



**Course Name:**

Intelligent Transportation System

<b>Course Number:</b> 20-555	<b>Credit:</b> 3
<b>Program:</b> Graduate	<b>Course Type:</b> Technical Selective
<b>Prerequisite:</b> -	<b>Corequisite:</b> -

**Course Description (Objectives):**

The main objective of this course is to introduce methods for measuring, estimating, and evaluating the rate and severity of road accidents. Additionally, learning the design methods for longitudinal guardrails, traffic signs, and environmental lighting is one of its specific goals.

**Course Content (outline):**

- Chapter 1: Introduction
- Chapter 2: Human factors
- Chapter 3: Fundamental concepts
- Chapter 4: Road safety management (network evaluation, ...)
- Chapter 5: Design methods (longitudinal guardrails, ...)

**References:**

- Highway Safety Manual (HSM), First Edition, 2010.
- Safe Mobility: Challenges, Methodology and Solutions.
- Dominique Lord and Simon Washington, 2018.