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：周詩梵

Instructor:Chou, Shih-Fan

課程名稱：線性代數

Course Title：Linear Algebra

2026/11/3

課程代號： CS1006302 Course Code 學分數： 3 Credits	必選修：必修/半學年 Required/Electve:Required/Half Yr. 先修課程： Prerequisites
節次教室： Time/Location	M3(TR-410) M4(TR-410) R2(TR-410)
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	The main goal of this course is to help students master the basic concepts and skills they will use later in their careers. The course objectives are: 1. Develop knowledge and skills necessary for linear algebra. 2. Enable students to harness MATLAB software to solve linear algebra problems. 3. Incorporate mathematical tools into various fields of applications.
課程大綱： Outline of Lectures	This course covers mainly the following contents: 1. Matrices and Systems of Equations 2. Determinants 3. Vector Spaces 4. Linear Transformations 5. Orthogonality 6. Eigenvalues 7. Numerical Linear Algebra 8. Canonical Forms
授課方式： Method of Instruction	講授 Lecture：80% 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：20% 講授 Lecture：%
教科書： Textbooks	Linear Algebra with Applications, Ninth Edition, Gareth Stetson Williams, 2019, 978-1-284-120097, Jones & Bartlett Learning.
參考書目： References	1.Linear Algebra with Applications, Steve Leon, Lisette de Pillis, 2020, 978-1-292-35486-6, Pearson. 2.Linear Algebra and its Applications, David C. Lay, Judi J. McDonald, Steven R. Lay, 2021, 978-1-292-35121-6, Pearson.
修課須知： Notice	
評量方式： Grading	

	Grading: Midterm Exam: 35% Final Exam: 35% Programming Practices: 30%
備註說明： Notes	Method of Instruction： Lecture：80% Practical exercises：20%