

Postgraduate Certificate,  
Diploma and Master of Science in  
**Medical Education**  
for Healthcare Professionals



**CURRICULUM**



**WARWICK**  
THE UNIVERSITY OF WARWICK

# Contents

<b>Postgraduate Certificate in Medical Education for Healthcare Professionals.....</b>	<b>3</b>
<b>Module 1:</b> Essentials of Medical Education.....	4
<b>Module 2:</b> Effective Teaching in Medical Education.....	6
<b>Module 3:</b> Assessment in Medical Education.....	8
<b>Postgraduate Diploma in Medical Education for Healthcare Professionals.....</b>	<b>9</b>
<b>Module 4:</b> Learning Technologies in Medical Education.....	10
<b>Module 5:</b> Management and Leadership in Medical Education.....	11
<b>Module 6:</b> Evidence and Values in Medical Education.....	12
<b>Master of Science in Medical Education for Healthcare Professionals.....</b>	<b>13</b>
<b>Module 7:</b> Research in Medical Education for Healthcare Professionals.....	14



# PROGRAMME LEARNING OUTCOMES & ASSESSMENTS

## Postgraduate Certificate in Medical Education for Healthcare Professionals

The Pg. Certificate in Medical Education for Healthcare Professionals comprises three 20 CATS modules:

- Essentials of Medical Education
- Effective Teaching in Medical Education
- Assessment in Medical Education

Through successful completion of these modules, learners will attain the following learning outcomes:

- 1.** Demonstrate an ethical educational philosophy and the ability to critically reflect on development as an educator using appropriate frameworks, theory, and tools for reflection.
- 2.** Critically evaluate the literature on medical education and apply this learning to his or her educational practice.
- 3.** Apply learning and teaching principles in the design and development of an education course, module, or project, including the analysis of the learning needs of the intended audience.
- 4.** Demonstrate the application of learning and teaching methods that are relevant to intended learning outcomes and programme content.
- 5.** Interpret, synthesise, and appropriately manage conflicting information arising from feedback from learners and educators.
- 6.** Demonstrate appropriate use of effective assessment methods in an integrated and robust way to ensure intended learning outcomes have been achieved.

# MODULE 1

## ESSENTIALS OF MEDICAL EDUCATION

### Introductory description

This module offers a flexible method of learning to meet the educational and development needs of participants who are involved in teaching or training others, whether as individual learners or in groups in any public, private, community or voluntary health care environment.

### Principal module aims

The aim of this module is to enable participants to begin to develop their understanding of education in the field of healthcare / for different health professions, and to begin to apply that understanding in the workplace. It is intended to be the introductory module to the Masters in Medical Education for Healthcare Professionals and provides the foundations on which other modules build.

### Participants will:

- Gain the necessary knowledge and skills to provide sound educational experiences for learners in an academic or healthcare workplace.
- Acquire the ability to design, plan and manage learning experiences for groups of trainees or for learners on a one-to-one basis.

### Learning outcomes

1. Demonstrate an understanding of key theories regarding how students learn with a particular reference to healthcare settings and the education and training needs of health professionals.
2. Demonstrate an understanding of the role and professional values of the educator in an academic or healthcare setting.
3. Demonstrate an understanding of the interprofessional team-based approach to the provision of patient care and how this relates to education.
4. Demonstrate a critical, questioning, and analytical approach to key theories and research and be able to undertake critical evaluation.
5. Demonstrate effective planning for, and use of, at least one of the following educational approaches with a particular reference to their subject area and to the level of the target student audience in appropriate healthcare settings:
  - › Large group presentation.
  - › Small group learning.
  - › One-to-one teaching and learning - planned and opportunistic.
6. Demonstrate the ability to assess and give feedback to students.
7. Evaluate (describe, analyse, and justify) their own practice as a medical educator and demonstrate the ability to respond effectively to evaluative feedback of teaching.
8. Demonstrate personal development planning as a medical educator.

# MODULE 1

## ESSENTIALS OF MEDICAL EDUCATION

### Formative Assessment:

- Documented planning of a teaching session / lesson.
- Creation of instructional materials.
- Conduct a teaching session/lesson.
- Collection and evaluation of student feedback on the delivery of the teaching session / lesson.

### Summative Assessment:

2,500-word evidence-based reflection on the teaching activity, including:

- Different learning styles and how they were applied in the development and delivery of the lesson.
- Reflection on the Teaching Portfolio created as part of the Formative Assessment element, including reference to the feedback received during delivery of the teaching session / lesson.
- Development of a personal action plan for future professional development as a medical educator.

