



v c c . c a

CSTP 2106: Introduction to Computer Security

EFFECTIVE DATE

September 2019

DEPARTMENT

Computer Systems Tech Diploma

DESCRIPTION

In this course students will learn the fundamentals of computer security. Students learn the principles of computer and information security in general, and become familiar with the fundamentals of designing a secure system both from a hardware and software point of view. Students will become familiar with security policies, the principles of cryptography, the basics of authentication, data protection concepts, how access control systems work, and software security. In general, learners will become familiar with the principles, practices, and analysis of developing secure software systems. Additionally, students will learn to recognize several areas of security attacks, examine current security measures and evaluate techniques to enhance existing measures.

CREDITS

3.0

YEAR OF STUDY

2nd Year Post-secondary

PREREQUISITES

CSTP 1104 Computer Systems Administration CSTP 1202 Introduction to Data Communication and Networking

COREQUISITES

None

COURSE LEARNING OUTCOMES

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

- Discuss Security Fundamentals
- Describe main types of security policies
- Articulate the principles of security design
- Evaluate Network Security
- Understand Access Control, Authentication and Account Management
- Evaluate the Use of Certificates

- Describe Compliance and Operational Security
- Explain Risk Management
- Discuss Troubleshooting and managing Security Incidents

PRIOR LEARNING ASSESSMENT & RECOGNITION (PLAR)

None

HOURS

Lecture: 30

Lab: 30

INSTRUCTIONAL STRATEGIES

Instructional strategies include classroom lectures, demonstrations, group discussions, computer lab and hands-on practical work.

GRADING SYSTEM

Letter Grade (A-F)

PASSING GRADE

C

EVALUATION PLAN

Type	Percentage	Assessment activity
Assignments	30	labs and 2 assignments
Project	20	
Midterm Exam	20	
Final Exam	30	

COURSE TOPICS

- Security Fundamentals
- Security Threats and Vulnerabilities
- Data, Application and Host Security
- Network Security
- Access Control, Authentication and Account Management

- The Use of Certificates
- Compliance and Operational Security
- Risk Management
- Troubleshooting and managing Security Incidents

LEARNING RESOURCES

None

Notes:

- Course contents and descriptions, offerings and schedules are subject to change without notice.
- Students are required to follow all College policies including ones that govern their educational experience at VCC. Policies are available on the VCC website at:
<https://www.vcc.ca/about/governance--policies/policies/>.
- To find out how this course transfers, visit the BC Transfer Guide at <https://www.bctransferguide.ca>.

Broadway campus

1155 East Broadway
Vancouver, B.C. Canada
V5T 4V5

Downtown campus

250 West Pender Street
Vancouver, B.C. Canada
V6B 1S9

Annacis Island campus

1608 Cliveden Avenue
Delta, B.C. Canada
V3M 6P1

604.871.7000

VCC.ca

Generated at: 1:43 am on Jun. 17, 2021