INTERNATIONAL HEALTH RESEARCH INSTITUTE

COURSE
BROCHURE

Doctor of Health Science (DHS)

2026

Where One Health, Biosecurity, and Human Systems Converge

IHRI

WWW.IHRI.EDU.EU

About IHRI
The International Health Research Institute

The International Health Research Institute (IHRI) is a pioneering institution dedicated to transforming professional practice through collaborative, interdisciplinary innovation. We operate in the critical gap between traditional academia and industry, preparing a new generation of Practitioner-Scholars to solve "wicked problems" in complex systems.

Our Mission: To develop innovative solutions to complex global challenges—from healthcare and space systems to agritech and leadership—through online education, research, and innovation. We empower researchers to implement novel, evidence-based approaches in an open, principled environment.

Introducing the Doctor of Health Science

The International Health Research Institute (IHRI) operates at the critical intersection of inquiry and impact. As a licensed European Higher Education Institution, our Doctor of Health Science (DHS) program specialises in translating "boots on the ground" operational expertise into rigorous, peer-reviewed evidence. Our mission is to tackle the world's most "wicked problems"—from health system failures to space adaptation and climate resilience.

Driven by our doctrine that "One Health is Planetary Security," we view health not in a silo, but as the operational convergence of Human Resilience, Biosecurity Intelligence, and Food Sovereignty. The DHS is built for Practitioner-Scholars: strategic leaders who possess both the frontline experience to deeply understand a complex problem and the academic rigour required to solve it.

Transform Frontline Experience into Global Impact.
Architect the Health Defence Systems of Tomorrow.

Course Overview

1 Official Qualification - Doctor of Health Science (DHS)

2 Higher Education Provider: International Health Research Institute (IHRI)

3 Accredited status: Accredited by the Malta Further and Higher Education Authority (MFHEA) – Higher Education Institution, License No. 2025-004

4 Level of qualification: Level 8 MQF/EQF Qualification

5 Delivery Method: Online

6 Hours of total learning: 4500 (contact hours, self-study hours, supervised placement, practice hours and assessment hours). Please refer to the Course Outline for details.

7 Total credits: N/A

8 Attendance: Full-time or Part-time

9 Programme Duration:
    48 months Full-Time
    60 months Part-Time

10 Target audience:
    Students aged 19-30
    Professionals aged 31-65

11 Target Group: The programme is designed for healthcare professionals seeking to develop leadership skills in their chosen area. It is also suitable for those seeking to refocus or change their career path. It is open to all health professionals seeking senior practice, administration/management/education or research roles, locally, nationally, or internationally. These health professionals wish to expand their subject expertise with the knowledge needed to translate research evidence into real-world practice. e.g.
- Healthcare Leaders, Managers & Administrators
- Healthcare Researchers
- Physicians
- Physician Assistants
- Nurses and Midwives
- Advanced Paramedics and Allied Health
- Healthcare Educators

Course Overview

12 Language: English

13 Entry requirements:
- Master's degree at MQF/EQF Level 7 or equivalent.
- 5+ Years Work Experience (Mid-to-Senior Level).
- English Proficiency (IELTS 6.0-7.0).

14 Alternative Entry:
- An MQF/EQF L6 full qualification or an alternative.
- 10+ Years Work Experience (Mid-to-Senior Level).
- English Proficiency (IELTS 6.0-7.0).

15 Learning Outcomes
Knowledge
- Synthesise knowledge at the frontier of a field of work or study and at the interface between fields.
- Interpret the acquisition and understanding of a substantial body of knowledge at the forefront of healthcare studies and professional practice.
- Conduct original research and contribute advanced scholarship that merits publication in peer-reviewed journals, thereby defining new knowledge in the field.
- Identify and examine tools/frameworks that will generate strategies for the implementation of research in complex settings.
- Understand how to solve critical problems in research and/or innovation to extend existing healthcare knowledge.
- Acquire and integrate theoretical knowledge with practical application research that produces fruitful results in healthcare and related fields.
- Critically analyse and apply service quality and implementation science concepts to design and evaluate transformational interventions that improve healthcare delivery.

Skills
- Develop advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice.
- Demonstrate a significant range of the principal skills, techniques, tools, practices and/or materials associated with services transformation, delivery of continuous quality improvements at Macro, Miso and micro levels, implementation science and research in Health studies.

