UNIVERSITY OF WOLVERHAMPTON
INTERNATIONAL STUDY CENTRE

INTERNATIONAL FOUNDATION PROGRAMME: SCIENCE



Programme Leader: Dr. Emeka Okechukwu

Dr. Emeka Okechukwu is STEM Programme Lead at the University of Wolverhampton International Study Centre. He joined Malvern International in January 2026 as a Lecturer and Module Lead in Health Sciences and Social Care before being appointed STEM Programme Lead in September 2026.

With over 15 years of university teaching and research experience, he leads the Health Sciences and Social Care, Engineering, Sciences, and Computing pathways, supporting academic quality, curriculum development, staff development, and student success. Emeka is passionate about delivering innovative, inclusive, and research- and industry-informed education that promotes excellence in student achievement, progression, and employability.

Module overview:

English and Academic Skills for Scientists (Science)

This module prepares international foundation students for undergraduate study in health and life sciences, including Pharmacy, Biomedical Science, Medicine, and related disciplines. Students will develop academic and scientific literacy, critical thinking, and professional communication skills through engagement with ethical and scientific case studies.

The module places particular emphasis on academic writing, verbal fluency, and language development, supported by structured use of AI tools for research and reflection. Students create a digital portfolio to demonstrate their academic and communication progress.

Students intending to progress to MPharm must also complete a programme-level internal English language exam or submit an IELTS score (minimum 7.0 overall, with no band below 6.5) and successfully undertake an academic interview as part of the progression process. Preparation for this is embedded throughout the module.

Foundations of Biology

This module introduces you to the core principles of biology that underpin human health, disease, and life sciences. You will explore key topics such as cell structure, biomolecules, genetics, human physiology, and biological processes including metabolism, homeostasis, and infection control. You'll also gain insight into the role of microbiology, public health, and environmental factors in maintaining wellbeing. Throughout the module, you will develop essential scientific skills, including data interpretation, research techniques, and scientific communication. By linking theory to practice, this module provides a strong foundation for further study in pharmacy, biomedical sciences, public health, and other science-based disciplines.

Foundations of Chemistry

This module provides a comprehensive introduction to the core principles of chemistry, preparing you for further study in science, pharmacy, biomedical, and health-related degree programmes. You will explore topics such as atomic structure, bonding, energetics, rates of reaction, equilibria, and organic chemistry. Through a combination of lectures, workshops, seminars, and laboratory activities, you will develop essential problem-solving skills, chemical reasoning, and scientific communication. You will also gain experience in planning and interpreting chemical investigations, both theoretically and in the lab. This module supports your transition to university-level study by building your confidence in using chemical concepts, data, and practical methods in academic and applied settings.

Mathematical Principles (Science)

This module provides a foundation in essential mathematical skills for students progressing to science and health-related undergraduate degrees. You will develop confidence in working with numbers, formulae, graphs, and data, with a focus on applying mathematical methods to real-world scientific and biological contexts. Areas of study include algebra, functions, trigonometry, and statistics. You will also learn how to interpret data, solve problems using structured reasoning, and communicate mathematical ideas clearly using appropriate notation and terminology. Throughout the module, you will apply your learning to scientific case studies and health-based scenarios, developing the analytical and quantitative skills needed for success in higher education and beyond.