

## Course Specification Template

This specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided.

We undertake continuous review of our courses to ensure quality enhancement and professional relevance, in response to student and other stakeholder feedback and to manage our resources. As a result, this course may be revised during a student's period of registration. Major changes to courses and modifications to courses are approved following consideration through the University College's Course Approval and Review processes or Course and Unit Modification policy, as appropriate; Any changes will be balanced against our obligations to students as set out in our Student Agreement and will be discussed with and communicated to students in an appropriate and timely manner.

### Basic Course Information

<b>Final award and title</b>	MSc MSK Medical Ultrasound PgDip MSK Medical Ultrasound PgCert MSK Medical Ultrasound	<b>Course Code</b>	MSMMUJP PGMMUPJ PCMMUJP
<b>FHEQ level and credit of final award</b>	MSc MSK Medical Ultrasound 180 Level 7 Credits (90 ECTS) PgDip MSK Medical Ultrasound 120 Level 7 Credits (60 ECTS) PgCert MSK Medical Ultrasound 60 Level 7 Credits (30 ECTS)		
<b>Intermediate awards titles</b>	For MSc MSK Medical Ultrasound <ul style="list-style-type: none"> <li>• PgDip MSK Medical Ultrasound</li> <li>• PgCert MSK Medical Ultrasound</li> </ul> For PgDip MSK Medical Ultrasound <ul style="list-style-type: none"> <li>• PgCert MSK Medical Ultrasound</li> </ul>		
<b>FHEQ level and credit of intermediate award</b>	PgCert MSK Medical Ultrasound 60 Level 7 Credits (30 ECTS) PgDip MSK Medical Ultrasound 120 Level 7 Credits (60 ECTS)		
<b>Awarding Institution</b>	AECC University College		
<b>Teaching Institution</b>	AECC University College		
<b>Professional, Statutory and , Regulatory Body (PSRB) accreditation/recognition</b>	Consortium for Accreditation of Sonographic Education (CASE)		
<b>Duration of PSRB accreditation/ recognition where applicable)</b>	Accreditation underway		
<b>Mode of study</b>	Part-time		
	The following Units have been approved for standalone delivery. All applicants must meet the entry requirements of these units:		

	MUS7002 Upper Limb Ultrasound- 20 Level 7 Credits (10 ECTS) MUS7003 Lower Limb Ultrasound- 20 Level 7 Credits (10 ECTS) MUS7054 Soft Tissue Ultrasound- 20 Level 7 Credits (10 ECTS) MUS7057 MSK Guided Injections- 20 Level 7 Credits (10 ECTS)
<b>Distance Learning course</b>	Application specialist units are taught face to face Non-application specialist units are taught online
<b>Standard length of course</b>	MSc- 3 years PGDip- 2 years PGCert- 1 year
<b>Language of delivery</b>	English
<b>Place of delivery</b>	AECC University College
<b>UCAS code (where applicable)</b>	N/A
<b>HECOS Code(s)</b>	101330
<b>Date Course initially approved</b>	20 August 2024
<b>Version number</b>	1.0
<b>Date this version approved</b>	20 August 2024
<b>Academic year from which this applies</b>	September 2024 and January 2025
<b>Author</b>	Farrah Elsaghir

## Course Overview

### 1. Admissions regulations and entry requirements

The regulations for this Course are the University College's Standard Admission Regulations which may be found from the [Latest Policies webpage](#). These regulations include the general entry requirements and specific requirements regarding English language. The detailed entry requirements for the course may be found from the relevant course page on the University College website.

#### Recognition of Prior Learning (RPL)

AECC University College has a Recognition of Prior Learning Policy which can be found from the [Latest Policies webpage](#).

The course is designed to provide for admissions through RPL ensuring that the Recognition of Prior Learning Policy has been followed. Evidence of equivalent course content and assessment is required.

## 2. Additional entry requirements

Applicants applying for a placement at the AECC University College must undertake and provide the results of a DBS check.

Applicants wishing to undertake application specific units must have a clinical placement either with the AECC University College or external site, as specified under entry requirements.

