

1.	Course Title	Introduction to Computer Security		
2.	Course Code	CSEC1013		
3.	Status	Major		
4.	Credit Hour	3 (2+1) 2 for Lecture (2 hours per week x 14 weeks) 1 for Practical (1.5 hour per x 14 weeks)		
5.	Semester/Year	2/3		
6.	Prerequisites	CICT1033 & CCPS1023		
7.	Teaching method:	Distance Learning (Electronic)		
8.	Evaluation	Assessment and Marking Percentage: Quizzes 10 % Assignments 10 % Interactions through discussion board 10 % Mid-Semester Exam 20 % Final Examination 50 %		
9.	Lecturer			
10.	Objective of the Subject	CSEC1013 is an introductory course for students to understand the following area computer security: • <i>Operating Systems security</i> • <i>Application security</i> • <i>Network security</i> Other than the theoretical basics on computer security, students are expected to do hands-on exercises and solve problems related to network security.		
11.	Learning Outcomes	Upon completing CSEC1013, students are expected to be able to: • Understand the foundation of computer security • Secure applications, operating systems and internet transactions • Do basic security assessment for application and network • Do basic intrusion analysis to identify source of attacks		
12.	Synopsis	CSEC1013 is designed to teach the foundation of computer security from the perspective of a system administrator and a penetration tester. Students will be doing hands-on exercise on top of the weekly lecture sessions.		
13.	Topics	Details	Lecture (Hrs)	Practical (Hrs)
	Topic 1	Introduction to Computer Security • Foundation of computer security • Ethics – privacy • Review of Fundamental Issues – OS, network, application • Terminologies	4	3
	Topic 2	Practical Cryptography • Basics of Cryptography • Symmetric Encryption • Asymmetric Encryption • Password Security • Email Encryption • Secure Transport Layer	5	3
	Topic 3	Operating Systems Security • Operating System Security Basics • OS Configuration, Fortification, Hardening • Common OS Attacks	5	4.5
	Topic 4	Software Security • Software Security Basics	5	4.5

Diploma in Business Information System

		• Common attacks to Software • Web Application Security		
	Topic 5	Network Security • Network Security basics • Common network attacks • Network security In-depth	5	3
	Topic 6	Security Assessment • Security assessment basics • Local security assessment • Remote security assessment • Log analysis	4	3
		Total contact hours	28	21
		Equivalent lecture hours	28	14
		Total lecture hours	42	
		Credit hours	3	
14.	Sources of reference: Textbook:	Mateti, P. (2007). Internet Security . Open Content License (GPL)		
15.	Additional References: Other materials:	1. Bishop, Matt (2004). Introduction to Computer Security . Addison-Wesley Professional. 2. Bishop, Matt (2002). Computer Security: Art and Design . Addison-Wesley Professional. 3. Stallings, Williams (2004). Operating System: Internals and Design Principles (5th ed) . Prentice Hall. All other materials will be available to students online.		