About the IDEA: Industry4WRD Challenge

The IDEA Industry4WRD is a higher institution level design idea pitching competition run by IEM CESIG, co-organised with IEM YES & AER-MFG. The name comes from what is known as the Fourth Industrial Revolution, involving 11 enablers which are Systems Integration, Big Data Analytics, Artificial Intelligent, Robotics, etc. The Malaysia National Policy on Industry 4.0 (Industry4WRD) has been launched by Prime Minister, Tun Dr. Mahathir Mohammad on 31 October 2018. The IDEA respond the call for digital transformation of manufacturing sector and its related services. IEM is strongly supporting and promoting Industry4WRD. The IDEA Industry4WRD aims to showcase and recognise the capabilities of engineering students in Fourth Industrial Revolution. A prize will be given to the team that presents the best innovation to meet any challenge relating to Industry 4.0.

DESIGN CHALLENGE!!!
Your team is required to propose an innovative strategy on the application of Industry4WRD technology enablers for a Plastics Manufacturing Company transformation towards Industry 4.0 (Refer to Appendix 1 for the challenges)

Who can participate?
The **IDEA** is open for higher learning institution engineering student. (University, University College, Polytechnic, College)

How many people can be on a team?
Teams of 4 are recommended, but teams can have 3-5 members.

Can a university have more than one team?
Yes, provided the teams do not share information or work together in any way.

What will I learn?
Through our competition, you will be tested and improve on your engineering analytical, time management, innovation and presentation skills!

Is there a prize?
Yes! We are excited to announce that IEM is providing a grand prize of RM800 for the first place team, RM500 for second place, and RM300 for third place.

What is the Judging Criteria?
We are looking for innovative applications that can be developed for industrial use.
➤ Innovation and novelty
➤ Relevance to Industry4WRD
➤ Practicality
➤ Productivity Improvement
➤ Presentation skills

Submission Details:
Applicants must submit a 250-word summary, a complete proposal and a 60-90 sec video. The video does not need to be professional (using mobile phones is fine). Video need to upload to YouTube Channel.

Format:
The competition takes place in 2 stages: the First round and the Final round. In the First round, up to 10 entries will be shortlisted and invited to the Final round. The First Round will be start from 1 March 2021 until 31 May 2021.

The Final round will be held virtually on 3 July 2021. This will be a 10-minute presentation followed by up to 5 minutes of questions from the panel.

First Round:
The deadline for competition entry is 31 May 2021 Monday at 23.59Hrs

The judges will evaluate the viability of your innovative solution based on the information provided in the 250-word summary, proposal and 30-60 second video. The video need to upload to YouTube Channel.

Entrants can submit more than one entry, and the judges will be assessing how well developed your innovative solution is.

All finalists will be notified by 15 June 2021. An email will be sent to the lead entrant only, who will need to confirm within 48 hours that they can present to the panel as specified.

Final Round
Each finalist will be asked to present to the Final Round Judging Panel. Each presentation will last no more than 10 minutes and will be followed by up to 5 minutes of questioning. The presentation can be in any format. All member of the submitting team must attend and make the presentation. Any Finalist not able to present for any reason will be disqualified from the competition.

Competition Schedule

Competition Open: **1 March 2021**

Submission Deadline: **31 May 2021**

Finalists will be announced: **15 June 2021**

Finalists Presentations: **3 July 2021**

Virtual Presentations will take place on 3 July 2021 (Saturday). The exact timings of finalist's presentations will be confirmed in June 2021.

THE INSTITUTION OF ENGINEERS, MALAYSIA

2021 IEM ENGINEERING STUDENT DESIGN CHALLENGE (IDEA)

THEME: Industry4WRD

Registration Closing Date 31 May 2021

Registration Fees:
IEM Student members: RM100/team
Non IEM members: RM200/team

Prizes (with IEM Certificates)
1st Placing: RM800
2nd Placing: RM500
3rd Placing: RM300
5 Consolation Prize: RM100/Team

Organised by:
CONSULTING ENGINEERS, SPECIAL INTEREST GROUP (CESIG)
&
IEM Young Engineers Section (YES)

Enquiry
Ms. Roselein
Email: **roselein@iem.org.my**
Tel. No.: 603–7968 4003

Instructions for submitting your entry:

To enter the IDEA, email the following two documents to @iem.org.my by the deadline of **31 May 2021 at 23:59Hrs** Registration form and Executive Summary (Word doc)

1. Video [max 90 seconds] in YouTube Channel with links

The documents should be sent as attachments within one e-mail. If your attachments exceed the maximum file size of 10MB please contact **roselein@iem.org.my** for alternative arrangements.

