

## **Course Name:**

Hydraulic System Design

Course Number: 20-261	Credit: 3
Program: Graduate	Course Type: Technical Selective
Prerequisite: -	Corequisite: -

## **Course Description (Objectives):**

The overall goal of this course is to familiarize students with the concepts, design, and implementation of open-channel water conveyance systems, including water intake from various sources, the design of different types of gates and trash racks, and the planning of water transmission and distribution networks. Students will also become acquainted with conveyance and control structures such as inverted siphons, culverts, and stilling basins.

## **Course Content (outline):**

- Chapter 1: Ponds
- Chapter 2: The Valves
- Chapter 3: Free surface transmission systems
- Chapter 4: Design of water distribution systems
- Chapter 5: Transitional control structures

## **References:**

- Manring, Noah. Hydraulic control systems. New York: Wiley, 2005
- Mays, Larry W., ed. Hydraulic design handbook. McGraw-Hill Professional Publishing, 1999.