EMINENCE 5.0
2025

SOFTWARE, ELECTRONIC, TELECOMMUNICATION AND ELECTRICAL FIELD
RELATED WORKSHOP SERIES AND COMPETITION

DELEGATES BOOKLET

BY WOMEN IN ENGINEERING (WIE) AFFINITY GROUP,
IEEE STUDENT BRANCH, UNIVERSITY OF RUHUNA

University of Ruhuna
IEEE Student Branch

IEEE Women in Engineering
University of Ruhuna
IEEE Student Branch

WHAT IS EMINENCE 5.0

Eminence 5.0 is a competition organized by the Women in Engineering, IEEE Student Branch of the University of Ruhuna. This event primarily focuses on tasks related to software, electronics, telecommunications, and electrical engineering. The competition will be held as an inter-university competition, and it consists of a webinar series to prepare participants.

OUR OBJECTIVES

- **Ignite Passion**: Inspire careers in Engineering & Science.
- **Build Skills:** Boost teamwork, leadership, and innovation.
- **Hands-On Learning:** Master industry-relevant software & applications.
- **Encourage Collaboration:** Motivate participation in technical challenges.
- **Enhance Reputation**: Showcase the Faculty of Engineering, University of Ruhuna.

WHY YOU SHOULD PARTICIPATE

- **Real-World Experience:** Solve practical engineering challenges.
- **Showcase Innovation:** Present creative and impactful ideas.
- **Professional Growth**: Strengthen technical & soft skills.
- **Networking Opportunities:** Connect with experts, peers, and mentors.
- **Recognition & Pride:** Gain acknowledgment for achievements and institutional excellence.

RULES AND REGULATIONS

Team Guidelines

1. Each team can have a maximum of 4 members.
2. The team leader must be a female participant.
3. Each team must consist of at least 50% female participants.
4. All team members must be from the same university.
5. All 4 members must participate on the competition day. If there is any issue, it must be communicated in advance.

Competition Rules

1. The competition consists of 4 tasks, and submissions for all tasks are mandatory.
2. If two teams have the same marks, the time taken to complete the tasks will be considered.
3. For the second round of the innovation task, if two teams get the same marks, the judging panel's decision will be final.
4. Late participation is not allowed—teams will not be given additional time if they cannot participate on time.
5. Make sure to have a reliable internet connection, using mobile hotspots or personal routers if necessary.

Registration

1. Registration closes at 8:30 a.m.
2. Late registrations will be accepted until 10:00 a.m. Registrations after 10:00 a.m. will not be accepted.

Submission Guidelines

1. All submissions must be done via GitHub. Create a GitHub repository with the following structure:

Repository Name : TeamNumber_TeamName
Folder Structure :

```
├── AI Task
├── Network Task
├── Power Task
└── Innovation
```

1. The GitHub repository must be public.

WHAT WILL BE THE TASKS

Task 01: MATLAB

- Objective: Design the given power system simulation.
- Required Software: MATLAB R2016 or later.
- Time Duration: 3 hours
- Submission: MATLAB Simulink file with figures.
- Marks Allocation: Based on simple and clean diagrams and the level of completeness of the simulation.

Task 02: AI Task

- Objective: Train and evaluate a small machine learning model using a given dataset.
- Dataset & Problem Statement: Provided via Kaggle or a similar platform.
- Task Requirements:

1. Build a machine learning model.
2. Train the model on the provided dataset.
3. Submit your predictions as instructed.

- Marks Allocation: Based on model accuracy, performance, code quality, and overall effectiveness.

Task 03: Network Simulation

- Objective: Configure the given network according to provided specifications.
- Recommended Software: Packet Tracer.
- Submission: Work file with completed configuration.
- Marks Allocation: Based on the completion and correctness of the task.

Task 04: Innovation

- Objective: Present an electronic design. This can be a pre-implemented design or an innovative idea. Innovative ideas will be given special consideration.

Requirements for Students:

- **Prototype or Simulation:** Students must prepare a functional prototype. If that is not possible, provide comprehensive simulations demonstrating functionality.
- **Presentation:**
  - Maximum 5 slides
  - Slides must be uploaded to the GitHub folder before the task starts.
  - One female participant must present.
  - Time: 10 minutes total
    - Demonstration: 5 minutes
    - Viva/Q&A: 5 minutes (all team members can answer)

- Marks Allocation: Presentation skills ,Innovative ideas, Implementation and Viva

Prototypes and Simulations:

- Functional prototypes are highly regarded.
- If a prototype cannot be built, include comprehensive simulations to demonstrate functionality.

PRE PREPERATIONS

Required Items for All Tasks

- University ID
- Laptop
- Internet connection (personal router or mobile hotspot)

Task-wise Software Requirements

Task	**Software / Platform**
Task 1 – MATLAB	MATLAB R2016 or later
Task 2 – Network Simulation	Cisco Packet Tracer (latest version 8.2.1.0118)
Task 3 – AI Task	Google Colab or Kaggle (or local environments like VS Code / Anaconda)
Task 4 – Innovation	Presentation, prototype/simulation software as needed

5) COMPETITION DETAILS

- The competition will be held at **New Computer Center at Faculty of Engineering University of Ruhuna**. On **4th October 2025** From 8.30 am onwards

- Around 150 university students from the University of Ruhuna and other universities will participate in the event.

- Lecturers from the Faculty of Engineering and Graduates from the Faculty of Engineering are invited to the judging panel.

AWARDS & GIFTS

- **Top 3 Teams:** Cash prizes and certificates for the first, second, and third places (based on total marks from all four tasks).
- **Best Innovation:** Cash prize and certificate awarded to the winner. Only the top 5 innovations from Round One advance to Round Two for final selection.
- **All Participants:** Receive a participation certificate.

AGENDA

4th October 2025
At NCC UoR FoE

07.30 – 08.30 am	Team Registration
08.30 – 09.15 am	Welcome and Introduction
09.15 – 09.30 am	Preparation for the Competition
09.30 – 12.00 am	Packet Tracer Task(1.5 hours) MATLAB Task (2 hours) AI Task
12.00 – 12.30 am	Lunch Break
12.30 – 02.30 pm	Electronic Design 1st Round (2 Hours)
02.30 – 02.45 pm	Sponsors' Speeches During the Time to Select the Teams That Will Qualify for the Final Round.
02.45 – 04.00 pm	Electronic Design Final Round
04.00 – 04.30 pm	Awarding & Closing Ceremony

CONTACT FOR FURTHER DETAILS

Subhani Harshani

Eminence 5.0 - Co chair
IEEE Student Branch
University of Ruhuna

Subhaniuduwawala1234@gmail.com

077 930 7650

Punsara Sewwandi

Eminence 5.0 - Co chair
IEEE Student Branch
University of Ruhuna

punsarasewwandi03@gmail.com

076 296 5008

Thanujaya Thennakoon

Eminence 5.0 Program - Team Lead
IEEE Student Branch
University of Ruhuna

thanujayaabtennekoon@gmail.com

076 325 3332