

# Final Examination

Course: Digital Image Processing  
Code: IT701400

## Rules

- Each report is conducted by a group of one, two, or three students.
- The Final report consists of 2 parts: the Programming part and the Report part
- Students who copy their friends's work will be scored 0.
- Students who copy source codes from Internet will be scored 0.
- If a student's work shows signs of copying each other, the student will attend an interview

## General requirements

- Only use OpenCV & Numpy libraries

## Report file requirements

The report will include **2 chapters**:  
- Chapter 1: Solving methods  
- Chapter 2: Experimental steps and results  
The report follows the form of the Faculty of Information Technology.

## Submission

Filenames of the source code and the report files must be the **Student IDs**, for ex.,  
o A group of only one student with student ID 521H1495 will submit a Python source file named 521H1495.py and a report file named 521H1495.pdf  
o A group of two students with student IDs 521H1234 and 522H4321 will submit a Python source file named 521H1234\_522H4321.py and a report file named 521H1234\_522H4321.pdf

## Topic

### Requirements

## Traffic signs Recognization

- **Input:** at least 15 photos containing prohibition signs with different content (signs on a street background). Among of them, 5 photos have at least two signs.
- **Output:**
  - + In each photo, draw rectangular frames surrounding the prohibition sign. Drawing rectangular frames **must be done automatically**, not manually.
  - + In each photo, infer the content of the prohibition sign and output it.