Course Overview

15 Learning Outcomes
Skills (Continued)

- Solve abstract problems that expand and redefine existing procedural knowledge.
- Respond to technological, social, and cultural issues and address the needs of a knowledge-based society.
- Demonstrate expertise in critical evaluations and analysis with incomplete or limited information to solve problems in new or unfamiliar environments and produce original research.
- Demonstrate mastery in implementing large-scale healthcare research projects in changing professional environments.
- Critically assess and plan healthcare projects independently, demonstrating expertise in initiating, executing, and evaluating project phases.
- Communicate effectively and interact with a range of groups and individuals through interpersonal skills.
- Critically evaluate complex and incomplete data, making sound judgments to communicate conclusions clearly to a range of audiences.

16 Teaching, learning and assessment procedures:

Online sessions delivered through our Institutional platform, access to study material online, and a digital Library for independent study.

17 Type of Assessment:

Assessments are online; Research Assignment (including elements of report writing, critical analysis of case studies, presentations, group work as appropriate), Exams and Examination of written Thesis / Formal Viva and oral examination of thesis Dissertations (Teaching and learning methodologies available in the Course outlines).

18 Pass Rate: > 50% (IHRI grading system)

Course Overview

19 Grading System

Mark Range	Grade	Descriptor
80 – 100%	A	Work of excellent quality. Superior performance, showing a comprehensive and critical understanding and application of the subject matter. Evidence of extensive additional reading/research/work.
70 – 79%	B	Work of very good quality. Performance showing a very good working knowledge of the subject matter. Evidence of a considerable amount of additional reading/ research/work.
55 – 69%	C	Work of average quality. Average performance, showing a good working knowledge of the subject matter. Evidence of sufficient reading/research/work.
50 – 54%	D	Work of fair but below-average quality. Performance shows a considerable but incomplete understanding of the subject matter— evidence of a fair amount of reading/research/work.
45 – 49%	E	Work of marginal quality. Performance showing minimal understanding of the subject matter, with no evidence of additional reading/research/work, which must be compensated by higher marks in other modules to be eligible for the Postgraduate Award.
0 – 44%	F	Unsatisfactory, failing work in any module.
P		Pass - when assessment is based on a Pass/Fail basis only.
I		Temporary grade for Incomplete work due to justifiable reasons (illness, approved Absence, etc.) for which the assessment date has been postponed or the deadline for submission of work has been extended.

20 Programme Extensions:

Extensions are permitted for up to a maximum of 6 years (full-time) or 8 years (part-time) from the initial enrolment date. During any approved extension period, students will be charged an annual extension fee of €3,750 for EU students, €5,875 for non-EU students, and €1,000 for LMIC students. This fee is due at the beginning of each additional year or pro rata for partial years, based on the student's original fee category. All terms and conditions apply.

21 Warranted profession: This programme does not lead to a warranted profession or related occupation.

22 Programme Intake Dates

We offer multiple opportunities to start your DHS journey throughout the year:

Intake Dates:

- February 15th
- April 15th
- June 15th
- September 15th
- December 15th

23 Application Deadline:

Applications must be submitted one month prior to your desired intake date.

24 Application Fee:

A non-refundable application fee is required to process your application.

All Applicants: €30

25 Fees:

EU FEE: € 14,900

Non-EU Fee: €23,500

26 Registration:

Admissions process, a step-by-step guide, and other information are available on our website - https://ihri.edu.eu/doctor-of-health-science/

27 Contact Details:

Contact information is available on our website - https://ihri.edu.eu/contact-us/

Where One Health, Biosecurity, and Human Systems Converge

The International Health Research Institute (IHRI) is building the defence systems of the future. Our Doctor of Health Science (DHS) program is designed for strategic leaders, moving beyond traditional academic silos to offer candidates exclusive access to our Operational Research Nodes and Operational Research Labs.

These nodes provide the critical infrastructure, technological backbone, and domain expertise required for targeted, high-impact Doctoral inquiry.

Our Doctrine: One Health is Planetary Security

At IHRI, we define One Health as the operational convergence of three critical defence systems. Our research labs are built around these pillars, providing DHS candidates with the resources to drive global, systemic change:

- Human Resilience (The Defence of Populations): Designing health systems capable of withstanding systemic shocks, from global pandemics to localised conflict.

- Biosecurity Intelligence (The Defence of Borders): Surveillance of zoonotic pathogens at the animal-human interface before they become global threats.

- Food Sovereignty (The Defence of Supply): Securing agricultural logistics and water systems against climate disruption and biological risk.

The Infrastructure Operational Research Nodes

As a DHS candidate, your doctoral project will be executed through one of our specialised operational nodes. These hubs act as dynamic research labs, connecting you with global experts, strategic command centres, and actionable field data.

