

Professional Diploma in **Infectious Diseases** Online



CURRICULUM



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Programme Overview

The RCPI / **iheed** 9-month Professional Diploma in Infectious Diseases is a new Royal College of Physicians of Ireland online programme, delivered in partnership with iheed, an Irish online medical education organisation. This programme is the fifth in the collaborative provision and builds on the learnings from programme launches in Paediatrics, Women's Health, Dermatology and Medicine for the Older Person.

Based on the latest knowledge and clinical best-practice, the programme will provide a highly engaging, richly informative, and convenient educational opportunity for doctors, nurses, midwives, physician associates and pharmacists wishing to upskill / refresh their knowledge in this important area.

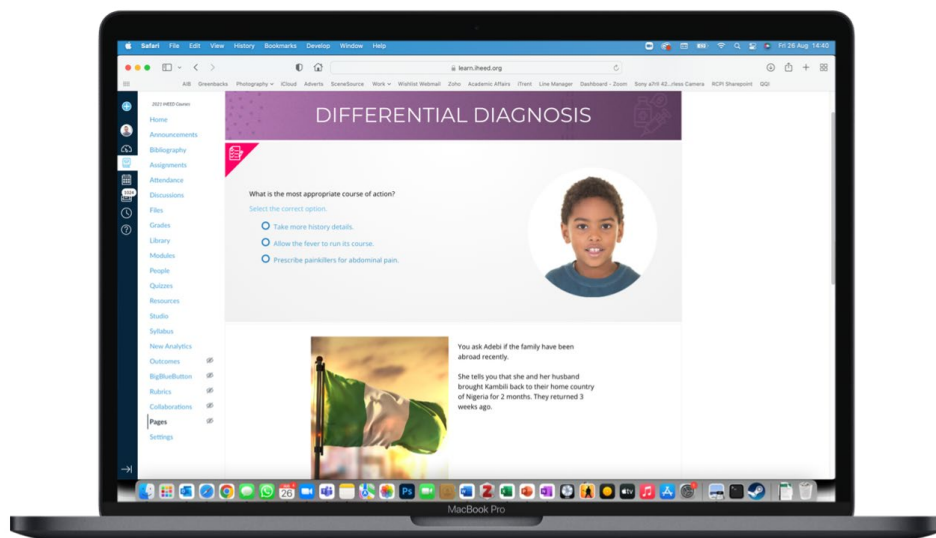
The programme aims to develop clinically focused diagnostic skills through the use of interactive patient cases. It provides a supportive, engaging, and accessible educational opportunity for healthcare professionals to develop diagnostic skills in a highly engaging format. It enhances the skills required to identify important clinical features to develop a diagnosis and formulate effective management plans for patients.

This programme brings together senior clinicians to review a wide range of issues around the management of infectious diseases across the world. The programme will:

- give a comprehensive introduction to infectious diseases
- explore infectious diseases of body systems
- explore infectious diseases in area specialisms
- consider health issues in public and global health

The duration of the Professional Diploma in Infectious Diseases is 9 months and learners will engage with bespoke online learning materials, access library resources, participate in discussion forums, as well as attend live virtual tutorials and complete formative and summative assessments online.

It is intended to further develop the qualification to the level of Postgraduate Diploma and Master of Science awards.



Minimum Intended Programme Learning outcomes

Upon successful completion of the programme, learners will be able to:

1. Demonstrate appropriate history-taking, examination and communication skills including sensitivity to the psychosocial issues faced by infectious diseases patients and their families.
2. Apply current international evidence and best-practice principles in the evaluation of a patient presenting with an infectious disease.
3. Demonstrate critical thinking and problem-solving in the treatment and management of infectious diseases within a learner's professional scope of practice and to recognize when onward referral is required
4. Evaluate strategies for management of infectious diseases in the context of public and global health
5. Assess the infectious disease risk associated with travel and apply evidence-based approaches to prevention of illness and management of tropical infections.
6. Explain appropriate approaches to the care of specific patient populations including paediatrics, obstetrics, homeless, migrant, LGBTQ+ and people who inject drugs
7. Demonstrate application of the principles of service provision for HIV and other Sexually Transmitted Infections

Target Audience

The programme is aimed at:

- Residents / doctors preparing for entry into specialism in infectious diseases
- Primary Care doctors
- Other doctors seeking to upskill in infectious diseases
- Nurses and Midwives
- Pharmacists
- Physician Associates

The programme will be offered to both Irish and international learners.

