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## DRFT 2259: Diploma HVAC Systems for Buildings

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### EFFECTIVE DATE

September 2021

### DEPARTMENT

Drafting

### DESCRIPTION

This course introduces the student to the overall layout of ducting and equipment for buildings for the heating, ventilation, and air conditioning systems for the mechanical engineering industry.

### CREDITS

3.0

### YEAR OF STUDY

2nd Year Post-secondary

### PREREQUISITES

DRFT 2100 Integrated BIM Project

### COREQUISITES

None

### COURSE LEARNING OUTCOMES

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

- Determine duct sizing and layout for buildings
- Describe thermal and air-quality air requirements for buildings
- Describe ventilation requirements for buildings
- Evaluate duct routing options for buildings
- Describe heating and cooling equipment, and air outlets
- Discuss American Society of Heating and Air-Conditioning Engineers (ASHAE), BC Building Code and other codes and standards
- Apply the concepts and processes at a higher level, in a 3D Building Information Modeling setting

## PRIOR LEARNING ASSESSMENT & RECOGNITION (PLAR)

None

## HOURS

Lecture: 30

Lab: 60

## INSTRUCTIONAL STRATEGIES

Lectures, video presentations, project-/problem-based learning, lab activities. The course may be offered face-to-face or in a blended format (mix of face-to-face and online)

## GRADING SYSTEM

Letter Grade (A-F)

## PASSING GRADE

D

## EVALUATION PLAN

Type	Percentage	Assessment activity
Project	60	Minimum of 3 project-based major assignments of approximately equal value.
Quizzes/Tests	10	
Final Exam	30	

## COURSE TOPICS

- Federal, provincial and industrial HVAC standards
- Building construction systems
- Building automation and control
- Coordinating With Other Disciplines
- Riser schematics, schedules, and details

## 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>.

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Generated at: 2:35 pm on Apr. 11, 2021