Course Name	FUNDAMENTALS OF IT SECURITY	Course Code	ITEC-331		

			Lec.	Lab	Total
Credit Hours	3	**Contact Hours**	2	2	4

Offered as

☐ University Requirement ☐ College Requirement ☒ Program Requirement ☒ Core ☐ Elective

☒ ITEC   ☐ COMP   ☐ CNET

Level	5	Prerequisite	NIL

Course Description:

This introductory course will provide learners with principles of data and technology that frame and define cyber security. Students will gain insight into the importance of cyber security and the integral role of cyber security professionals. This course will provide a dynamic learning experience for the students with foundational cyber security principles, security architecture, risk management, attacks, incidents, and emerging IT security technologies. Topics may include confidentiality, integrity, and availability; security architecture; security policies; authentication; access control; risk management; threat and vulnerability assessment; common attack/defense methods; IDPS ;incidence response plan; introduction to cryptography.

Upon completion, the student will be able to:

- Define Key concept of Security

- Explain the core information security principles

- Identify the key components of cyber security network architecture

- Describe risk management processes and practices

- Distinguish system and application security threats and vulnerabilities

- Appraise cyber security incidents to apply appropriate response

- Evaluate decision making outcomes of cyber security scenarios

- Develop and apply skill in information security using Kali Linux

Assessment Methods	☒ **Midterm Exam**	15%	☒ **Assignment**	10%	☒ **Mini-Project**	15%
	☒ **Lab Exam**	20%	☒ **Final Exam**	40%		

Textbook:
♦ Principles of Information Security, 6th Edition, Michael E. Whitman, Herbert J. Mattord, 2018, Cengage, Print ISBN: 9781337102063.

Reference Materials:
- Information Security: Principles and Practices, 2nd Edition, Mark S. Merkow, Jim Breithaupt, 2014, Publisher Pearson Education ISBN-13: 978-0-7897-5325-0.

- Foundation of information security by Jason Andress. ISBN-10: 1-7185-0004-1, ISBN-13: 978-1-7185-0004-4, Publisher: William Pollock