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	Version	2
Faculty	EDICT	Effective From	February 2016
Polytechnic Level		Indicative NQF Level	7
Credits	15	Student Contact hrs	90
Pre-requisites	IT6003 (ITB5003) & IT6004 (ITB5004) & IT6008 (ITB5008)	Self-directed hrs	60
Co-requisites	None	Other directed hrs	0
Anti-requisites	none	Total learning hrs	150

Learning Outcomes

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

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