Entry Requirements

To be admitted to the programme, applicants must:

- Be a registered doctor, physician associate, nurse, midwife or pharmacist
- Demonstrate evidence of English Language Proficiency
- Have access to broadband, computer with webcam, microphone & speakers.

MODULE 1: INTRODUCTION TO INFECTION AND THE HOST

10 ECTS

Module Aims & Objectives:

The aim of this module is to provide learners with detailed knowledge of history-taking and examination in the context of infectious diseases. The module will provide learners with the knowledge and evidence about the nomenclature, taxonomy, pathogenicity, virulence / host pathogen response and diagnostic tools in infectious diseases and how these principles apply to the clinical management of patients.

Learners will apply clinical decision-making in the context of common infectious diseases presenting in paediatric and obstetric patients. The module will also provide learners with knowledge to manage important aspects of infectious diseases, including sepsis and an introduction to Human Immunodeficiency Virus (HIV).

Through tutor-led instruction, self-paced online content, peer-to-peer engagement and robust assessment it aims to enable learners to make appropriate, evidence-based, patient-centred, clinical decisions within the scope of their professional practice.

Minimum Intended Module Learning Outcomes:

On successful completion of this programme, learners will be able to:

1. Differentiate between bacterial, viral, parasitic, and fungal infections and describe how such microorganisms cause disease.
2. Evaluate the role of pharmacology in infectious diseases and discuss evidence-based approaches to manage patients requiring treatment.
3. Assess strategies in the risk factors, detection and management of sepsis including national and international programmes for sepsis
4. Evaluate strategies for the diagnosis and management of common infectious diseases in paediatric and obstetric patients.
5. Demonstrate application of the evidence underpinning the pathogenesis, natural history, screening/diagnosis, treatment, and ongoing management of HIV.

Module Assessment:

Video Assessment: Formative

Examination: 100%

MODULE 2: SYSTEMS BASED INFECTIOUS DISEASES

10 ECTS

Module Aims & Objectives:

This module provides learners with the academic unpinning to evaluate infectious disease across a range of systems including gastrointestinal, liver, renal, skin & soft-tissue, bone and infections of the Central Nervous System. The module also evaluates evidence-based approaches to the management of patients with Sexually Transmitted Diseases.

Through tutor-led instruction, self-paced online content, peer-to-peer engagement and robust assessment it aims to enable learners to make appropriate, evidence-based, patient-centred, clinical decisions within the scope of their professional practice.

Minimum Intended Module Learning Outcomes

On successful completion of this programme, learners will be able to:

1. Evaluate the basic pathophysiology, clinical features, and management of common viral and bacterial causes of infections of the central nervous system
2. Assess the causative agents, modes of transmission, and management of common Gastrointestinal and liver and renal infections
3. Assess and categorize common and acute infectious respiratory system diseases and explain how secondary bacterial infections occur in the respiratory tract
4. Demonstrate a systematic approach to the evaluation and management of patients who present with skin and soft-tissue infections.
5. Evaluate the presentation and management of osteomyelitis, diabetic foot disease and other bone infections.
6. Discuss the management of patients presenting with sexually transmitted infections.

Module Assessment:

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| Video Assessment | 20% |
| Examination: | 80% |

MODULE 3: PUBLIC HEALTH & SOCIAL ASPECTS OF INFECTIOUS DISEASES

10 ECTS

Module Aims & Objectives:

This module equips learners to consider infectious diseases in the context of public and global health. Learners will consider issues relating to vaccines, prevention strategies, travel health, and anti-microbial stewardship. The modules will also explore clinical decision making in the context of tropical diseases and HIV prevention.

Through tutor-led instruction, self-paced online content, peer-to-peer engagement and robust assessment it aims to enable learners to make appropriate, evidence-based, patient-centred, clinical decisions within the scope of their professional practice.

