



Postgraduate Prospectus

PG Certificate in
in Point-of-Care
Ultrasound for
Cardiothoracic Surgery

PG Certificate in Point-of-Care Ultrasound for Cardiothoracic Surgery

INTRODUCTION

The Postgraduate Certificate in Point-of-Care Ultrasound for Cardiothoracic Surgery is designed for healthcare professionals seeking advanced competence in perioperative and cardiothoracic point-of-care ultrasound. Aligned with MQF Level 7, the programme combines academic study, practical workshops and supervised clinical scanning to develop autonomous practitioners capable of integrating ultrasound into surgical and critical care decision-making.

ENTRY REQUIREMENTS

No previous ultrasound experience required. Applicants must be registered medical doctors or healthcare practitioners of good professional standing and be proficient in English.

Applicants whose first language is not English may be required to provide evidence of English language proficiency through a recognised qualification such as IELTS, TOEFL, Cambridge C1 or equivalent.

Link to Identity Malta's VISA requirement for third country nationals:

<https://www.identitymalta.com/unit/central-visaunit/>

PROGRAMME INFORMATION

MQF Level

Level 7

Accreditation Category

Higher Education Programme

EQF Level

Level 7

Mode of Study

Blended Learning
(60% Online / 40% In-Person)

ECTS

30 Credits

Duration

12 Months (Part Time)

Programme Type

Qualification

DESCRIPTION

The programme covers an introduction to the Fundamentals of Ultrasound Scanning and six valuable applications including:

- > Core Echocardiography
- > Intermediate Echocardiography
- > Inferior Vena Cava (IVC) Assessment
- > Lung Ultrasound
- > Ultrasound-Guided Vascular Access
- > Ultrasound-Guided Cardiothoracic Procedures

Learners develop expertise in cardiac image acquisition, interpretation and ultrasound-guided procedures while gaining extensive supervised workplace experience. Particular emphasis is placed on perioperative haemodynamic assessment, postoperative cardiothoracic complications, pleural pathology, fluid management and safe image-guided interventions.

PROGRAMME STRUCTURE

Module 1

1st Semester

Ultrasound Fundamentals in Point-of-Care
for Cardiothoracic Surgery
8 ECTS | 200 hours

Module 2

1st Semester

Clinical Module 1
11 ECTS | 275 hours

Applications:

- Core echocardiography
- Inferior vena cava (IVC) assessment
- Lung ultrasound for perioperative and cardiothoracic patient assessment

Module 3

2nd Semester

Clinical Module 2
11 ECTS | 275 hours

Applications:

- Intermediate echocardiography
- Ultrasound-guided vascular access
- Cardiothoracic procedural applications for advanced perioperative practice

Total Programme Credits: 30 ECTS

There are three components involved in learning Point-of-Care Ultrasound:

1

SCAN TECHNIQUE

Learning the correct scanning technique to acquire diagnostic quality images and apply strategies to overcome technical challenges and patient-related limitations.

2

INTERPRETATION

Interpretation of ultrasound images to identify normal anatomy and recognise the presence or absence of pathology.

3

INTEGRATION

Understanding how ultrasound findings influence clinical reasoning, diagnosis and patient management within surgical practice.

Scanning technique is primarily learned through mentoring and supervised practice. Skills are first taught during intensive hands-on training sessions with substantial supervised scanning to establish a strong technical foundation.

This is supplemented by work-based clinical practice designed to reinforce correct technique in real-world patient populations. A proportion of scans must be mentored to ensure appropriate progression and competency development.

Throughout the programme, students participate in one-to-one mentor encounters during which they practice applications, receive feedback, address learning needs and review progress towards logbook completion.

Candidates are required to complete a minimum of 200 documented ultrasound examinations and maintain a clinical logbook demonstrating progressive competence.

Interpretation and integration are taught through real-world clinical cases, pathological image review, case-based discussions and clinical decision-making exercises. These activities help learners understand not only how to perform ultrasound examinations but also when and how to apply ultrasound findings appropriately within surgical care.

ASSESSMENT

Assessment consists of:

- > Multiple Choice Question (MCQ) examinations
- > Clinical case-based short answer questions
- > Objective Structured Clinical Examinations (OSCEs)
- > Clinical logbook completion
- > Formative assessment during mentor-mentee meetings
- > Literature review

GRADING SYSTEM

The Overall Grading will be as follows:

- > Fail <50%
- > Pass 50-59%
- > Pass with Merit 60-69%
- > Pass with Distinction $\geq 70\%$

Students must demonstrate competence in image acquisition, image interpretation and clinical integration across all applications.

Successful completion of the programme leads to the award of the:

POSTGRADUATE CERTIFICATE IN POINT OF CARE ULTRASOUND FOR CARIOTHORACIC SURGERY
MQF Level 7 | EQF Level 7 | 30 ECTS Credits



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