



CSTP 1204: Software Analysis and Design

EFFECTIVE DATE

September 2019

DEPARTMENT

Computer Systems Tech Diploma

DESCRIPTION

In this course students are exposed to the pillars of the Software Development Life Cycle (SDLC). Students explore and apply the concepts required to analyze, design, create, install and document a systems project through individual and team exercises. Learners will be exposed to key project management concepts and practices. Using Object Oriented Design (OOD), students learn how to identify classes and build the domain model. Additionally, learners are introduced to an industry standard modeling graphical language: Unified Modeling Language (UML). Students learn the features of various Software Development Life Cycle (SDLC) patterns such as the Agile iterative model and the WaterFall model. Learners will learn the key players and stakeholders in a typical project and their roles. Various testing types such as unit testing, feature testing, regression testing, user acceptance testing, smoke test, and functional testing are also introduced.

CREDITS

3.0

YEAR OF STUDY

1st Year Post-secondary

PREREQUISITES

CSTP 1105 Introduction to Programming

COREQUISITES

None

COURSE LEARNING OUTCOMES

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

- Describe the software life cycle
- Explain project management concepts
- Analyze methods for initiating a project
- Prepare project analysis and plans

- Prepare UML models for software design
- Design software using object-oriented best practices
- Prepare project tests
- Prepare a software project for deployment
- Analyze user feedback in order to refine a design and grow a system

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	3 assignments
Midterm Exam	30	
Final Exam	30	
Participation	10	

COURSE TOPICS

- The software life cycle
- Project management concepts
- The methods for initiating projects

- Project analysis
- UML models for software design
- Using object-oriented to design software
- Project tests
- Software project for deployment

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: 7:25 am on Apr. 10, 2021