

## 17<sup>th</sup> IEEE UAE STUDENT DAY, 2023

### April 29, 2023

## **Senior Design Project (SDP) Competition**

## Poster/Demo

## Category No. 1: Communications and Electronics Category No. 2: Computing and Robotics Category No. 3: Power and Renewable Energy

#### **GENERAL INFORMATION**

This competition is intended to give students in the Senior Year of their undergraduate study program the opportunity to demonstrate their graduation projects through a poster and/or an actual demo of the system.

#### **COMPETITION RULES:**

- 1. Undergraduate engineering students within the UAE are eligible to participate.
- 2. Each institution can submit a maximum of two projects per category for judging.
- 3. Display of a Roll-up poster describing the operation of the system and its salient features.
- 4. Each team will be given 15 minutes to demonstrate/explain all aspects of their system and answer the judges' questions.
- 5. Each team will be provided with a standard table and a place for the poster.

#### **CRITERIA FOR JUDGING:**

The judging criteria will include:

- Originality and Creativity of the Student's contribution
- Quality of technical content
- Project Results
- Attention to non-technical aspects of the design
- Professionalism in poster and oral presentation

Detailed evaluation form with guidelines is given on the next page.



# **UAE SECTION**

| No. | Evaluation Criteria   |  | Weight | Grade |
|-----|---|--|--------|-------|
| 1   | Originality and Creativity: The mark is based on how well the following questions are answered:             |  |        |       |
|     | <ul> <li>How much creativity is there in the design of<br/>the project?</li> </ul>                          | Is the project useful?   | /10    |       |
|     | Is the design of the project original?  | <ul> <li>Did the team demonstrate engineering knowledge in<br/>solving design problems?</li> </ul>   |        |       |
| 2   | Technical Content & Final System: The mark is based on how well the following questions are answered:       |  |        |       |
|     | <ul> <li>Does the design meet the project<br/>requirements &amp; specification?</li> </ul>                  | <ul> <li>Is the hardware and/or software fully implemented<br/>and/or simulated?</li> </ul>  |        |       |
|     | Is the implementation modular?  | <ul> <li>Is the quality of the final system high/low (<i>i.e.</i><br/>elegant/ robust imp. consistent with industrial<br/>standards)?</li> </ul> | /40    |       |
|     | Is the design safe and sound?   | Do the students demonstrate mastery of the domain?   |        |       |
| 3   | Project Results: The mark is based on how well the following questions are answered:                        |  |        |       |
|     | <ul> <li>Are the test cases clearly identified and test<br/>results clearly demonstrated?</li> </ul>        | <ul> <li>Has the team compared the system performance<br/>with that of other systems?</li> </ul>   | /20    |       |
|     | <ul> <li>Are the results comprehensive, convincing<br/>and achieve the project objectives?</li> </ul>       | Are all faults/limitations clearly identified?   |        |       |
| 4   | Non-technical Design Aspects: The mark is based on how well the following questions are answered:           |  |        |       |
|     | <ul> <li>Did the team consider the ethical, social, and<br/>environmental impact of the project?</li> </ul> | <ul> <li>Did the team pay attention to human system<br/>interaction and product aesthetic related issues?</li> </ul>                             | /10    |       |
| 5   | Oral Presentation: The mark is based on how well the following questions are answered:                      |  |        |       |
|     | Jid the team cover all the relevant issues?   | - Did the team make the subject matter interesting?  | /10    |       |
|     | - Was the presentation clear and concise?   | - Did the team answer questions well?  |        |       |
|     | Jid the team show confidence in the subject<br>matter?  | <ul> <li>Did all team members participate in the various<br/>aspects of oral presentation?</li> </ul>  |        |       |
| 6   | Project Poster: The mark is based on how well the following questions are answered:                         |  |        |       |
|     | <ul> <li>Does the poster size conform to the<br/>competition specifications?</li> </ul>                     | Is the poster informative and logically organized?   | /10    |       |
|     | <ul> <li>Does the poster cover all key aspects of the<br/>project?</li> </ul>                               | <ul> <li>Are the poster text, figures &amp; tables clear and<br/>readable from a reasonable distance?</li> </ul>                                 |        |       |
|     | Total*  |  | /100   |       |

#### \* Classification

| 90%-100%      | Project is an outstanding piece of work. Presentation and poster are of professional standard. |  |  |
|---------------|--|--|--|
| 80%-89%       | Project is an excellent piece of work. Presentation and poster are excellent.                  |  |  |
| 70%-79%       | Project, presentation and poster are very good. All design aims are met.                       |  |  |
| 60%-69%       | Project, presentation and poster are good. Most design aims are met.                           |  |  |
| Less than 60% | Minimum core of design aims has been met. Presentation and poster are satisfactory.            |  |  |