Minimum Intended Module Learning Outcomes

On successful completion of this programme, learners will be able to:

1. Evaluate the fundamentals of public health and global health in the context of infectious diseases.
2. Evaluate the role of vaccines and other prevention strategies in management of infectious diseases.
3. Analyse the role of antimicrobial stewardship in infectious diseases and public health.
4. Assess and advise on travel medicine in the context of infectious diseases.
5. Discuss the care of patients and management of infectious diseases in special populations.
6. Describe and evaluate the pathogenesis, clinical presentation and management of common tropical diseases including appropriate preventative measures.
7. Evaluate HIV prevention measures including the background evidence, implementation, efficacy, adherence, and safety of Pre-Exposure Prophylaxis (PrEP).

Module Assessment:

Video Assessment 20%

Examination: 80%

PROGRAMME STRUCTURE & CONTENT

MODULE 1 INTRODUCTION TO INFECTION AND THE HOST

- › Infection and the Host
- › Clinical Bacteriology and Gram-positive Infections
- › Bacteriology- Gram-negative Infections
- › Virology
- › Mycology & Parasitology
- › Maternal Infections
- › Childhood Infections
- › Childhood Infectious Syndromes
- › Sepsis: Pathogenesis & Guidelines
- › Introduction to HIV

MODULE 2 SYSTEMS BASED INFECTIOUS DISEASES

- › Central Nervous System (CNS) Infections
- › Gastrointestinal/Hepatobiliary (GI) Infections
- › Renal Infections
- › Skin and Soft Tissue Infections
- › Bone and Joint Infections
- › Viral Respiratory Infections
- › COVID-19
- › Bacterial Respiratory Infections
- › Sexual Health

MODULE 3 PUBLIC HEALTH & SOCIAL ASPECTS OF INFECTIOUS DISEASES

- › Public Health
- › Global Health
- › Vaccines and Prevention
- › Travel Health
- › Antimicrobial Stewardship
- › Special Populations I
- › Special Populations II
- › Tropical Infections
- › HIV Prevention & Pre-Exposure Prophylaxis

PROGRAMME DELIVERY MODEL

Learners will receive a combination of:

- Start of programme induction workshops
- Online content
- Weekly live synchronous online tutorials
- Innovative assessment methodologies

Programme Induction

Programme induction, prior to Module 1, comprises a number of components, to ensure learners are aware of programme structure, supports, key regulations, use of the online learning environment etc.

Weekly Structure

As a wholly online programme, it is important the programme is designed around the needs of learners who are full-time clinicians and part-time learners. Each week covers a different topic in infectious diseases and the programme follows a predictable rhythm for learners.

- **Discussion Posts.** An asynchronous case discussion is posted each Monday morning. This is linked to the week's topic, presents a clinical case and asks learners to consider the next appropriate steps in investigation, diagnosis, management, referral etc. Learners respond to this at any time they wish during the week. Likewise, the tutors usually join the conversation every second day for 10-15 minutes to read and respond to comments and move the conversation on.
- **Self-directed online learning.** The heart of the programme is extremely high-quality online learning content developed specifically for this course. Learners can access this at a time that suits them within the week.
- **Tutorial.** The only time that learners (and tutors) need to be specifically available is the weekly tutorial. There are normally 4-6 groups running in parallel and tutorials are scheduled to suit each international time zone. Indicative time are:
 - › Wed / Thurs 7pm for Europe, Africa & Eastern Mediterranean
 - › Friday 7am for Middle East and East Australia / New Zealand
 - › Friday 11am / 12pm / 1pm for India / South Asia / Western Australia

The tutorials run on the assumption that learners have already engaged with the online content and the role of the tutor is to highlight key points from the content and facilitate discussion about practical application, difficult cases, red-flag issues etc. This makes best use of both the tutors' and learners' time.

Who is iheed?

iheed is leading the way in delivering high-quality **online medical education**. Built by doctors and healthcare professionals, we have **over 30,000 users** across the globe, and believe that effective, accessible medical education is the key to providing better health outcomes worldwide. **iheed** is a division of Cambridge Education Group.

Since 1952, Cambridge Education Group has been delivering the highest quality academic programmes, providing a valuable stepping-stone for thousands of students to progress onto the world's leading universities and maximise their career opportunities.

Any questions?

Get in contact today at
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