

High Gear for New Technology, a Mindset for Change

THE HKIE JOINT INSTITUTES COMPETITION 2013/2014

Rules and Regulations

Organised by:

The Hong Kong Institution of Engineers (HKIE)
The HKIE - Young Members Committee

Supported by:

The HKIE Student Chapter - City University of Hong Kong
The HKIE Student Chapter - Hong Kong Institute of Vocational Education (Chai Wan)
The HKIE Student Chapter - Hong Kong Institute of Vocational Education (Sha Tin)
The HKIE Student Chapter - Hong Kong Institute of Vocational Education (Tsing Yi)

The HKIE Student Chapter - The Chinese University of Hong Kong
The HKIE Student Chapter - The Hong Kong Polytechnic University
The HKIE Student Chapter - The Hong Kong University of Science and Technology
The HKIE Student Chapter - The University of Hong Kong

Proposal of The HKIE Joint Institutes Competition

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1) Introduction

A unique livelihood gathers what we think, feel and do day by day. Innovation is the crucial process of developing products, services or ideas. It creates an infinite frontier for new technology application. New technology allows people around the world to communicate multilaterally and strive for the best in their life. New technology prompts human civilisation to advance eventually. Therefore, new technology is beneficial to us, the society as a whole, let alone the next generation.

With the innovative ideas and application of new technology, we would be able to use our limited resources in our Mother Earth in a better way. As engineering students, we can utilise our creativity and apply our engineering knowledge to daily life for developing and improving our livelihood. Thus, the quality of living of the entire community can be further enhanced.

To encourage the students to be self-conscious of the importance of enhancing our livelihood and to contribute to our community in an innovative way, the Joint Institutes Competition (“the Competition”) is organised by the Hong Kong Institution of Engineers (HKIE), the Young Members Committee and supported by the Student Chapters to promote both the innovation and the improvement of our livelihood. It is one of the highlights in the HKIE Hi-Tech Fiesta 2014 to be held on Sunday, 8 June 2014 at Kowloonbay International Trade & Exhibition Centre.

The theme of the competition this year (2014) is “**High Gear for New Technology, a Mindset for Change**”. Technology and innovation have always enhanced our quality of life. Since the 21st century begins, high technology products keep creating positive impacts to our life and changing the world. Our world has gone smaller, smarter and simpler.

The competition aims to facilitate the students to propose innovative idea and solution with the application of the latest high technology to improve our livelihood and create a better world. The

competition is divided into two stages, the Heat and the Final. The format and rules are discussed in Part 7.

2) Purposes

- i) To promote the image of the HKIE, the HKIE-PMC and the HKIE Student Chapters.
- ii) To provide opportunities for students to apply their engineering knowledge from academic theories to practice.
- iii) To increase students' awareness of the society and encourage them to conceive some improvement for the community by using their engineering expertise.
- iv) To encourage students to deliberate matters in an innovative and critical way.
- v) To enhance the relationship and exchange ideas among students of different institutes.
- vi) To enhance students' knowledge and awareness on latest high technology and relevant applications.

3) Objectives

- i) To eliminate an existing problem and enhance quality of living through innovation with high technologies.
- ii) To raise the degree of introspection to social problems surrounding us.
- iii) To demonstrate the social responsibilities retained as engineers.

4) Theme

- i) The content of the competition is related to the improvement of our livelihood through application of high technologies.
- ii) The concept of the competition can be described as a “No Frame” competition, which no constraints or limitations will be set on the scopes to be focused, except it is engineering related. And a certain degree of freedom is left to the contestants to decide upon the content of the report and presentation methods in the final round competition.
- iii) Contestants are allowed to choose any topics related to the current issues, which may require modification, in the society. Contestants shall develop innovative ideas and solutions or ideas from engineering perspective against any circumstances (including but not limited to any service/situation/product/system/process) which call for improvement or modification. Preferably, the proposed solutions or ideas should be the result of cross-disciplinary collaboration.
- iv) The idea or solutions should have strong back up with realistic data or modeling result. It is also suggested to be sustainable and have consideration of other major aspects such as economic, social, environment, etc.
- v) Some issues will be provided as choices in parallel in case the participants do not have ideas on what issue to be discussed with as follows:
 - i) Public transportation
 - ii) Mobility of disable people
 - iii) Disaster recovery
 - iv) Reduction of carbon foot-print
 - v) Safety of daily life

5) Eligibility

- i) All student members of the HKIE are eligible to apply. Application as a student member is free of charge. Application form can be downloaded from the HKIE webpage: <http://www.hkie.org.hk/docs/downloads/membership/forms/FORM1S.pdf>
- ii) Contestants should form a team of 3 to 5 members.
- iii) Students are encouraged to form a team composing of different disciplines.
- iv) Each student can only participate in one team.

