



Ultrasound
Academy



Postgraduate Prospectus

PG Certificate In Ultrasound
For Internal Medicine

PG Certificate In Ultrasound For Internal Medicine

Introduction

The course will prepare clinicians, trainees or specialists in Internal Medicine to practice point-of-care ultrasound in the management of their patients.



MQF
Level 7



ECTS
30 Credits



Mode of Study
Blended Learning
(online / in-person)



Duration
12 Months (part time)

Entry Requirements

No previous ultrasound experience required. Students must be qualified medical doctors or health practitioners of good standing and be proficient in English. In addition, they must work in Institutions where they have access to ultrasound machines and mentors.

Description

The program covers an introduction to the Fundamentals of Ultrasound scanning and 6 valuable modalities encountered in Internal Medicine including:

- Core Echocardiography and IVC for Internal Medicine
- Intermediate Echocardiography for Internal Medicine
- Lung US for Internal Medicine
- Focused Assessment for Free Fluid for Internal Medicine
- Ultrasound guided Vascular Access and Interventional for Internal Medicine
- Deep Vein Thrombosis for Internal Medicine

Further details regarding learning outcomes of specific modalities may be found on the website. The program is very hands-on and will be taught with a mix of blended learning, mentored scanning and work based practice.

Didactic components are delivered through reading material and online/in-person lectures. The bulk of the material is covered in online lectures which can be accessed at the student's pace prior to the in person sessions.

There are 3 components involved in learning Point of care Ultrasound:

Scan Technique

Learning the correct scanning technique to acquire good quality images and apply strategies to overcome obstacles.

Interpretation

Interpretation of the scan to identify the presence or absence of specific pathology.

Integration

The place of POCUS within clinical management and the integration of the US findings in the care of the patient.

Scanning technique is a skill that is primarily learned through mentoring and practice. The skills are first taught in an intensive course with a significant amount of mentored hands on practice to ensure a good foundation for eventual work based practice.

This will be supplemented by work based practice which is intended to reinforce correct technique within a real world population of patients. A proportion of the scans must be mentored. There will be 4 to 5 one to one mentoring days during which the students can practice all the modalities with the mentor. This will ensure the maintenance and refinement of technique every 2-3 months. These encounters will also serve to encourage the student and evaluate their progress in compiling the logbook.

Candidates are required to perform a specific minimum number of scans per modality, compile a logbook, and submit case studies. This will ensure that they have crossed the evidence based threshold for skill acquisition.

Interpretation and integration are primarily taught using real world case studies with pathological findings on the images and clips. The cases will incorporate short answer questions and/or MCQs to ensure that the student engages with the case and understands how when to use POCUS and how to apply the findings to the clinical management. Interpretation and integration will be introduced during the introductory in-person course.

Coursework

The students are required to compile a logbook with a minimum of 200 scans with a proportion of directly mentored scans.

MCQ assessment per semester during one of the mentor-mentee meetings.

Between one and two literature reviews of 1000 words for specific modalities.

The MCQs and literature reviews will carry 18% of the final mark.

Assessment

Final Assessment will be composed 3 parts:

1

Skill assessment in the form of Observed Structured Clinical Examinations or OSCEs

Each modality will be assessed using an OSCE in which the components of the examination are individually assessed on a marking sheet. Obligatory components must all be achieved in order to pass the OSCE. Certification requires a pass in the OSCE of all modalities.

2

MCQs to test didactic knowledge

The didactic knowledge and pattern recognition will be assessed using 15 - 25 MCQs per modality. There will be a total of 120 MCQs and a pass requires the candidate to answer a minimum of 50% correctly.

3

Clinical cases with short answer questions to test clinical integration and recognition of pathology

There will be a total of 28 clinical cases with SAQs encompassing all modalities. A pass requires the candidate to answer a minimum of 50% correctly.