# MODULE 2

## EFFECTIVE TEACHING IN MEDICAL EDUCATION

### Introductory description

There are numerous roles fulfilled by medical educators, e.g., provision of information, role modelling, facilitation, assessment, curriculum and programme design, and creation of materials. Understanding the challenges of educators balancing multiple roles and being able to practically apply relevant education theories in their clinical context is key to becoming an effective educator.

### Principal module aims

The aim of this module is to enable participants to further their professional development as educators by undertaking self-evaluation of their teaching practice against frameworks and models attempting to describe effective teaching, gaining insights into the processes which support the development of teaching expertise, focusing on their own priorities (derived from self-evaluation) and on key contexts for practice (e.g., particular healthcare settings, inter-professional education).

### Learning outcomes

1. Undertake a self-evaluation of their development as a teacher through a systematic and critical application of established frameworks describing the features of 'effective' and 'excellent' educator.
2. Demonstrate a critical understanding of key principles and methods of curriculum planning and design through application to a particular healthcare settings and educational contexts (including inter-professional education).
3. Analyse the key features of the learning environment in particular healthcare settings relevant to your professional practice and identify the teaching skills required to support successful education in these settings.
4. Demonstrate development in generic capabilities (such as communication skills and professional identity formation) relevant to a range of teaching roles.
5. Support fellow professionals in their development as educators through critical application of professional development processes (such as feedback, mentoring, peer review, teamwork and action learning).
6. Plan and maintain your own continuing development as an educator through critical application of professional development processes (such as reflective practice, peer review, and scholarship of teaching).

## MODULE 2

# EFFECTIVE TEACHING IN MEDICAL EDUCATION

### Formative Assessment:

- Create learning outcomes and evaluation for a teaching activity.
- Submission of a recording of the teaching activity related to the learning outcomes (to be delivered to the peer group and to the tutor).
- Provision of feedback on the teaching activity - other students in the group will give peer feedback, and the tutor will also provide feedback.

### Summative Assessment:

A 2,000-word evidence-based reflection on the teaching activity and students' personal learning, including areas of future development.

# MODULE 3

## ASSESSMENT IN MEDICAL EDUCATION

### Introductory description

This module will introduce the theoretical frameworks for assessment and evaluation and help relate theory to practice.

### Principal module aims

The aim of this module is to introduce participants to methods and directions in both formative and summative assessment of learning. Participants will be given opportunities to relate the theory to practice and develop their skills through practical assignments.

### Learning Outcomes

1. Demonstrate a sound understanding of the key principles, concepts and tools underpinning assessment of learners and learning.
2. Critically evaluate the relative strengths and weakness of formative and summative assessment methods in particular healthcare settings and educational contexts.
3. Demonstrate an understanding of competency and frameworks / tools for assessing skills and competencies.
4. Demonstrate an understanding of the role of blueprinting and its practical application in enhancing the quality of healthcare assessments.
5. Demonstrate an understanding of the importance of standard setting methods in terms of their implementation, application and implications.
6. Demonstrate an understanding of the integral role of feedback in assessment and its practical application in enhancing the quality of healthcare assessments.

### Formative Assessment:

Evaluate and make justified recommendations to enhance current practice of an area of education, e.g., a current course, in line with current international practice. Within this, consider:

- Balance of formative and summative assessment and standard setting within their programme of choice and measures for remediation.
- Assessment of professionalism within the context of their healthcare workplace.

### Summative Assessment:

1,500-word evidence-based reflection on the activity



# POSTGRADUATE DIPLOMA IN MEDICAL EDUCATION FOR HEALTHCARE PROFESSIONALS

The **Pg. Diploma in Medical Education for Healthcare Professionals** comprises three 20-CATS modules from the PG Certificate, plus the following three 20-CATS modules:

- Learning Technologies in Medical Education
- Evidence and Values in Medical Education
- Management and Leadership in Medical Education

Through successful completion of these modules, learners will attain the following learning outcomes:

1. Demonstrate knowledge, skills and attitudes of digital age teaching and learning.
2. Demonstrate the ability to be adaptive in integrating design, teaching, and assessment methods with modern learning technologies to achieve intended learning outcomes.
3. Demonstrate advanced information skills necessary to critically appraise literature in medical education to evaluate evidence and formulate research questions.
4. Interpret and apply the results of educational research to their own educational practice.
5. Demonstrate a thorough understanding of organisational leadership theories and how supportive, multi-professional cooperation can improve education and collaborative care.
6. Demonstrate the ability to communicate, follow, lead, and function effectively to improve learning in their own organisational context.

# MODULE 4

## LEARNING TECHNOLOGIES IN MEDICAL EDUCATION

### Introductory description

This module provides a hands-on experience of the application of learning technologies in medical education and will cover e-learning, simulation, assessment, communication, use of artificial intelligence, use of learning management systems and leveraging digital media and social networking. The module will build on learning and assessments in the previous three modules and enable students to utilise technology within their healthcare education environment.

