

# Civil Engineering - Joint (CIVJ)

---

## Civil Engineering - Joint (CIVJ) Courses

CIVJ 5000 [0.5 credit] (CVG 5100)

Deep Foundations

CIVJ 5003 [0.5 credit]

Dam Engineering

CIVJ 5005 [0.5 credit]

Adsorption Separation Process

CIVJ 5006 [0.5 credit] (CVG 5106)

Site Improvements

CIVJ 5008 [0.5 credit] (CVG 5108)

Pile Dynamics

CIVJ 5102 [0.5 credit]

Behaviour of Soil and Rock

CIVJ 5104 [0.5 credit]

Soil Plasticity

CIVJ 5105 [0.5 credit] (CVG 5175)

Numerical Methods for Geotechnical Engineering

CIVJ 5106 [0.5 credit] (CVG 5161)

Mechanics of Unsaturated Soils

CIVJ 5107 [0.5 credit] (CVG 5177)

Offshore Geotechnique

CIVJ 5108 [0.5 credit] (CVG 5178)

Ice Mechanics

CIVJ 5109 [0.5 credit] (CVG 5109)

Geotechnical Hazards

CIVJ 5201 [0.5 credit] (CVG 5142)

Advanced Structural Dynamics

CIVJ 5202 [0.5 credit] (CVG 5143)

Advanced Structural Steel Design

CIVJ 5203 [0.5 credit] (CVG 5145)

Theory of Elasticity

CIVJ 5204 [0.5 credit] (CVG 5147)

Theory of Plates and Shells

CIVJ 5206 [0.5 credit] (CVG 5150)

Advanced Concrete Technology

CIVJ 5209 [0.5 credit] (CVG 5153)

Wind Engineering

CIVJ 5300 [0.5 credit] (CVG 5144)

Advanced Reinforced Concrete Design

CIVJ 5301 [0.5 credit] (CVG 5156)

Finite Element Methods I

CIVJ 5302 [0.5 credit] (CVG 5146)

Numerical Methods of Structural Analysis

CIVJ 5303 [0.5 credit] (CVG 5157)

Finite Element Methods II

CIVJ 5304 [0.5 credit] (CVG 5149)

Structural Stability

CIVJ 5305 [0.5 credit] (CVG 5148)

Prestressed Concrete Design

CIVJ 5306 [0.5 credit] (CVG 5155)

Earthquake Engineering

CIVJ 5307 [0.5 credit] (CVG 5158)

Elements of Bridge Engineering

CIVJ 5308 [0.5 credit] (CVG 5154)

Random Vibrations

CIVJ 5309 [0.5 credit] (CVG 5159)

Long Span Structures

CIVJ 5310 [0.5 credit] (CVG 5311)

Bridge Design

CIVJ 5311 [0.5 credit] (CVG 5312)

Durability of Concrete Structures

CIVJ 5312 [0.5 credit] (CVG 5313)

Seismic Analysis and Design of Concrete Structures

CIVJ 5500 [0.5 credit]

Deep Foundations

CIVJ 5501 [0.5 credit] (CVG 5111)

Hydraulic Structures

CIVJ 5502 [0.5 credit] (CVG 5112)

Computational Hydrodynamics

CIVJ 5503 [0.5 credit] (CVG 5160)

Sediment Transport

CIVJ 5504 [0.5 credit] (CVG 5162)

River Hydraulics

CIVJ 5506 [0.5 credit] (CVG 5120)

Water Resources Systems

CIVJ 5508 [0.5 credit]

Groundwater and Seepage

CIVJ 5509 [0.5 credit] (CVG 5123)

Advanced Topics in Hydrology

CIVJ 5601 [0.5 credit] (CVG 5125)

Statistical Methods in Hydrology

CIVJ 5602 [0.5 credit] (CVG 5126)

Stochastic Hydrology

**CIVJ 5603 [0.5 credit] (CVG 5127)**  
**Hydrologic Systems Analysis**

**CIVJ 5604 [0.5 credit] (CVG 5128)**  
**Water Resources Planning and Policy**

**CIVJ 5605 [0.5 credit] (CVG 5124)**  
**Coastal Engineering**

**CIVJ 5606 [0.5 credit] (CVG 5131)**  
**River Engineering**

**CIVJ 5607 [0.5 credit]**  
**Irrigation and Drainage**

**CIVJ 5803 [0.5 credit] (CVG 5119)**  
**Computational Hydraulics**

**CIVJ 5901 [0.5 credit]**  
**Unit Op of Water Treatment**

**CIVJ 5904 [0.5 credit]**  
**Water and Wastewater Labs**

**CIVJ 5905 [0.5 credit]**  
**Water and Wastewater Proc**

**CIVJ 5906 [0.5 credit]**  
**Solid Waste Disposal**

**CIVJ 5907 [0.5 credit]**  
**Chemistry of Enviro Engin**

**CIVJ 6000 [0.5 credit] (CVG 6300)**  
**Special Topics in Civil Engineering**

**CIVJ 6001 [0.5 credit] (CVG 6301)**  
**Special Topics in Civil Engineering**

**CIVJ 6002 [0.5 credit] (CVG 6302)**  
**Special Topics in Civil Engineering**

**CIVJ 6003 [0.5 credit] (CVG 6303)**  
**Special Topics in Civil Engineering**

**CIVJ 6004 [0.5 credit] (CVG 6304)**  
**Special Topics in Civil Engineering**

**CIVJ 6005 [0.5 credit] (CVG 6305)**  
**Special Topics in Civil Engineering**

**CIVJ 6006 [0.5 credit] (CVG 6306)**  
**Special Topics in Civil Engineering**

**CIVJ 6007 [0.5 credit] (CVG 6307)**  
**Special Topics in Civil Engineering**

**CIVJ 6008 [0.5 credit] (CVG 6308)**  
**Special Topics in Civil Engineering**

**CIVJ 6009 [0.5 credit] (CVG 6309)**  
**Special Topics in Civil Engineering**

**CIVJ 6010 [0.5 credit] (CVG 6310)**  
**Special Topics in Civil Engineering**

**CIVJ 6011 [0.5 credit] (CVG 6311)**  
**Special Topics in Civil Engineering**

**CIVJ 6012 [0.5 credit] (CVG 6312)**  
**Special Topics in Civil Engineering**

**CIVJ 6013 [0.5 credit] (CVG 6313)**  
**Special Topics in Civil Engineering**

**CIVJ 6014 [0.5 credit] (CVG 6314)**  
**Special Topics in Civil Engineering**

**CIVJ 6015 [0.5 credit] (CVG 6315)**  
**Special Topics in Civil Engineering**

**CIVJ 6016 [0.5 credit] (CVG 6316)**  
**Special Topics in Civil Engineering**

**CIVJ 6017 [0.5 credit] (CVG 6317)**  
**Special Topics in Civil Engineering**

**CIVJ 6018 [0.5 credit] (CVG 6318)**  
**Special Topics in Civil Engineering**

**CIVJ 6019 [0.5 credit] (CVG 6019)**  
**Special Topics in Civil Engineering**

**CIVJ 6020 [0.5 credit] (CVG 6320)**  
**Special Topics in Civil Engineering**

**Summer session:** some of the courses listed in this Calendar are offered during the summer. Hours and scheduling for summer session courses will differ significantly from those reported in the fall/winter Calendar. To determine the scheduling and hours for summer session classes, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)

Not all courses listed are offered in a given year. For an up-to-date statement of course offerings for the current session and to determine the term of offering, consult the class schedule at [central.carleton.ca](http://central.carleton.ca)