6) Time Schedule

Activity	Date
Submission of Heat Applications	15 Feb 2014 (Sat)
Interview	End-Feb 2014
Announcement of Result of Heat	Mid-March 2014
Submission of Final Reports	2 May 2014 (Fri)
Booth Exhibition, Presentation and Prize Presentation (in the <i>HKIE Hi-Tech Fiesta 2014</i>)	8 June 2014 (Sun)

7) Competition Format

7.1 Application Form

Information shall be indicated in application form:

- Name of Team
- Personal Information of Contestant(s)
- HKIE Membership numbers

Completed application form shall be sent to hkie.jic.2013@gmail.com with the subject “The HKIE Joint Institutes Competition 2013/2014 – Application”. The deadline of application is 23:59 (Hong Kong Time) on 15 February 2014 (Saturday), referring to the time when the email is successfully sent. Late submissions will not be entertained.

7.2 Heat

7.2.1 Format

- i) The Heat will be conducted in the form of proposal.
- ii) The proposal should be written in English.
- iii) The proposal is limited to four A4 pages and one additional A3 page. The A3 page is for graphical presentation purpose only.
- iv) Font size should be of size 12 and with single line spacing in the proposal. Times New Roman should be used as the font style.
- v) The overall proposal format is aimed to be neat, concise and creative.
- vi) The proposal should consist of problem identification, supporting data and preliminary innovative solutions.

Problem Identification

- 2-3 photos of the targeted issue with brief description.
- Description and analysis of each photo is limited to 150 words.
- The photos, descriptions and analyses shall be included in the four A4 pages and/or the one A3 page mentioned in item iii) above.

Supporting Data

- 1 page of supporting data and point-of-view for the cause of the issue as analysis,

(For example: gathering data from relevant reports, interviewing the public, interviewing district councilors, conducting surveys using questionnaires etc.)

Preliminary Innovative Solutions

- 1 page of preliminary innovative ideas or solutions for improving the issue shall be provided.
- A brief background session of the selected high technologies.
- Method of presentation of the ideas is not confined to word description. Students can present their ideas in drawings, diagrams, etc.

7.2.2 Submission

Submission Attachment

The submission attachment should contain:

- Proposal in PDF form

Submission Method

All items in the Submission Attachment should be sent by email to hkie.jic.2013@gmail.com with the subject "The HKIE Joint Institutes Competition 2013/2014 – Heat Submission". The name of the team and the name of the university/institute should be quoted in the email.

Submission Deadline

- i) The deadline of entries submission is 23:59 (Hong Kong Time) on 15 February 2014 (Saturday), referring to the time when the email is successfully sent.
- ii) Late submissions will not be entertained.

Successful Submission

Submission is valid only if:

- i) Contestants submit the entries with proposal of the defined format; and,
- ii) Contestants will receive an email acknowledgement on or before 22 February 2014.

If the contestants cannot receive an email acknowledgement, please contact us by email at hkie.jic.2013@gmail.com after 22 February 2014.

Entries will not be returned unless specifically requested.

7.2.3 Interview

- i) All teams will have a 10-minute ONLY presentation session to introduce and elaborate their ideas to the judges and they are allowed to use simple presentation tools e.g. PowerPoint. The judges may interrupt the presentation after the 10-minute time limit.
- ii) The presentation should be conducted in English.
- iii) Interviewee(s) may receive questions from the judges in English or Chinese during the interview. If the question is asked in English, the interviewee(s) should answer in English, vice versa.
- iv) The whole interview session (including the presentation) will last for about 20 minutes.

7.2.4 Judging

Panel of Judges

- i) The panel of judges will consist of registered engineers in different disciplines and each interview session will be in charge by at least two judges.
- ii) Judges may ask interviewee(s) questions in English or Chinese for further clarification and interrupt the interviewee(s) anytime if the answer is sufficient.

Judging Criteria

Each team will receive the average mark from the judges as its final mark.

The weighting of the judging criteria are listed as below:

- a) Project selection, concept and definition (30%)
- b) Analysis of the issue with supporting data (20%)
- c) Innovative suggestions and originality (20%)
- d) Application of high technologies (10%)
- e) Feasibility and sustainability (e.g. Social, Economic, Environmental) (10%)
- f) Presentation Skill (10%)

7.2.5 Acknowledgement

Participating certificate(s) will be issued to every contestant in the teams who have joined the Heat.

7.3 Final

7.3.1 Eligibility

- i) Maximum eight entries with the highest average marks will enter the Final.
- ii) The short-listed contestants will be announced in mid - March 2014.

