepts and technologies used in ethical hacking.
2. Design a security policy to protect data assets from being compromised.
3. Critically analyze network enabled software applications and hardware devices for security vulnerabilities.
4. Implement advanced ethical penetration tests on a controlled test environment.
5. Defend network infrastructure from a range of basic attacks using industry defined countermeasures.

Version
Effective From September 1, 2018

Indicative NQF Level
7

Student Contact hrs
90

Self-directed hrs
60

Other directed hrs
0

Total learning hrs
150

NOF Sub-strand
Theoretical
Understanding
Generic, Problem Solving and Analytical Skills
Practical
Application of knowledge
Practical
Application of knowledge
Practical
Application of knowledge