### Principal module aims

The aim of this module to give participants an in depth and critical understanding of the potential for taking a learning technologies approach, including:

- A broad conceptual and experiential understanding of the application of learning technologies in teaching, learning and assessment with specific reference to healthcare.
- Capability to develop and evaluate learning and teaching that involves learning technologies.

### Learning Outcomes

1. Conduct a review of the use of learning technologies, showing an awareness of current debates and issues surrounding the use of learning technologies in medical education.
2. Critically analyse opportunities and constraints when using learning technologies, showing understanding of the educational theory and evidence when selecting approaches.
3. Plan and develop a learning technology resource and/or activity to support a clearly defined healthcare learning need.
4. Critically review the appropriate use of social networking and online collaborative activities in the healthcare education domain.
5. Demonstrate appropriate understanding of patient consent and IPR issues when using and sharing learning resources and activities.
6. Demonstrate appropriate evaluation skills to assess the effectiveness of a learning technologies approach.
7. Show clear and effective communication skills in written and online media.
8. Continue to develop their personal professional development as an educator.

### Summative Assessment:

Functional implementation of an online course including modules, assessment, and evaluation in an Online Learning Environment.

- Individual 30-minute presentation of the online course
- 1,500-word evidence-based reflection on the teaching activity

# MODULE 5

## MANAGEMENT AND LEADERSHIP IN MEDICAL EDUCATION

### Introductory description

This module offers a blended method of learning to meet the educational and developmental needs of healthcare practitioners who are currently in management and leadership roles or are interested in exploring these roles as part of their professional development.

### Principal module aims

The aim of this module is to enable students to develop a critically evaluative understanding of the key principles of management and leadership in healthcare contexts and be able to apply these in practice.

### Learning Outcomes

1. Identify areas for change and development within a range of professional contexts, including educational contexts such as clinical training programmes, and develop evidence-based plans that could be used to address these, demonstrating a theoretical understanding of leadership and management and their ability to apply this in the context of multi-professional teams.
2. Demonstrate critical self-evaluation of their roles and skills as managers, leaders, and team members, through detailed understanding of relevant theoretical models and engagement with relevant leadership competency tools and frameworks.
3. Apply leadership, followership, and management skills to improve learning in their own professional contexts, using effective oral and written communication and working in multi-professional teams.

### Summative Assessment:

#### Part A (50%)

10-minute individual presentation + 5 minutes Q&A

- Students identify an area for change and development within their educational context and develop an evidence-based plan that could be used to address this.
- Students are required to demonstrate a theoretical understanding of leadership and management and their ability to apply this in context.

#### Part B (50%)

A 1,500-word critical reflection, demonstrating evaluation of their roles and skills as leaders in Medical Education, through engagement with relevant competency frameworks and tools, culminating in the identification of areas for further development and a personal action plan to support this.

The critical reflection should demonstrate understanding of, and reference to, key theories and concepts in leadership.

# MODULE 6

## EVIDENCE AND VALUES IN MEDICAL EDUCATION

### Introductory description

This module explores the complex relationship between evidence, values and professionalism which underpin the practice and development of medical education research.

### Principal module aims

The aim of this module is to equip participants with a critical understanding of the complex interrelationships between evidence, values and professionalism which underpin the methods for developing and undertaking research into medical education.

### Learning Outcomes

1. Use the principles and techniques of critical appraisal to evaluate evidence produced within a range of research paradigms and traditions.
2. Formulate research questions and construct systematic searches for evidence relevant to medical education.
3. Apply critical understanding of appropriate methods for the investigation of a particular research questions to the appraisal of research proposals and published studies.
4. Demonstrate the advanced information skills required to undertake literature searches and manage the results.
5. Use appropriate decision-making processes to address problems in medical education requiring consideration of evidence and values – see below.
6. Identify the benefits and limitations of approaches to reviewing literature in a range of fields relating to medical education.
7. Demonstrate a critical understanding of the relationship between 'evidence', 'values' and 'professionalism' in the practice and development of medical education research.
8. Identify ethical issues in medical education research and critically evaluate approaches to the resolution of complex ethical issues.

### Formative Assessment

Group review of the learner's research question with feedback from the tutor and other students.

### Summative Assessment:

2,500-word submission including a description of the learner's research question and a reflection on the activity and future development. It is anticipated that ~60% of the submission (1,500 words) will be devoted to a literature review of the topic.