It is imperative that prior to registration onto the MSc Medical Ultrasound course, the clinical placement (internal and external placement) is recognised as satisfactory by the Course Lead. Students have the option to undertake units as a standalone (CPD) units, however this is on condition that pre-requisites are met for the unit/s and a clinical placement form is also submitted at the time of application which meets the requirements and is approved by the Course Lead. The student is expected to train in a safe environment which provides opportunities for good quality supervised training. The clinical placement must provide the student with access to a good case-mix of patients in regular planned clinics using high-specification equipment. Learning resources should also include computers and internet access to encourage students to carry out academic and research activities for the successful completion of their coursework. CASE recommend that a student have access to clinical lists for a minimum of two days per week during the period of training. Placement checks will be conducted by a member of the course team for external sites if additional information is required regarding a placement which will including meeting the Practice Educator/team. An offer on the programme will only be given if the placement meets the required standard for entry.

An appropriately qualified individual in the department must act as a Practice Educator and undertake biannual Practice Educator training. The designated individual should undertake the role of the assessor for the clinical competency assessment. Where possible, a Deputy Practice Educator should also be named on the clinical placement form who can also aid the Practice Educator and undertake the role of the moderator for a practical assessment where possible. Although a student may have a named Practice Educator and Deputy Practice Educator who can undertake the clinical competency assessment, the Medical Ultrasound team will still audit/moderate departments in the clinical competency assessment.

For students who have a Practice Educator and do not have a named Deputy Practice Educator, the Medical Ultrasound team will need to moderate the assessment, these students may be subjected to additional costs and students are advised to read the additional cost document for MSc Medical Ultrasound.

## 3. Aims of the course

This course aims to enable students to attain application-specific skills in diagnostic ultrasound ensuring safe and competent practice for entry to the profession as a reflective and critical practitioner. This aligns with Master's degree characteristic statements for 'professional/practice' (QAA 2016). As part of this process, the course aims to enable students to:

- acquire in-depth knowledge and understanding in diagnostic musculoskeletal (MSK) ultrasound aligned to new developments and current empirical evidence.
- acquire clinical skills for safe and competent practice in Musculo-skeletal ultrasound diagnosis practicing autonomously and compassionately whilst maintaining patient dignity.
- advance professional practice through critical evaluation and critical reflection on documentary (practice) evidence and empirical (research) evidence within the ultrasound sector.
- plan and conduct an in-depth scientific investigation in a topic area relevant to diagnostic Musculo-skeletal ultrasound.
- develop clinical leadership, research capabilities and ability to work collaboratively with other healthcare professionals.
- develop continual learning and professional development strategies

<b>4. Course Learning Outcomes – what students will be expected to achieve</b>	
<b>This course provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:</b>	<b>The methods used to enable outcomes to be achieved and demonstrated are as follows:</b>
<p><b>Subject Knowledge and Understanding</b> Having successfully completed this course students will be able to demonstrate knowledge and understanding of:</p> <p>A1 the science, operation and appropriate selection of ultrasound equipment</p> <p>A2 professional responsibility in safe and ethical MSK ultrasound practice</p> <p>A3 the relevant anatomy and pathology in a named clinical application(s)</p> <p>A4 the techniques and use of diagnostic MSK ultrasound in a named clinical application(s)</p> <p>A5 how methodologies of research and audit enquiry are used to create and interpret knowledge (MSc stage only).</p>	<p><b>Teaching and Learning Methods</b> A range of teaching and learning methods are used to demonstrate subject knowledge and understanding. The primary learning environment for students on application specific units is the clinical placement setting where practical skills are mostly attained. The student is expected to adopt self-directed learning strategies in which individual learning needs are identified within their own professional practice, learning achieved by appropriate means, and learning outcomes applied to meet these needs and change practice. Students are required to attend formal seminars and presentations (A1-A5). LO A1-2 will also be demonstrated through practical sessions using machinery and phantoms at the University College and use of the prosection lab for practical skills to demonstrate LO A3. Workshops will aid teaching for LO A4.</p> <p><b>Assessment Methods</b> The student will experience a variety of assessment methods to be able to demonstrate the learning outcomes. This allows for practical demonstration as well as critical thinking. ILOs A1-A4 are assessed in critical reflective written accounts in which critical thinking and critical writing skills are demonstrated through critical written account and case studies. Clinical competency is assessed by portfolio including a logbooks and records of practical assessments (A1-A4). A4 is demonstrated in the clinical competency assessment for application specialist units. Research methods and dissertation assess A5.</p> <p>Students receive feedback (summative) on their written work through an assessment feedback form which grades individual assessment criteria and gives an overall grade for the work. In addition to the grade students receive literal feedback through the open comments box. In specified units students are given the opportunity to submit a draft of their work for feedback before their final submission. Students receive feedback immediately after their mock and final practical examinations by engaging with their assessor. In particular, detailed feedback is provided in cases where remedial work is necessary.</p>

