

Briefing Session of The 21st IET/MATE Hong Kong Regional Of the MATE ROV Competition

Organizing Committee,
The Institution of Engineering and Technology
(IET) Hong Kong

November 08, 2025



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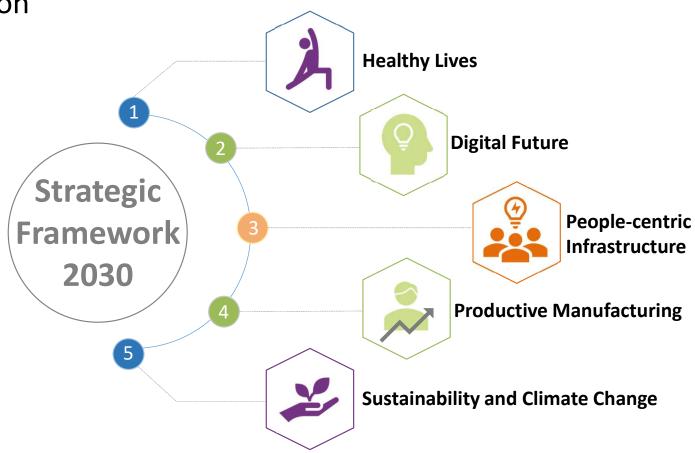
We are the professional home for engineers and technicians across all technical disciplines.



IET - an Innovative Institution

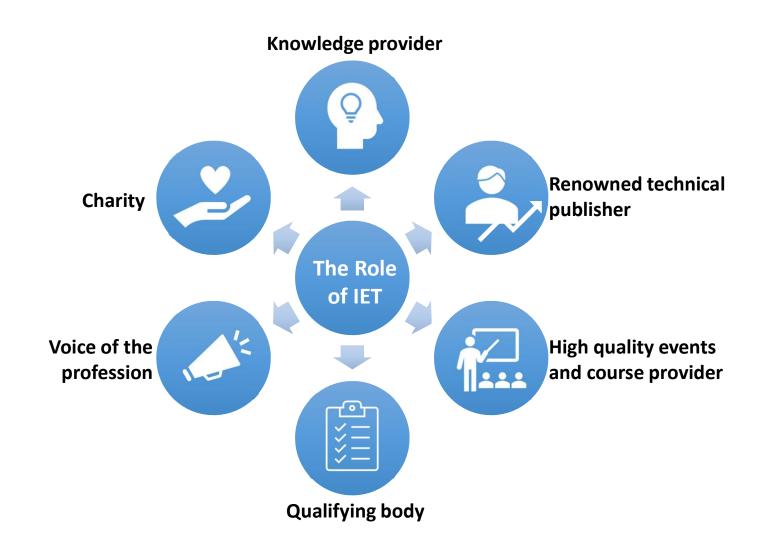
• Strategic Framework 2030: targeting a better world for our next

generation



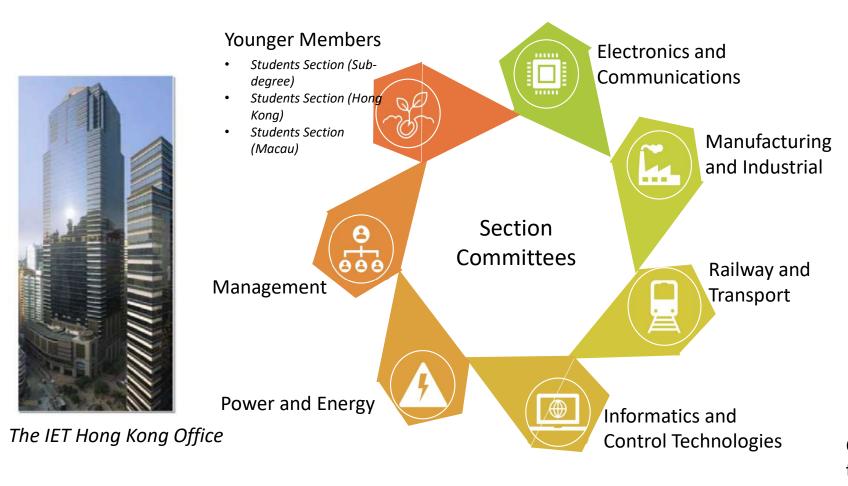


The Role of IET





IET Hong Kong Local Network





Connect to our Professionals through Facebook page



Promote and Engage with STEAM education

- In Hong Kong, we organize many STEAM activities over many years.
- This marks our 21st year collaborating with MATE on the ROV competition.
- New website: https://iethkrov.wixsite.com/iethkrov





