Course Project Description & Guidelines

1. Project

This project is **for Image and/or Video Processing solutions/applications**.
You are free to choose a problem of interest that can be solved using techniques from or related techniques to this course, and that is non-trivial, meaning it should involve meaningful processing, analysis, or interpretation of images/videos.
Examples include (but are not limited to):

- Enhancement, restoration, or filtering
- Feature extraction and detection
- Segmentation or classification
- Motion analysis or tracking
- Video analysis (object detection, activity recognition, etc.)
- Any multimedia application involving digital image or video processing

Each project must demonstrate clear problem formulation, appropriate methods, implementation, and evaluation.

2. Free Topic

Each team is required to explain **one digital image or video processing algorithm/technique** that was **not discussed in class**.
The explanation should clearly cover:

1. The theoretical foundation of the chosen algorithm
2. A small example showing how the algorithm works
3. Evaluation or comparison with related algorithms

Activities

1. Project Report & Poster
Due: *20 December 2025*
Each team must submit:

- A **final project report** (hardcopy + electronic)
- A **poster** (hardcopy + electronic)

The electronic submission must be a **zip file** containing:

- All source code
- Sample outputs
- PDF of the report

Note: Acknowledge all external code used.

2. Project & Free Topic Presentations
Time and room will be announced soon.

➢ **Team Structure**

- Each team may consist of **3-4 students**.
- A **Task Assignment Page** must be included in all submissions, detailing:
    o Tasks performed
    o Contribution percentage for each student
    o Signatures of all team members

Failure to include this page results in a 2% deduction.

Instructions for Submitting Project Reports

➢ **Activities & Deadlines**

1. **Project Report & Poster**

   Due date: 20 December 2025

   Each team must submit:
    - A **typed and bound hardcopy** of the project report
    - An **electronic zip file** including:
        o Source code
        o Dataset (or link if too large)
        o Sample outputs
        o PDF of the report
    - An **A4 project poster** summarizing problem, method, and results.

2. **Presentations**

   Discussions for **Project** and **Free Topic** will be scheduled later (time and room to be announced).

➢ **A Cover Page for the report which includes:**

- Project Title
- Course Number
- Student names, IDs, sections
- Date submitted

➢ **The Project Report Sections may include:**

1. Cover Page
2. Problem Description
3. Data Preparation
4. Methods and Models
5. Results and Evaluation
6. Discussion
7. Appendix
8. Task Assignment Page