



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Design of Urban Stormwater Control Measures

ENVENG 5760

Credit Hours:

3.00 - 3.00

Course Components:

Lecture

Course Description:

Modification of hydrologic methods for urban systems, urban pollutants of concern, stormwater regulations, low impact development, green infrastructure, design of stormwater control measures [(SCMs), also known as Best Management Practices (BMPs)], and discussions of stormwater control performance. Design focused projects that offer real world challenges, diverse set of method and tools.

Prerequisites and Co-requisites:

Prereq: CivilEn 3160 or FABEng 2720, or Grad standing in Engineering, or permission of instructor.

Course Goals / Objectives:

- Understand how urbanization affects runoff hydrology and water quality Understand and explain Ohio's design recommendations for post-construction SCMs
- Explain unit processes responsible for water quality improvement in post-construction SCMs Describe how the water balance, peak flow rates, and runoff timing is impacted by each SCM Explain the maintenance needs of SCMs
- Utilize various hydrologic and water quality models to aid in design of SCMs Develop skills in AutoCAD and ArcMap, including the development of engineering plan sheets with plan, profile, and cross-sectional views.