



## Department of Electrical and Information Engineering

Faculty of Engineering

University of Ruhuna

### Mini project Instructions

Course	<b>Computer Vision and Image Processing</b>
Course Code	EC6206
Duration	14 weeks
Outcomes	<p>The aim of the mini project is to,</p> <ul style="list-style-type: none"><li>• Apply theoretical knowledge of image processing and computer vision to a practical problem.</li><li>• Encourage creativity and research-oriented problem solving.</li><li>• Develop basic implementation and reporting skills.</li></ul>

### Project Requirement

The group must propose a Mini Project that primarily focuses on Image Processing and Computer Vision techniques.

The project must consist of **at least 65% image processing and computer vision components**.

### Example Project Areas

Students may select topics from, but not limited to, the following areas,

- Image segmentation and object detection
- Image enhancement or restoration
- Feature extraction and pattern recognition
- Medical image analysis
- Face, gesture, or motion detection
- Image classification or recognition using deep learning
- Optical character recognition (OCR)
- Video-based analysis or tracking
- Image-based measurement systems (e.g., counting, defect detection, etc.)

### Group Selection Criteria

- Each group can have **up to 4 members**.
- Students may **freely select their own group members**.
- Groups can include members from **both Electrical and Computer Engineering departments**.
- Once selected, the same group will be **considered for future course group work** as well.
- After finalizing your group members, **fill out the Google Sheet shared with you using the provided link**,
- **When you update the Google Sheet, merge the columns for Group Name, Project Title, Group No., and Proposal Acceptance Status before submission.**

👉 <https://docs.google.com/spreadsheets/d/1eGfdjbWM1fCQ7M69Nf4iWIWqFbtIXXte7FQTpHXfczw/edit?usp=sharing>

**Note:** Groups must be finalized **before submitting the project proposal. The deadline for selecting the group will be 4<sup>th</sup> of February.**

## Proposal Format

1. Each group must prepare and submit a **Mini Project Proposal** using **only the LaTeX template provided**.
  - The template already includes all required sections and formatting.
  - **Do not modify** the structure, margins, or layout.
  - Don't remove the "back to table content" function from the LaTax
  - **Words documents are not allowed.**
2. The proposal must focus on **Image Processing and Computer Vision** concepts.
  - At least **65% of the project content** must involve image processing or computer vision-based components.
  - AI and plagiarism content must be less than 20%.
3. You may include **sketches, diagrams, or figures** if necessary to explain your idea clearly. (if you use sketches, diagrams, or figures or table, add table of contents for each one)
4. **Follow the word limits** indicated in each section of the LaTeX template strictly.
  - Exceeding or falling far below the limit will result in **mark deductions**.
  - Each section has a recommended range.
5. The **clickable Table of Contents** in the template must remain functional.
6. **Proposal length:** The complete proposal should be **6-20 pages** (including figures and table).
7. Use clear academic writing and avoid plagiarism.
8. Save your final proposal as a **PDF file** generated from the LaTeX source.
9. Submit the **PDF version** of the proposal.  
Submission date will be **15<sup>th</sup> of February**. **Submission box will be given by your ELMS.**  
**Rename the PDF file with your group number before submitting the report to ELMS.**