Prifysgol **Wrecsam Wrexham** University

Module specification

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Module Code	ENG4C1
Module Title	Welsh for STEM
Level	4
Credit value	20
Faculty	FACE
HECoS Code	100335
Cost Code	GAME

Programmes in which module to be offered

Programme title	Is the module core or option for this	
	programme	
Standalone Module aligned to the BEng		
Automotive Engineering programme for QA	Standalone	
and assessment purposes		

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	36 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	36 hrs
Placement / work based learning	0 hrs
Guided independent study	164 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	07/05/2025
With effect from date	07/05/2025
Date and details of	
revision	
Version number	1

Module aims

The module aims to introduce students to the necessary linguistic skills to engage with scientific, technological, engineering, and mathematical concepts through the medium of Welsh. Emphasis will be placed on developing specialised vocabulary relevant to STEM disciplines. By the end of the module, students should feel confident in their ability to understand and communicate basic Welsh within STEM contexts.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Demonstrate competency in basic understanding of Welsh-language terms related to STEM subjects, at an introductory level.
2	Apply basic Welsh vocabulary and grammatical structures to talk and write about science topics, making sure they are easy to understand.
3	Demonstrate understanding of the role of Welsh language legislation on scientific practices within Wales, and the ability to apply Welsh language measures in a scientific context

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

The module will be assessed through a portfolio submission including audio recorded student content and interactive moodle Welsh language comprehension tests and will assess all four skills (reading, writing, speaking and listening) through tasks that match those that participants will become familiar with over the course of the module.

	Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
Ī	1	1, 2, 3	Portfolio	100%

Derogations

N/A

Learning and Teaching Strategies

A series of workshop style lectures with student-led seminars and small group activities. Directed learning using library and internet resources will be facilitated using Moodle and MS Teams. This module will also follow the ALF (Active Learning Framework) guidelines, which will include alternative methods of assessment and a blended approach to delivery, with some theory and software sessions being delivered online (depending on requirements and student experience).



Indicative Syllabus Outline

Introduction to Welsh Language and STEM

- Overview of the Welsh language in STEM contexts
- Introduction to basic scientific vocabulary and grammatical structures
- Listening and reading exercises on introductory STEM topics in Welsh

Developing Vocabulary and Communication Skills

- Expansion of specialised STEM vocabulary in Welsh
- Practice in using Welsh language resources for STEM application.
- Oral exercises focusing on expressing scientific concepts and ideas in Welsh.

Writing for STEM Disciplines

Introduction to academic writing conventions in Welsh

Presentation and Communication Skills

Practice in communicating basic scientific ideas orally.

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads

"Cymraeg: A Strategy for Welsh in Science and Technology" by Welsh Language Commissioner - This document outlines the strategic approach to promoting the use of Welsh in science and technology fields, providing insights into language policies and initiatives.

"Y Cyd-ddarllenwr: Adnoddau ar gyfer Dysgwyr yng Nghyd-destun STEM" by Dr. Gwenllian Dafydd - A comprehensive reader designed specifically for Welsh learners in STEM contexts, offering a range of texts and exercises to enhance language skills.

"Geirfa Gwyddoniaeth: Termau Allweddol yn y Gwyddoniaethau Naturiol a Chymdeithasol" by Dr. Euros Lewis - A Welsh-language science glossary providing key terminology in natural and social sciences, essential for building vocabulary in STEM fields.

Other indicative reading

Cydolenni: Ysgrifennu Cynrychioliadol mewn Gwyddoniaeth" by Prof. Angharad Rhisiart - This book explores principles of representative writing in science, offering guidance on effective communication and writing strategies for Welsh-speaking scientists.

"Astudio a Gweithio mewn Lleisiau Cymunedol" edited by Dr. Sioned Puw Rowlands - A collection of essays on community voices in research and practice, offering perspectives on collaborative approaches to STEM work within Welsh-speaking communities.

"Y Gymraeg mewn Gwyddoniaeth: Cwestiynau Sylfaenol ac Atebion" by Dr. Branwen Emlyn - An introductory text addressing fundamental questions about the role of Welsh in science, providing insights into language attitudes, challenges, and opportunities in STEM fields.

Plus, various others to be signposted on Moodle.