Focus: Biosecurity Intelligence & Pathogen Surveillance

Lab Leadership

LAB A
Global Bio-Risk & Defence
Lead To Be Announced

LAB B
Genomics & Biological Systems
Dr Ari Meerson

Research Vectors

- **Biorisk Management:** Developing strategic protocols to detect, contain, and neutralise engineered and naturally occurring biological threats.

- **Genomics & Omics:** Advancing research in transcriptomics, bio-markers, and the metabolic pathways of systemic disease to accelerate targeted medical countermeasures.

- **Dual-Use Technology Governance:** Architecting regulatory frameworks for advanced biotechnologies that possess both high-impact therapeutic and catastrophic destructive potential.

- **Pandemic & CBRN Response:** Architecting rapid-deployment strategies for chemical, biological, radiological, and nuclear (CBRN) incidents and zoonotic spillover events.

- **Bioinformatics & Predictive Modelling:** Leveraging artificial intelligence and genomic data to forecast pathogen evolution and predict imminent global health threats.

- **Zoonotic Intelligence & Spillover Surveillance:** Monitoring the animal-human interface to intercept emerging infectious diseases before they breach global borders.

Focus: Integrated rural care and community-led models, workforce capability and resilience, digital health implementation, policy, economics, and health equity.

Lab Leadership

LAB A
Pre-Hospital & Frontline Health Systems
Dr Angela Martin

LAB B
Community & Integrated Rural Care
Lead To Be Announced

Research Vectors

Community Health and Mobile Integrated Care: Deploying agile, mobile healthcare frameworks to ensure continuous, high-quality care delivery in decentralised and vulnerable communities.

Prehospital Professionalisation and EMS Systems Design: Architecting advanced, high-reliability emergency medical systems and elevating the strategic capabilities of first responders.

Integrated Rural Care and Community-led Models: Building self-sustaining, community-driven health infrastructure to harden isolated populations against systemic healthcare failures.

Rural Workforce Recruitment, Retention and Resilience: Developing robust workforce policies to attract, sustain, and protect the human capital essential for frontline healthcare defence.

Digital Health Implementation: Integrating advanced digital technologies and telehealth operating systems to bridge geographical divides and optimise remote patient management.

Focus: Architecting Governance Operating Systems and solving "Wicked Problems" in high-stakes environments.

Lab Leadership

LAB A
Space Health & Extreme Environments
Dr Manavi Jadhav

LAB B
Resilient Governance & AI
Dr Ciaran Culligan

Research Vectors

Astrobiology: Investigating the fundamental biological mechanisms of life in extraterrestrial conditions to inform planetary biosecurity and resilience models.

Space Situational Awareness, Asteroid Tracking and Space Debris: Developing strategic intelligence and monitoring frameworks to safeguard orbital infrastructure and ensure planetary defence against cosmic threats.

Human Health and Resilience in Altered Gravity and Extreme Environments: Optimising physiological and psychological performance parameters to protect personnel operating in isolated, confined, and extreme (ICE) environments.

HRO Implementation: Architecting fail-safe operational systems and High Reliability Organisation cultures to prevent catastrophic failures in complex, high-stakes environments.

Replacing Management Heuristics with Algorithmic Governance: Pioneering data-driven, automated decision-making frameworks to eliminate cognitive bias and enhance strategic command during crises.

Critical Infrastructure Resilience during Crises: Designing robust operational safeguards to ensure the continuous function of vital societal systems under systemic shock or targeted disruption.

Focus: We engineer resilient, cross-border food systems and ecological defence strategies to guarantee sovereign stability against climate-driven shocks and supply chain collapse.

Lab Leadership

LAB A
AgriFood & Food Sovereignty
University of Agriculture, Ketou

LAB B
Environmental Systems & One Health
Kanan Puntambekar

Research Vectors

Food Sovereignty: Securing national autonomy over agricultural production and distribution to guarantee food independence against geopolitical and biological threats.

Logistics & Cross-Border Supply Chain Analysis: Mapping and hardening international agricultural supply chains to prevent systemic collapse during global crises.

Tropical Agriculture Resilience: Engineering robust agricultural frameworks capable of withstanding extreme climate volatility and emerging pathogens in vulnerable tropical zones.

One Health: Operationalising the vital nexus between human, animal, and environmental health to predict and mitigate transboundary biosecurity risks.

Climate Change Adaptation: Developing proactive strategic models to shield critical food and water infrastructure from the cascading impacts of climate disruption.

Ecosystem Dynamics: Analysing complex ecological networks to foresee environmental degradation and preserve the natural resources essential for societal survival.

