

HKUST Pre-University Program 2026

Name: Exploring STEM Through Sensing Technologies

Duration: July 20-24, 2026

Instructor: Prof. Tim WOO & Prof. Man Fung CHEUNG



HKUST Pre-University Program
Undergraduate Recruitment and Admissions Office



		20-Jul	21-Jul	22-Jul	23-Jul	24-Jul
		Monday	Tuesday	Wednesday	Thursday	Friday
09:30-11:00	Topic	Orientation	Introduction to Electrical Circuit Theory	Introduction to Vectors and Their Applications in Robotics	Introduction to Sound Waves and Their Spectra	Group Discussion
11:15-12:45	Topic		Laboratory Experiment: Applying Circuit Theory to Light and Temperature Sensing	Laboratory Experiment: Exploring Mecanum Wheel Systems	Laboratory Experiment: Analyzing Sound and Spectrum through building an electronic piano	Exploring Trigonometry in Finger Detection and Face Recognition Algorithms
12:45-14:00	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
14:15-15:45	Topic	Social Activity - USTouch	Executive Talk	City Excursion (Optional)	Group Discussion	Leadership Forum and Gala Dinner (Optional)
16:00-17:30	Topic		Workshop / Talks (Optional)		Introduction to Image Processing and Color Decomposition	
Notes: This is the preliminary program itinerary, and the final itinerary will be shared two weeks prior to the start of the program. The content above is subject to change without notice. Students should regularly check the website and their email for any updates.						