

DAY 1: Wednesday, July 26, 2023

Session 1: Introduction

- **8:00-8:45** **Welcome to PCSWMM & EPA SWMM (Lecture 1)**
- 8:45-9:45 Design of a stormwater system (Hands-on Exercise 1)

Session 2: SWMM Hydrology

- **10:00-10:45** **Introduction to SWMM Hydrology (Lecture 2)**
- 10:45-12:00 Estimating subcatchment attributes based on GIS data (Hands-on Exercise 2)

Session 3: SWMM Hydraulics

- **13:00-13:45** **Introduction to SWMM Hydraulics (Lecture 3)**
- 13:45-14:45 Design of a stormwater dual-drainage system (Hands-on Exercise 3)
System evaluation using multiple design storms (Hands-on Exercise 4)

Session 4: Watershed delineation/Watershed Planning

- **15:00-15:45** **Watershed delineation and planning (Lecture 4)**
- 15:45-16:30 Automatic watershed delineation with a DEM (Hands-on Exercise 8)

DAY 2: Thursday, July 27, 2023

Session 5: LID Modelling

- **8:00-8:45** **Welcome and Introduction to LID Modelling (Lecture 5)**
- 8:45-9:45 Water quantity with LIDs (Hands-on Exercise 5)

Session 6: Water Quality Modelling and Calibration

- **10:00-10:45** **Water Quality Modelling and SRTC Tool (Lecture 6)**
- 10:45-12:00 Simulating water quality (Valleyfield, Quebec) (Hands-on Exercise 6)
Model calibration using the SRTC tool (Hands-on Exercise 7)

Session 7: Integrated 1D-2D Modelling

- **13:00-13:45** **Integrated 1D-2D Modelling (Lecture 7)**
- 13:45-14:45 Combined 1D-2D urban flood analysis (Hands-on Exercise 8)

Session 8: Model Troubleshooting and Q&A

- **15:00-16:00** **Troubleshooting of Models and Python Scripting (Lecture 8)**
- **16:00-16:30** **Q&A Session**

DAY 3: Friday, July 28, 2023

Session 9: Wastewater Modelling Fundamentals

- **8:00-8:45** **Welcome and Wastewater Collection Systems Modelling (Lecture 9)**
- 8:45-9:45 Building Wastewater Network Hydraulics (Hands-on Exercise 10)

Session 10: Combined Sewer System Models

- **10:00-10:45** **Combined Sewer Systems Models (Lecture 10)**
- 10:45-12:00 Setup a Combined Sewer System Model (Hands-on Exercise 11)

Session 11: Pumps theory and application cases

- **13:00-13:45** **Pump stations theory (Lecture 11)**
- 13:45-14:45 Pump stations application cases (Instructor-lead demo)

Session 12: Other pre and post processing tools

- **15:00-16:00** **Assorted tools for other applications (Lecture 12)**
- **16:00-16:30** **Q&A Session and workshop wrap-up**