Water Supply Management: Architecting fail-safe water governance and distribution protocols to protect hydrological resources against scarcity and targeted disruption.

THE DOCTORAL LAB EXPERIENCE

- **Operational Intelligence:** Move beyond theoretical research. DHS candidates engage in applied operational intelligence, solving real-world, high-stakes organisational and global challenges.

- **Strategic Command Partnerships:** Access sovereign bridges and diplomatic conduits, including our established treaties for Food Security and Biosecurity research connecting the European Union and West Africa.

- **Global Ecosystem:** Tap into a robust network of international research collaborations that directly enrich the academic and practical value of your doctoral degree.

- **Build Your Legacy.** Your research at IHRI will shape the operational resilience of tomorrow. Apply your expertise within our Operational Research Nodes and become a strategic leader in planetary health.

I H R I

Course Structure

Doctor of Health Science (DHS)							
Module	**Name**	**MQF Level**	**Total Learning Hours**	**Total Contact Hours**	**Supervised Placement & Practice Hours**	**Self Study Hours**	**Assessment Hours**
DHS 801	Transforming Services/ Delivering Quality	8	750	150	20	560	20
DHS 802	Implementation Science	8	750	150	20	560	20
DHS 803	Research Methods	8	750	150	20	560	20
DHS 804	Literature Review & Project Proposal	8	750	150	20	560	20
DHS 805	Thesis	8	1500	400	100	950	50

Full Time Structure	**Part Time Structure**
YEAR 1 DHS 801 DHS 802	**YEAR 1** DHS 801 DHS 802 (50%)
YEAR 2 DHS 803 DHS 804	**Year 2** DHS 802 (50%) DHS 803
YEAR 3 & 4 DHS 805	**Year 3** DHS 804 DHS 805
	Year 4 & 5 DHS 805

Module Outline DHS 801

Name: Transforming Services/Delivering Quality
Code: DHS 801

Description
This module is designed to meet the needs of professionals working in healthcare to develop a detailed understanding of the concept of quality and the process of Quality Improvement across the Healthcare continuum. Students will develop a deep and comprehensive knowledge of the diverse methods of improving quality, including but not limited to Continuous Quality Improvement and Total Quality Management, and the guidelines for implementing quality management and continuous quality improvement processes.

Students will conduct a comprehensive and in-depth exploration of TQM, Lean/Six Sigma and other integral tools of Process Improvement and Customer/Patient Satisfaction. The development of delivering quality and research will be examined by exploring system enhancement, theoretical frameworks, and tools for measuring system improvements.

Students will be encouraged to reflect upon how innovative practice could transform service delivery to drive up the quality of the patient experience, and will:
- Examine the challenges for modern healthcare provision.
- Construct opportunities to improve quality.
- Formulate a comprehensive understanding of the concept of quality from differing perspectives.
- Experiment with innovations and service redesign in practice.
- Analysis of service transformation theory and construction of novel quality implementation strategies.

Assessment Methods

Formative
- Tutorials / Transformational Tutorials
- Critical Prompts
- Minute Papers

Summative
- Analytical essay

Name: Implementation Science
Code: DHS 802

Description

Students will critically appraise theories, models, and the practice of implementation science in health and social care. They critically examine diagnostic, behavioural change and sociological models of implementation, with strategies to increase the utilisation of the scientific evidence base in health and social care that flow from these theoretical positions. Students will develop the skills to evaluate theories of implementation and will be able to demonstrate insight into how innovation and behaviour change can be planned and delivered in modern health services. Students will identify and critically appraise evidence about implementation science from different sources and consider how these can be integrated into a plan for action.

This module will enable students to develop a detailed, theory-informed strategy for achieving evidence-based change in an area of healthcare practice. Students on completion will be able to:
- Evaluate the evidence base in an effective intervention.
- Choose a strategy that produces the most significant impact.
- Design an appropriate and effective study.
- Track essential outcomes.
- Account for the barriers to uptake in communities, social service agencies, and healthcare facilities.

Assessment Methods

Formative
- Tutorials / Transformational Tutorials
- Critical Prompts
- Minute Papers

Summative
- Essay

Name: Research Methods – Qualitative and Quantitative
Code: DHS 803

Description

This module has been designed to enable students to undertake an in-depth critical analysis of research methods currently used in various settings. The module provides a detailed overview of quantitative and qualitative research methods, focusing on:

- Developing a thorough understanding of science theories, methodological views, and paradigms.
- Understanding the process of research and knowledge production in various settings, as well as in healthcare.
- Formulation of suitable problem statements and research questions from relevant academic and professional literature, and appropriate methods.
- Critical appraisal of the philosophical, ontological, and epistemological basis of research in healthcare and education.
- Appraisal and consideration of alternative research methodologies and analytical techniques for different research questions and proposals.

