語言學與人工智能 學分學程實施辦法

一、 為提供學生跨學域並具整合性之選課環境及擴展學生第二專長，依據「國立陽明交通大學學分學程設置辦法」訂定本學分學程。其主旨在於整合漢語語言學、認知科學程式設計、人工智能等不同學域內之課程，以培養具有此類專長及基本訓練之學生。

二、 引導學生探索人類語言的句法結構聚合與語意合成邏輯的認知機制與流程，並以此語言學本體知識為核心基礎，結合程式設計實作能力，帶領學生理解語言學本體知 識可以被程式化進行實作應用，解決業界問題，讓語言學跟上基礎學科的發展進程： 從「科學理論」進入「工程實作」產生「科技應用」，成為人工智能時代中有市場 需求的資訊產品。

三、 申請資格：凡本校學生（含碩士、博士），均得申請本學程，申請人需繳交修習申請表、學年成績單至外國語文學系（所）申請，並經口試篩審通過後，方得修讀本學程。

四、 凡修畢學程規定之科目、學分，且成績及格者，得檢具歷年成績表、學分學程證明書申請表，向學分學程設置單位申請通過後，由註冊組核發學分學程證明。

五、 本學程學生在申請前若已修過表列之任何相關課程，須向召集人提出書面申請，經認可後得採計為學程之學分。

六、 本學程學生若選修與表列課程相關之課程，經召集人認可後，得採計為學程之學分。

七、 學生如未修滿學分，學分仍承認為本校畢業之選修學分。

八、 本校學生不得因修讀學分學程而申請延長修業年限。

九、 本實施辦法經各級課程委員會審查通過後實施，修訂時亦同。

十、 本辦法如有未盡事宜，悉依相關規定辦理。

學分學程課程規劃表

一、學程名稱：語言學與人工智能學分學程 Program of Linguistics and Artificial Intelligence

二、課程名稱及開課系所

編號	課程名稱	開課系所	學分	備註
1	Python 程式設計	資訊中心	3	必修科目 13 學分 （共 5 門）
2	普通心理學	人學中心	2	
3	語言學概論（二）	外文系	2	
4	大一英文（二）	外文系	3	

5	語言學與人工智能：基礎概念與實作	外文所	3	
6	句法學/語意學	外文系	3	
7	漢語語法	外文系	3	
8	句法學	外文所	3	
9	邏輯語意學	外文所	3	選修科目 12 學分 (8 選 4)
10	語言與人類心智	外文所	3	
11	生成語言學與人工智能	外文所	3	
12	語言學與人工智能：進階概念與實作	外文所	3	
13	心智與數位科技	心哲所	3	
應修學分總數				25 學分

三、召集人姓名：周昭廷　　　單位：外文系

四、聯絡人姓名：吳昱璇　　　單位：外文系

Guidelines for *Linguistics and Artificial Intelligence Certificate Program*
College of Humanities and Social Sciences

1. In order to provide students with an interdisciplinary and integrative course selection environment and to expand their secondary expertise, this credit program is established in accordance with the " Regulations for the Establishment of Credit Programs at National Yang Ming Chiao Tung University." The purpose is to integrate courses from various fields, including Chinese linguistics, cognitive science, programming, and artificial intelligence, aiming to cultivate students with expertise and fundamental training in these areas.
2. The program guides students to explore the cognitive mechanisms and processes behind the syntactic structure building and semantic compositional logic of human language. It uses this

linguistic knowledge as a foundation, combined with practical programming skills, to lead students in understanding how linguistic knowledge can be applied through programming to solve industry problems. This allows linguistics to keep pace with developments in foundational disciplines: from "scientific theory" to "engineering practice," ultimately leading to "technological applications," producing market-demanded information products in the era of artificial intelligence.

3. Qualifications: Students (including MA students and PhD students) are eligible for application. To enroll in this Certificate Program, on must hand in an application form, academic year transcript to the Department of Foreign Languages and Literatures (Institute of Foreign Literatures and Linguistics) and pass an oral exam.

4. Students who have completed the required subjects and credits for the program with passing grades may submit a transcript and a credit program completion application to the Department of Foreign Languages and Literatures (Institute of Foreign Literatures and Linguistics), and upon approval, the Registration Office will issue a certificate for the credit program.

5. If students have completed any of the listed relevant courses prior to applying for this program, they must submit a written application to the program convener. Upon approval, those courses may be counted towards the credit program.

6. If one has taken any courses on the list before application to the Certificate Program, one has to submit a written application to the Certificate Program conveners for credit recognition approval.

7. If students do not complete the required credits, the credits earned can still be counted as elective credits for graduation from the university.

8. Students may not use this certificate program as the reason to request for extension of his/her duration of study.

9. This Policy and its subsequent revisions shall be announced and implemented after being passed in the relevant Curriculum Committee Meeting. The same shall apply where the Policy is amended.

10. Any matters not covered herein shall be governed by related regulations.

Curriculum Planning

1. Certificate Program title: Certificate Program of Linguistics and Artificial Intelligence
2. Course titles and departments

No.	Course Name	Department	Credit	Remarks
1	Python Programming	Information Center	3	Required Courses: 13 credits
2	General Psychology	Center for Humanities	2	
3	Introduction to Linguistics (II)	Department of Foreign Languages and Literatures	2	
4	Freshman English (2)	Department of Foreign Languages and Literatures	3	

5	Linguistics and Artificial Intelligence: Basic Concepts and Implementation	Department of Foreign Languages and Literatures	3	
6	Syntax/Semantics	Department of Foreign Languages and Literatures	3	Elective Courses (at least 12 credits)
7	Structures of Chinese	Department of Foreign Languages and Literatures	3	
8	Formal Syntax	Department of Foreign Languages and Literatures	3	
9	Introduction to Logical Semantics	Department of Foreign Languages and Literatures	3	
10	Language and the Human Mind	Department of Foreign Languages and Literatures	3	
11	Generative Linguistics and Artificial Intelligence	Department of Foreign Languages and Literatures	3	
12	Linguistics and Artificial Intelligence: Advanced Concepts and Implementation	Department of Foreign Languages and Literatures	3	
13	Mind and Digital Technology	Institute of Philosophy of Mind and Cognition	3	

Remarks:
1.Conveners: C.T. Tim Chou
  Department: Department of Foreign Languages and Literatures
  Contact: Yu-Hsuan Wu
  Department: Department of Foreign Languages and Literatures