7.3.2 Format

- i) The Final will be conducted in the form of:
 - a) Submission of report
 - b) A one-day booth exhibition and presentation
- ii) The report will be limited to six A4 pages and two A3 pages, excluding the cover page and the Table of Contents page. The two A3 pages will be for graphical presentation only. Font size should be of size 12 and with single line spacing in the report. Times New Roman should be used as the font style.
- iii) Judging criteria will be distributed to the short-listed teams as a guideline for them to consider what to be included into the report.
- iv) An exhibition will be organised to promote the contestants' findings and ideas to the general public during "The HKIE Hi-Tech Fiesta 2014".
- v) Each team is required to deliver a presentation to the judges on the day of exhibition. The format of presentation is not bounded with limitations. Contestants will conduct presentations in any formats or methods, for example, video clips, models, etc. The presentation should be able to demonstrate the ideas in both static displays, with the elaboration of a narrator. Each team has a maximum of HK\$3,000 budget for their booth exhibition and presentation. Any claims of cost from the budget require a proof of the expenditure eg official receipts.
- vi) The content of the presentation may cover the following items: coherence between the proposal and the theme, innovative suggestions, implementation suggestions, continuous improvement, etc.

7.3.3 Submission of Report

Submission Attachment

The submission attachment should contain

- Report in PDF form
- Appendix(es) (if any)

Submission Method

All items in the Submission Attachment should be sent by email to hkie.jic.2013@gmail.com, with the subject "The HKIE Joint Institutes Competition 2013/2014 – Final Submission". The name of the team and the name of the university/institute should be quoted in the email.

Submission Deadline

- The deadline of entries submission is 23:59 on 2 May 2014, referring to the time when the email is successfully sent.
- Late submissions will not be entertained. If the report is not submitted by the deadline, the team will be assumed to withdraw from the Competition.

Successful Submission

Contestants will receive an email acknowledgement on or before 5 May 2014 upon successful submission of report.

If the contestants cannot receive an email acknowledgement, please contact us by email after 5 May 2014.

Entries will not be returned unless specifically requested.

7.3.4 Presentation and Exhibition

The presentation and the exhibition of the Final will be held on 8 June 2014 (Sunday). Details of the presentation and exhibition will be released on or before 5 May 2014

7.3.5 Judging

Panel of Judges

The panel of judges will consist of three to five members of the Organising Committee of The HKIE Hi-Tech Fiesta 2014 or guests.

Judging Criteria

- i) For the first three places, the marks will be given with the following judging criteria: 60% from the presentation and 40% from the content of the final report.
- ii) The weighting of the judging criteria for the final report are listed as below:
 - a) Project selection, concept and analysis (20%)
 - b) Innovative and high technologies suggested (40%)
 - c) Suggestions on implementation (10%)
 - d) Value on economical, social and environmental aspects (20%)
 - e) Review and continuous improvement (10%)
- iii) During the exhibition, judges will visit the booth of each team and receive a maximum of 5 minutes presentation from each team following a maximum of 5 minutes Q & A session.
- iv) The suggested weighting of the judging criteria for the final presentation are listed as below:
 - A. Presentation quality, skill and clarity (20%)
 - B. Booth design and features parallel to the theme of the Fiesta (20%)
 - C. Overall creativity (20%)
 - D. Engineering goals and values achieved (20%)
 - E. Thoroughness and effort (20%)
- v) There is also one “My Favourite Project” Award and it will be judged by the public voting at the HKIE High-Tech Fiesta 2014 and the team with the highest votes will be granted with the Award. The voting will begin at 9:00am and end at 3:00pm.

7.3.6 Awards

There will be one Gold, one Silver, one Bronze, at maximum five Merits Awards and one “My Favourite Project” Award. The Gold, Silver, Bronze and the Merits Awards will be selected by the Panel of Judges. “My Favourite Project” Award will be voted by the general public in the exhibition for the Final. Participating certificate(s) will be issued to each contestant in the teams who are succeeded in joining the Final. Certificate(s) of Merits will be issued to each contestant in the teams who win the merit award. A certificate for “My Favourite Project” Award will be issued to the team who wins the foresaid award. Trophies will be presented to each contestant in the teams who win the Gold, Silver and Bronze Awards. Each team may only win one of the Gold, Silver, Bronze Awards and the Merits; while the foresaid team can win the “My Favourite Project” Award separately.

The distribution for the cash prizes is:

Gold Award (1 team):	HK \$30,000
Silver Award (1 team):	HK \$20,000
Bronze Award (1 team):	HK \$10,000
Merits (at maximum 5 teams):	HK \$5,000 for each team
“My Favourite Project” Award (1 team):	HK \$5,000

8) Enquiry

For enquiries, please email to hkie.jic.2013@gmail.com, with the subject “The HKIE Joint Institutes Competition 2013/2014 – Enquiry”.

9) Remarks

- i) The decisions made by the panel of judges are final and no appeal will be accepted.
- ii) The Organising Committee reserves all rights of the competition except the result of judgment.
- iii) If entries submitted involve adoption of wordings or graphics which are protected by copyrights, the participant must state the origins. Contestants who fail to do so may be disqualified.
- iv) Contestants are responsible for any privacy and confidentiality issues encountered in all their submissions and products. Contestants should assume that any information shown on their submissions and the exhibition booth could be released to the public.
- v) The Organising Committee owns the right of printing, copying and usage of the submissions and products from the contestants.