

LT5620: TRANSLATION TECHNOLOGY

Effective Term

Semester B 2024/25

Part I Course Overview

Course Title

Translation Technology

Subject Code

LT - Linguistics and Translation

Course Number

5620

Academic Unit

Linguistics and Translation (LT)

College/School

College of Liberal Arts and Social Sciences (CH)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

Other Languages

Other Languages for Medium of Instruction

English, supplemented by Chinese, in situations where English-Chinese translation is involved.

Medium of Assessment

Other Languages

Other Languages for Medium of Assessment

English, supplemented by Chinese, in situations where English-Chinese translation is involved.

Prerequisites

Pass departmental information technology (IT) proficiency test or Special approval by programme leader

Precursors

Nil

Equivalent Courses

CTL5620 Translation Technology

Exclusive Courses

Nil

Part II Course Details

Abstract

The aim of this course is to study and explore the roles of the enabling language information technologies that are employed in translation processes. In particular, topics will include computers and information technology, machine translation (MT) systems, linguistic knowledge and translation expertise in the automation of multilingual translation. The course will also present a survey of different types of machine translation systems and translation memory retrieval facilities that integrate the best of human and machine intelligence to maximize translation productivity.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe the major milestones in the development of translation technology		x	x	
2	Apply different kinds of translation tools to help with different translation tasks		x	x	x
3	Evaluate different types of translation technology in terms of translation quality		x	x	x
4	Explore and describe the recent trends of translation technology research and development		x	x	

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	1	Lectures towards the above outcomes to explain and illustrate the major developments in translation technologies	1, 2, 3, 4	1 hour
2	2	Readings of lecture notes selected papers and selected chapters from textbooks	1, 2, 3, 4	
3	3	Workshops to compare and contrast different translation technologies and services	1, 2, 3, 4	1 hour

4	4	Tutorials to help students to resolve their learning problems and to demonstrate their achievements for the above tasks	1, 2, 3, 4	1 hour
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Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Written assignment and oral presentation (optional)	1, 2, 3, 4	50	
2	Quiz (optional)	1, 2, 3, 4		

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Additional Information for ATs

Exam: (CILO No. 1-4)

Assessment Rubrics (AR)**Assessment Task**

Written assignment and oral presentation (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Knowledge attitude, ability, creativity accomplishment and performance in presenting and completing demons/assignments

Excellent

(A+, A, A-) 1. Excellent knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Excellent, creative application of linguistic knowledge to analysis of basic tasks and key issues in translation technology. 3. Very active participation and high performance.

Good

(B+, B, B-) 1. Good knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Good application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Active participation and good performance.

Fair

(C+, C, C-) 1. Adequate knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Fair application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Adequate participation and fair performance.

Marginal

(D) 1. Basic familiarity with the subject matter. 2. Marginal ability to apply basic linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Marginal participation and marginal performance.

Failure

(F) 1. Poor familiarity with the subject matter. 2. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Poor participation and poor performance.

Assessment Task

Quiz (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Marks

Excellent

(A+, A, A-) 1. Excellent knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Excellent, creative application of linguistic knowledge to analysis of basic tasks and key issues in translation technology. 3. Very active participation and high performance.

Good

(B+, B, B-) 1. Good knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Good application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Active participation and good performance.

Fair

(C+, C, C-) 1. Adequate knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Fair application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Adequate participation and fair performance.

Marginal

(D) 1. Basic familiarity with the subject matter. 2. Marginal ability to apply basic linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Marginal participation and marginal performance.

Failure

(F) 1. Poor familiarity with the subject matter. 2. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Poor participation and poor performance.

Assessment Task

Examination (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Marks

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Marginal

(D) 1. Basic familiarity with the subject matter. 2. Marginal ability to apply basic linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Marginal participation and marginal performance.

Failure

(F) 1. Poor familiarity with the subject matter. 2. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Poor participation and poor performance.

Assessment Task

Written assignment and oral presentation (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Knowledge attitude, ability, creativity accomplishment and performance in presenting and completing demons/assignments

Excellent

(A+, A, A-) 1. Excellent knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Excellent, creative application of linguistic knowledge to analysis of basic tasks and key issues in translation technology. 3. Very active participation and high performance.

Good

(B+, B) 1. Good knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Good application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Active participation and good performance.

Marginal

(B-, C+, C) 1. Adequate basic knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Fair or marginal application of linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Adequate or marginal participation and fair performance. ; Basic or marginal familiarity with the subject matter as a whole.

Failure

(F) 1. Poor familiarity with the subject matter. 2. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Poor participation and poor performance.

Assessment Task

Quiz (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Marks

Excellent

(A+, A, A-) 1. Excellent knowledge of major issues, key issues, basic concepts, ideas, principles and theories in translation technology. 2. Excellent, creative application of linguistic knowledge to analysis of basic tasks and key issues in translation technology. 3. Very active participation and high performance.

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Failure

(F) 1. Poor familiarity with the subject matter. 2. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Poor participation and poor performance.

Assessment Task

Examination (for students admitted from Semester A 2022/23 to Summer Term 2024)

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(F) 1. Poor familiarity with the subject matter. 2. Poor ability or fail to apply linguistic, computing and programming knowledge to basic tasks and key issues in translation technology. 3. Poor participation and poor performance.

Part III Other Information

Keyword Syllabus

- Survey of language processing technology underlying translation technology
- Historical review of translation technologies
- Major approaches to translation technologies
- Application of different types of translation technology for different translation tasks
- Evaluation of different types of translation technology
- Recent trends of research and development in translation technologies

Reading List

Compulsory Readings

Title	
1	Lecture notes/slides for the course
2	Selected papers/chapters on topics of translation technology
3	Selected tutorials on key tasks of translation technology and system implementation/evaluation

Additional Readings

Title	
1	Relevant chapters in the recommended reading list from online tutorials
2	Advanced and related topics on translation technology and system implementation/evaluation
3	Recommended Reading Text(s) 1. Pushpak Bhattacharyya. 2015. Machine Translation. Boca Raton: Taylor & Francis. 2. Sharon O'Brian, Laura Winther Balling, and Michael Carl. 2014. Post-editing of Machine Translation: Processes and applications. Newcastle upon Tyne, England: Cambridge Scholars Publishing, 3. Chiew Kin Quah. 2006. Translation and Technology. Basingstoke, Hants.; New York: Palgrave Macmillan. 4. Sergei Nirenburg, Harold Somers, and Yorick Wilks. 2003. Readings in Machine Translation. Cambridge, Mass.: MIT Press 5. Lynne Bowker. 2002. Computer-Aided Translation Technology: A Practical Introduction. Ottawa: Univeristy of Ottawa press. 6. D., L. Balkan Arnold, R.L. Humphreys, S. Meijer and L. Sadler. 1994. Machine Translation: An Introductory Guide. Manchester and Oxford: NCC Blackwell.