

# Graduate Certificate in Intelligent Sensing Systems (ITSS)

## Agenda (IS02 Part-time through-train)

Day	Topic	Lecturer	Workshop submissions	In-class quiz
Course 1: Vision Systems (VSE, 5 days)				
1	Foundations of computer vision	Matthew Chua		tutorial
2	Foundations of computer vision	Tan Jen Hong	✓	
3	Computer vision using machine learning		✓	✓
4	Computer vision using machine learning Vision system architecture and solution	Tian Jing	✓	
5	Designing minimum viable product (MVP) for vision systems	Tan Tzann Chang	✓	
	Vision system case studies	Tian Jing		✓
Course 2: Spatial Reasoning from Sensor Data (SRSD, 3 days)				
1	Spatial sensing: 3D scene model & reconstruction	Tian Jing	✓	
2	Spatial reasoning: Vision-based localization		✓	
3	Spatial recognition: RGB-D & point cloud		✓	✓
Course 3: Real-time Audio-Visual Sensing and Sense Making (RTAVS, 4 days)				
1	Video analytics: Motion and tracking	Tian Jing	✓	
2	Video analytics: Action recognition		✓	✓
3	Audio processing			
	Audio analytics	✓		
4	Audio-visual sense making	Tan Jen Hong	✓	✓