Stay tune with our ROV competition website



About Hong Kong Regional Competition

Organizer:



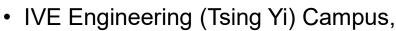
The Institution of Engineering and Technology (IET) Hong Kong

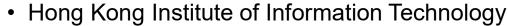




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Supporting Organizations

Co-organizer: MATE II









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Recent Achievement of Hong Kong Teams

Explorer Class:

- 2nd Runner Up in World Championship 2016
- Champion in World Championship 2017
- Champion in World Championship 2019, two other teams were fourth and fifth positions
- 2nd Runner Up in World Championship 2024
- Many awards such as MVPs, Marketing Display, Engineering Presentation, etc in past 10 years

Ranger Class

- 1st Runner Up in World Championship 2024
- 1st Runner Up in World Championship 2025



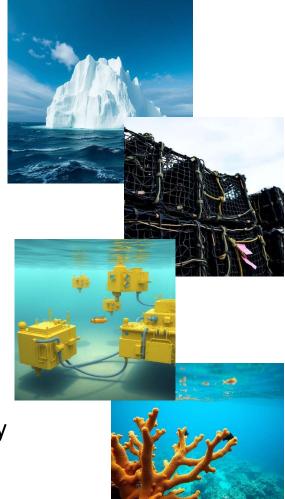
Theme of MATE ROV 2026

- Pushing Performance: Science, Technology, & Discovery in Harsh Environments
 - Raising awareness about the role of Earth's frozen regions, called the cryosphere, and highlighting priorities of the Decade of Action for Cryospheric Sciences (2025-2034).
- The competition focuses on real-world problems in this environment, with specific mission tasks including:
 - Task #1: Seabed 2023: A Kaleidoscope of Corals in Cold Water
 - Task #2: Smart Atlantic Alliance: Better Information, Better Decisions
 - Task #3: Wind-Powered Offshore Oil Platform: Scalable Solutions for Global Energy Needs
 - Task #4: MATE Floats Under the Ice
- The World Championship event will be hosted in Newfoundland and Labrador, Canada, a location with a deep connection to marine science and a fitting backdrop for the theme.



Theme of MATE ROV 2026

- The theme of the MATE ROV 2026 competition is the role of Earth's frozen regions, known as the cryosphere.
- The competition focuses on real-world challenges related to this theme, with mission tasks that involve:
 - Tracking icebergs that could threaten offshore oil platforms.
 - **Deploying whale-safe fishing gear**, such as a special lobster pot with an acoustic release mechanism, to reduce marine mammal entanglement.
 - Servicing a subsea observatory by replacing an eDNA biodiversity sensor.
 - Surveying coral in cold water as part of a seabed mapping initiative.



Typically, tasks will be localized based on the environment at the contest venues.

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About Hong Kong Regional Competition

- The IET Hong Kong will invite teams from Hong Kong, Macau, Taiwan and China to take part in the final contest day of the Hong Kong Regional of MATE International ROV Competition.
- We have 3 classes:
 - Explorer Class: Recommend for teams from tertiary education
 - Ranger Class: Recommend for teams from secondary school
 - Scout Class: Recommend for beginners (primary and secondary school)
- The winning teams of Explorer and Ranger classes will be nominated to join the MATE International Competition.