# MASTER OF SCIENCE IN MEDICAL EDUCATION FOR HEALTHCARE PROFESSIONALS

The **Master of Science in Medical Education for Healthcare Professionals** comprises the six 20-CATS modules from the PG Diploma plus the following 60-CATS module:

- Research in Medical Education for Healthcare Professionals

Through successful completion of this module, learners will attain the following learning outcomes:

- 1.** Develop the capacity for self-directed enquiry and demonstrate the ability to manage a professional project.
- 2.** Critically evaluate and synthesise the literature in a chosen area of Medical Education and draw inferences from that literature.
- 3.** Identify key research questions within a chosen area of Medical Education on which they will carry out a professional project.
- 4.** Evaluate and select appropriate research methods, demonstrating an appreciation of the ethical implications of the chosen methods.
- 5.** Identify, analyse, and interpret suitable data to enable the research question to be addressed.
- 6.** Formulate robust explanations of the findings and their application / relevance, demonstrating the written and oral communication skills to convey them in a succinct, compelling manner.

# MODULE 7

## RESEARCH IN MEDICAL EDUCATION FOR HEALTHCARE PROFESSIONALS

### Introductory description

***“Research in Medical Education for Healthcare Professionals”*** is a 60 CATS module that will enable students to identify, understand, appraise, and plan research related to Medical Education.

The module will build on the students’ learning in Module 5 (Evidence and Values in Medical Education), allowing them to explore different research methods and giving them the opportunity to apply these skills and understanding to develop, design and deliver a Research Project relevant to Medical Education. The module will cover the skills needed to identify, appraise, and synthesise research evidence and develop an understanding of the implications of research for Medical Education. Students will explore different research approaches including systematic reviewing, quantitative, qualitative, and mixed methods research, and the application of various sampling, data collection and data analysis methods. Working independently, and under limited supervision, students will then take responsibility for the direction and management of a project through to completion and submission.

### Principal module aims

The aims of this module are:

- To develop students’ knowledge and understanding of research methods and principles.
- To develop students’ intellectual abilities using theoretical perspectives and drawing on current experience and previous experiential learning.
- To develop students’ ability to critically evaluate an area of practice relevant to Healthcare Education.
- To develop students’ ability to critically appraise the research literature and synthesise their findings.
- To develop students’ ability to undertake substantial independent study.
- To develop students’ ability to produce and communicate a piece of work informed by the forefront of research and evaluation, and with the potential for publication for a professional audience.

### Learning outcomes

1. Develop an appropriate research proposal and protocol that addresses a research question or evaluates an area of professional practice within Medical Education.
2. Demonstrate self-direction and originality in the critical evaluation and synthesis of the research evidence in an area of Medical Education and consider possible developments and improvements for implementation.
3. Apply the principles and techniques of critical appraisal to evaluate the limitations of research evidence, including complex interventions and studies at the forefront of methodological development in Medical Education.
4. Demonstrate understanding of ethical values and principles in the context of Research in Medical Education, how to apply for ethical approval and the role of Internal Review Boards.

# MODULE 7

## RESEARCH IN MEDICAL EDUCATION FOR HEALTHCARE PROFESSIONALS

5. Justify the choice of methodology and how this applies to research or enquiry within Medical Education.
6. Demonstrate advanced skills in planning, information gathering and data interpretation and synthesis for research enquiry.
7. Demonstrate independent analytical and critical thinking skills.
8. Write succinctly in the format of an academic article for an appropriate professional journal and present work visually in the format of an academic poster.
9. Have the knowledge and skills to independently design, plan, conduct, and complete a significant piece of academic writing which addresses an area of Medical Education.
10. 1 Demonstrate an in-depth knowledge of different research methodologies and how these might be applied to research in Medical Education.

### Summative Assessment

Students will deliver 3 pieces of work for Summative Assessment:

- Research Proposal (pass/fail)
- Poster Presentation (20%)
- Journal Article (80%)

## This programme is delivered in partnership with iheed

The partnership between the University of Warwick and iheed brings together Warwick's academic excellence and iheed's unrivalled expertise in online healthcare education. This synergy creates a transformative learning journey that can take your healthcare leadership career to new heights.

Warwick's faculty members contribute their knowledge, research and teaching excellence, ensuring the academic rigor and depth of the programme. Simultaneously, iheed's world-leading online education capabilities bring learning to life in a stimulating, interactive and user-friendly way, ensuring a rich, engaging and, most importantly, effective learning experience.

The result is a programme that delivers the very best of both partners: top-tier academic quality, taught in a way that maximises learning outcomes and provides flexibility for professionals.

**Interested in discovering more about iheed online programmes?  
Get in touch at:**

[meded@iheed.org](mailto:meded@iheed.org)

  
Cambridge Education Group

[iheed.org](https://iheed.org)

+353 1 230 8652



  
**WARWICK**  
THE UNIVERSITY OF WARWICK