

MODULE SPECIFICATION

Part 1: Information							
Module Title	Logical Programming [TSI]						
Module Code	UFCFEX-6-2		Level	Level 5			
For implementation from	2022-	23					
UWE Credit Rating	6		ECTS Credit Rating	3			
Faculty	Faculty of Environment & Technology		Field	Computer Science and Creative Technologies			
Department	FET [ET Dept of Computer Sci & Creative Tech					
Module Type:	Stand	Standard					
Pre-requisites		None					
Excluded Combinations		None					
Co-requisites		None					
Module Entry Requirements		None					
PSRB Requirements		None					

Part 2: Description

Educational Aims: The aim of this module is to give an understanding of logic programming principles, using PROLOG programming language as an example.

Outline Syllabus: Introduction to logic programming paradigm;

Predicate logic;

Introduction to PROLOG programming language. Elements, syntax;

Relations, rules, structures;

Declarative and procedural meaning;

Automaton representation in PROLOG language;

Lists and structure trees;

Route planner;

Manipulating trees.

Teaching and Learning Methods: Learning and teaching will be provided to students in two forms: lectures and labs. During lectures, theoretical aspects of the course will be provided to students by the teaching staff. Lectures will be supported by presentation published and available to the students on e.tsi.lv under the module section. Also, additional materials, like code examples, text books, publications on the internet, official documentation, videos etc will be

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presented in e.tsi.lv.

During labs, each student receives an individual task to perform. PROLOG is considered as logical programming language. In addition to learning activities during taught sessions, students are expected to spend time outside of class on independent learning activities. These might include completing assignment tasks, independent reading, practising new skills on personal projects.

Part 3: Assessment

This module assessment is split into two components (A – Exam, B – Labs):

A1 - final 2-hour examination which will assess the students understanding of taught material that forms part of the learning outcomes but cannot easily be assessed through practical tasks.

B1 – series of labs, exploring basic principles of logical programming using PROLOG programming language as example. An application and its source code should be provided to the teaching staff in form of report. B2 – series of in-class tests with theoretical and practical tasks.

First Sit Components	Final Assessment	Element weighting	Description
Examination - Component A	✓	40 %	Examination
Portfolio - Component B		36 %	A series of labs, exploring basic principles of logical programming using PROLOG programming language as example. An application and its source code should be provided to the teaching staff in form of report.
In-class test - Component B		24 %	A series of in-class tests with theoretical and practical tasks.
Resit Components	Final Assessment	Element weighting	Description
Examination - Component A		40 %	Examination
Portfolio - Component B		36 %	series of 5 labs, exploring basic principles of logical programming using PROLOG programming language as example. An application and its source code should be provided to the teaching staff in form of report.
In-class test - Component B		24 %	series of 3 quizzes with theoretical and practical tasks. Answers for quizzes should be provided to the teaching staff through e.tsi.lv system in the module section

Part 4: Teaching and Learning Methods						
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:					
	Module Learning Outcomes	Reference				
	Understand and use the basics of logical programming	MO1				
	Understand and apply the underlying mathematics	MO2				
	Understanding predicate expressions	MO3				

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	Read PROLOG programs created by others, using those as examples to solve problems.						
	Develop simple programs in PROLOG language						
	Dissecting the subject area into phrases, then translating phrases into predicate expressions Widening personal knowledge in logical programming, relying on experience from this course						
Contact Hours	Independent Study Hours:						
	Independent study/self-guided study	48					
	Total Independent Study Hours:	48					
	Scheduled Learning and Teaching Hours:						
	Face-to-face learning	32					
	Total Scheduled Learning and Teaching Hours:	32					
	Hours to be allocated	60					
	Allocated Hours	80					
Reading List	The reading list for this module can be accessed via the following link: https://rl.talis.com/3/uwe/lists/9456BB8B-6E7F-95FE-2929-D240AFC212F6.html	tml?lang=en-					
	gb&login=1						

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Computer Science and Software Development [Oct][FT][TSI][4yrs] BSc (Hons) 2020-21

Computer Science and Software Development [Feb][FT][TSI][4yrs] BSc (Hons) 2020-21