New initiatives by IET Hong Kong

- To promote ROV for primary students, secondary students and public, Experience Day is launched since April 2023
- It is recognized as one of programs under

• "Innovative Engineering Education Programme for Primary and Secondary

Schools" (中小學創新工程教育計劃)







New initiatives by IET Hong Kong

• Activities:

- Gane Booths showcasing Multi-Disciplinary Engineering
- Booths showcasing ready-made ROVs at different classes
- Mini-lecture on basic knowledge of underwater robotics
- Driving experience of ROVs at the Swimming pool













Key Dates & Venue

- Contest Days: April 25 and 26, 2026
- Venue: IVE (Tsing Yi Campus)
 - Opening and Closing Ceremonies: Lecture Theater
 - Pit Crew Venue, Presentation Venue: Classrooms
 - Mission Venue: Outdoor Swimming Pool



Depth: 1.4 m - 2.0 m



Key Dates & Venue

• Contest Days: April 25 and 26, 2026

Date and duration	Scout class	Ranger Class	Explorer Class	Experience Class
25 Apr AM	Preparation	Preparation	Preparation	N/A
25 Apr PM	Test Run	Test Run	Test Run	Open to public
26 Apr AM	Opening Ceremony Contest Day	Opening Ceremony Contest Day	Opening Ceremony Contest Day	(TBC)
26 Apr PM	Contest Day Closing Ceremony	Contest Day Closing Ceremony	Contest Day Closing Ceremony	(TBC)



About Hong Kong Regional Competition

- Registration fee:
 - For Explorer, Ranger and Scout Class, there are two portions including
 - Hong Kong Regional Registration fee including at most 10 lunch boxes per contest day and 8 free T-shirts

• Explorer Class: HKD 5,500

• Ranger Class: HKD 4,000

Scout Class: HKD 3,000

 MATE Centre Registration fee: Directly payment to the MATE in accordance with MATE Centre guidelines.

Explorer Class: USD 390

Ranger Class: USD 270

Scout Class: USD 90

- The details of both registration fee will be announced later.
- For Experience Day
 - Fee of charge except the Driving experience of ROVs at the Swimming pool.
 - Registration fee for Driving experience of ROVs at the Swimming pool will be announced later.

Updated information on 9 Nov 2025.



Scout Class by IET Hong Kong

- To promote ROV for beginners, a class called *Scout* is recommended for primary and secondary schools.
- Requirement:
 - Demonstrate a light version of mission tasks
 - Submit company spec sheet and Initial Safety Inspection sheet.
 - Conduct On-Site Safety Inspection
 - Conduct an engineering presentation
- Eligibility:
 - All primary and secondary school teams
 - Priority will be given to primary secondary school teams that have not received any top awards (Championship, First Runner-Up, or Second Runner-Up in other categories) in the past three years.



Ranger Class by IET Hong Kong

- To promote ROV, a class called Ranger class is established for primary and secondary schools.
- Requirement:
 - Demonstrate mission run on localized tasks. The details will be announced later.
 - Submit Company Spec Sheet, Technical Documentation, Marketing Display, and Initial Safety Inspection sheet
 - Submit Corporate Responsibility Score Sheet and other required document (optional)
 - Conduct Engineering Presentation
- Eligibility:
 - All secondary school teams.



Explorer Class by IET Hong Kong

- To promote ROV, a class called Explorer class is established for tertiary institutions.
- Requirement:
 - Demonstrate mission run on localized tasks. The details will be announced later.
 - Submit Company Spec Sheet, Technical Documentation, Marketing Display, and Initial Safety Inspection sheet
 - Submit Corporate Responsibility Score Sheet and other required document (optional)
 - Conduct Engineering Presentation.
- Eligibility:
 - Teams from tertiary institutions.
 - Secondary schools with a strong track record in Ranger Class.



Awards in the Hong Kong Regional Competition

- Scout Class for Primary Schools and Secondary Schools
 - Championship, first runner-up, second runner-up
 - Best team spirit award
- Ranger Class for Secondary Schools:
 - Championship, first runner-up, second runner-up
 - Best innovation award
 - Best team spirit award
 - Best new contester award (Eligibility: the teams are joining the competition for the first time)
- Explorer Class for Tertiary Institutes:
 - Championship, first runner-up, second runner-up

Upcoming events

- 15 Nov 2025 Programming Workshop
- 17 Jan 2026 Competition briefing,
 Safety workshop, 3D printing workshop
 & Programming workshop



QR code for Programming Workshop on 15 Nov 2025









Q&A