國立台灣科技大學 114學年 第2學期　課程大綱

Spring 2026 NTUST Course Outline

授課教師：曾厚強

Instructor:Hou-Chiang Tsen

課程名稱：人工智慧在數位學習的應用

Course Title：Artificial Intelligence in Digital Learning

2026/11/3

課程代號： VE5711702 Course Code 學分數： 3 Credits	必選修：選修/半學年 Required/Electve:Elective/Half Yr. 先修課程： Prerequisites
節次教室： Time/Location	TA(T4-401-1) TB(T4-401-1) TC(T4-401-1)
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	The primary aim of this course is to teach artificial intelligence tools, methods, and research issues related to digital learning. Students who elect this course will learn how to design relevant research and experiments and apply them in actual courses.
課程大綱： Outline of Lectures	●Readability Model: CRIE, Lexile and TAASSC ●Learning mandarin tools: co-occurrence, vocabulary of different levels, typo and grammar detection system (DeepL、 Grammarly) ●ChatGPT, Introduction Machine Learning ●How to install python, Support Vector Machine, Support Vector Regression. ●Using linguistic features to train a readability model ●Using Word2vec to train a readability model ●Clustering technique ● python basic syntax ●Introduction Colab：Run some example
授課方式： Method of Instruction	講授 Lecture：70% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：30% 講授 Lecture：Teachers will use verbal explanations and hands-on practice to teach students the knowledge related to machine learning, and students will also need to practice hands-on practice.%
教科書： Textbooks	None.
參考書目： References	None.
修課須知： Notice	None.
評量方式： Grading	

	Midterm exam： 1、Setting up Python 2、Comparing the performance of readability model Final exam： Students selected a journal paper about a machine learning model used in education. You need to prepare a PowerPoint and a 15-minute presentation.
備註說明： Notes	Students do not need any prior knowledge of machine learning, but they do need basic English communication skills.