

SCHOOL OF COMPUTING

IT8303 AI Human Interface

MODULE OVERVIEW

1. Module Aims

AI-Human Interface aims to equip students with skills to build automated intelligent systems that can interact and communicate with human. Students will learn neural network architectures and deep learning neural networks. Students will apply deep learning frameworks to build intelligent systems for image recognition and conversational chatbots.

2. Module Contents

The topics within the module and the project studies hours are listed as below:

Topic	Title	Hours
1.	Introduction to Deep Learning	5
2.	Robotic Process Automation	5
3.	Python for Deep Learning	10
4.	Convolutional Neural Network for Image Recognition	15
5.	Introduction to Chatbots	10
6.	Overview of Bot Platforms	10
7.	Building Chatbots in Dialogflow	10
8.	Deploy Chatbot with Advanced Concept	10
	Total	75

3. Module Calendar

Week	Activities	Deadlines
W1 14 – 18 Oct	Lecture – Topic 1 Lab – Topic 1	
W2 21 – 25 Oct	Lecture – Topic 2 Lab – Topic 2	
W3 28 Oct – 1 Nov	Lecture – Topic 3 Lab – Topic 3	
W4 4 – 8 Nov	Lecture – Topic 4 Lab – Topic 4	
W5 11 – 15 Nov	Lecture – Topic 4 Lab – Topic 4	
W6 18 – 22 Nov	CA1 Assignment Workshop	Quiz 1
W7 25 - 29 Nov	CA1 Assignment Consultation	CA1 Submission
W8 2 - 6 Dec	CA1 Presentation	
7 Dec – 5 Jan	Vacation Break 4 weeks	
W13 6 – 10 Jan	Lecture – Topic 5 Lab – Topic 5	
W14 13 – 17 Jan	Lecture – Topic 6 Lab – Topic 6	
W15 20 – 24 Jan	Lecture – Topic 7 Lab – Topic 7	
W16 27 – 31 Jan	Lecture – Topic 7 Lab – Topic 7	
W17 3 – 7 Feb	Lecture – Topic 8 Lab – Topic 8	
W18 10 – 14 Feb	CA2 Consultation	Quiz 2
W19 17 – 21 Feb	CA2 Presentation	CA2 Submission

4. Assessment

The assessment consists of three individual assignments. The weightage and format are as follows:

1.	CA1	Individual Assignment 1 (Build Convolutional Neural Network for Image Recognition).	40%
2.	CA2	Individual Assignment 2 (Design, build and deploy a chatbot using Dialogflow).	40%
3.	CA3	Assignment 3 (Quizzes, General Performance in class, Attitude)	20%
TOTAL			100%