GOOD LUCK & REMEMBER: We are looking for:

*Innovation and novelty * Relevance to Industry 4.0*
** Practicality * Presentation skills*

Rules & Regulations

A. Prizes

a) Cash prizes will be awarded to the first, second and third place winners. There will be separate, independent, prizes for the poster and presentation elements of the challenge.

b) The team judged to have produced the "**Best Video**" shall be awarded a further cash prize of RM200, to be divided equally between the members.

c) The team judged to have given the "**Best Presentation**" shall be awarded a further cash prize of RM200, to be divided equally between the members.

d) The team judged by peer review to have produced the "**Most Innovative Proposal**" will receive a cash prize of RM200, to be divided equally between the members.

e) The institution judged to be the "**Most Supportive Institution**" will receive a cash prize of RM300, to be given to the IEM Student Section.

f) Certificates of recognition will be awarded to all participants, winning team members and the winning institution.

B. Rules for the Video

The video is to demonstrate the pitching skills of a team. Applicants must submit a 60-90 second video. The video does not need to be professional (using mobile phones is fine). Video need to upload to YouTube Channel.

C. Rules for the Presentation

The presentation is a chance for ten final team to sell its design solution to the Challenge using verbal and presentational skills.

a) The maximum length of the presentation is Ten (10) minutes, plus typically Five (5) minutes for questions. It can be delivered by any number of team members, from one person to all members of the team.

b) In producing their presentations, participants should take account of the judging criteria.

c) Presentations will be assessed according to the competition scheme and will be judged by one representative from each university. Universities will not mark their own presentation.

d) Each team will be required to answer questions on their proposal.

D. Enforcement of the Rules

a) On matters relating to evaluation procedure, the authority will be the chair of the 2021 IDEA organizing committee or his/her delegated representative(s).

b) The judging panel comprises representative from the organizing committee and the CESIG Chairman.

c) The decisions of the panel of judges will be final.

d) In addition to the rules for the final outlined above, universities are responsible for internally ensuring that the spirit of the competition is adhered to during the design prior to the competition Final.

e) If a team wishes to lodge a complaint or appeal, or to query a procedure or rule infringement they must do so through the chair of the organizing committee or delegated representative. The result of the subsequent decision is final, with no further appeal.

Please complete and submit this registration form, YouTube link and 250-word summary before or on **15 Mar 2020 before or at 11.59pm**. The completed registration form and 1 page concept paper should be emailed to **roselein@iem.org.my**

If you have any enquiries about this registration form, rules and regulations of the competition, please contact the Organizing Secretariat at

Tel : **03-79684001/2** Email: **roselein@iem.org.my**

- All fields are mandatory to be filled.

PART A: REGISTRATION FORM

Name of Team:
_____

Educational Institution Name:

No.	Name	IEM Student Membership No. (if any)
1	*Leader:*	
2		
3		
4		
5		

PART B: CONTACT DETAILS

ADDRESS 1: (Corresponding and mailing address)	
CITY:	
STATE:	
POSTCODE:	
EMAIL ADDRESS:	
MOBILE NUMBER:	

PART C: PAYMENT DETAIL

Payment can be made via bank transfer, cheque or banker's draft to IEM. The payment detail will be informed via email upon submission of registration form.

PART D: DECLARATION

*All the participants must read and sign the following statement:
We/I declare that the information given on this form is correct. We/I understand and agree that if we/I make any false statements, submit false information or fail to disclose information requested in this application, we/I will be disqualified from this competition.
We/I have read and fully understand the guideline or rules and regulation in which governing the IEM ENGINEERING STUDENT DESIGN CHALLENGE (IDEA) and agree to abide by those rules and regulations.
Participant(s) Signature(s):

No.	Name	NRIC No./ Passport No.	Signature	Date
1				
2				
3				
4				
5				