The principles of study design and mixed research methodologies will be discussed and critiqued in detail. Students will develop an understanding of methods commonly used in healthcare research. Various research methods will be presented, including interviews, focus groups, Randomised Control Trials (RCTs) and other epidemiological methods, and the pros and cons will be explored.

Students will also be taken through critically appraising qualitative and quantitative research methods using appropriate techniques. Students will need to demonstrate that they can apply the theoretical issues of the module to practical situations, such as critical evaluation of the research of others and the formation of their research skills. The students, through directed learning, will be supported through seminar and workshop activities in preparation for the assessment of the module.

Assessment Methods

Formative

- Tutorials / Transformational Tutorials
- Critical Prompts
- Minute Papers

Summative

- Assignment

Module Outline DHS 804

Name: Literature Review and Research Proposal
Code: DHS 804

Description
Building upon module D803, this module has been designed to enable the students to undertake an in-depth critical appraisal of published research evidence. In order to critically appraise and assess its suitability for application in practice, the student will need to develop an understanding of methods commonly used in healthcare research.
The student will then be taken through the process of critically appraising these qualitative and quantitative research methods using appropriate published checklists to effectively critique the research of others and to ensure the quality of their own research endeavours. This module will also address literature searching in order to identify appropriate literature, ethical principles surrounding research, methods of analysing and interpreting data, and will explore issues surrounding the application of research into practice.

The module is designed to guide students through the process of carrying out a narrative literature review (an extensive description and interpretation of previously published writing on a chosen topic). Narrative reviews provide a flexible and rigorous approach to analysing and interpreting the literature. Course content will include:
- rationale for a narrative review
- clarity of boundaries, scope, and definitions
- justification for inclusion and exclusion criteria
- reflexivity and a saturation/sufficiency statement
- details on analysis and interpretation
- defining a topic and search parameters, conducting a search using appropriate databases and sources, and summarising findings from the review.

Students who are marked Grade B and above will be encouraged to present their literature review findings at an institute seminar and encouraged to prepare a manuscript for publication along with the faculty.

Assessment Methods

Formative
- Tutorials / Transformational Tutorials
- Critical Prompts
- Minute Papers

Summative
- Research Proposal
- Literature Review

Module Outline DHS 805

Name: Thesis
Code: DHS 805

Description

This advanced research project requires students to produce a comprehensive integrative research product incorporating the advanced knowledge and skills from the programme into a final thesis of 50,000 – 60,000 words. The research must make a significant contribution to the knowledge domain, be of publishable quality, and be aimed at dissemination through the field. The research should also position the students at the leading edge in their chosen field.

Assessment Methods

Formative
- Tutorials / Transformational Tutorials
- Panel Review

Summative
- Dissertation
- Viva Voce

Our Learning Approach: The Modern Tutorial System

The IHRI Doctor of Health Science leverages an innovative pedagogical approach inspired by the Oxford tutorial system, adapted for modern online delivery. This method blends asynchronous and synchronous tutorials to provide a flexible, engaging, and transformative learning experience.

Core Components

- Self-Paced Engagement: Students engage with core readings and critical prompts at their convenience, fostering a balance between academic and professional commitments.
- Reflective Artifacts: Critical commentaries and "minute papers" created during tutorials become reusable resources for ongoing learning.
- Live Expert Interaction: Live discussions with lead advisors facilitate deeper exploration of topics and enhanced candidate-advisor interaction.

"This pedagogical approach integrates expert guidance, deep reflection, and flexible learning opportunities to deliver a transformative educational experience."

Champions of the Open Access Framework

At a time when rigorous scientific evidence is frequently barricaded behind commercial paywalls—allowing unverified disinformation to proliferate unchecked across global networks—we believe that planetary security relies on borderless intelligence. IHRI champions the Open Access movement by advocating for open-source software, transparent data sharing, and using and publishing in peer-reviewed open-access journals.

By ensuring our findings and tools are universally accessible, we empower global frontline communities and rapidly accelerate the deployment of critical health innovations.

IT Requirements & Digital Access

Connectivity & Hardware: A reliable internet connection is essential. The platform is compatible with computers, laptops, tablets, and smartphones.

READY TO ADVANCE YOUR PRACTICE?

VISIT IHRI.EDU.EU TO EXPLORE THE NODES AND BEGIN YOUR APPLICATION.

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