<p><b>Cognitive Skills</b></p> <p>Having successfully completed this course students will be able to:</p> <p>B1 critically reflect on the practice of diagnostic MSK ultrasound</p> <p>B2 critically evaluate research and experiential evidence so as to develop reasoned arguments and arrive at valid conclusions</p> <p>B3 apply new knowledge and insight to inform and change professional practice within MSK ultrasound diagnosis</p> <p>B4 make sound diagnostic decisions from a range of information sources including MSK ultrasound images</p> <p>B5 synthesise existing knowledge and practice to identify areas amenable to research and other forms of investigation (MSc stage only)</p>	<p><b>Teaching and Learning Methods</b></p> <p>This reflective and critical thought learning model is mostly evident in the written coursework and or practical assessments (B1-B5). Learning experiences in the clinical setting achieve many of the intellectual and practical skills associated with safe and ethical breast imaging practice (B4). The clinical setting allows the student to apply learning (B3). Learning by undertaking a research study under supervision in the final stage achieves knowledge and skills in empirical data collection, analysis and interpretation generating original knowledge in the form of answers to research questions or recommendations based on review of current practice against pre-determined standards (B5).</p> <p><b>Assessment Methods</b></p> <p>The student will experience a variety of assessment methods to be able to demonstrate the learning outcomes. This allows for practical demonstration as well as critical thinking. ILOs B1-B5 are assessed in critical reflective written accounts in which critical thinking and critical writing skills are demonstrated. Clinical competency is assessed by a record of clinical cases (portfolio) and a practical assessment (B2-B4). The research/audit protocol and dissertation/clinical audit assess B5. The coursework/practical components of application specialist units incorporate ILO B3 &amp; B4.</p> <p>Students receive feedback (summative) on their written work through an assessment feedback form which grades individual assessment criteria and gives an overall grade for the work. In addition to the grade students receive literal feedback through the open comments box. In specified units students are given the opportunity to submit a draft of their work for feedback before their final submission. Students receive feedback immediately after their mock and final practical examinations by engaging with their assessor. In particular, detailed feedback is provided in cases where remedial work is necessary.</p>
<p><b>Practical Skills</b></p> <p>Having successfully completed this course students will be able to:</p> <p>C1 demonstrate new skills for safe and competent MSK ultrasound practice</p>	<p><b>Teaching and Learning Methods</b></p> <p>A range of teaching and learning methods are used. The primary learning environment is the clinical placement setting where practical skills are mostly attained. The student is expected to adopt self-directed learning strategies in which individual learning needs are identified within the</p>

<p>C2 acquire high quality MSK ultrasound images</p> <p>C3 effectively and sensitively communicate findings and conclusions to peers, colleagues and patients</p> <p>C4 demonstrate the ability to seek second and expert opinion</p> <p>C5 plan and undertake an original and systematic line of enquiry to inform professional practice</p>	<p>individual's own professional practice, learning achieved by appropriate means, and learning outcomes applied to meet these needs and change practice.</p> <p>In addition to clinical practice LO C1-4 will be demonstrated through practical demonstrations and practical hands-on workshops. Using machines, phantoms and models at the University College. Learning experiences in the clinical setting achieve many of the intellectual and practical skills associated with safe and ethical ultrasound practice (C1-C4). Learning by undertaking a research study under supervision in the final stage achieves knowledge and skills in empirical data collection, analysis and interpretation generating original knowledge in the form of answers to research questions or recommendations based on review of current practice against pre-determined standards (C5).</p> <p><b>Assessment Methods</b></p> <p>The student will experience a variety of assessment methods to be able to demonstrate the learning outcomes. This allows for practical demonstration as well as critical thinking. LOs C1-2 are assessed in critical reflective written accounts in which critical thinking and critical writing skills are demonstrated. Clinical competency is assessed by a record of clinical cases (logbooks) and practical assessments (C2-C4). The research protocol and dissertation assess C5.</p> <p>Students receive feedback (summative) on their written work through an assessment feedback form which grades individual assessment criteria and gives an overall grade for the work. In addition to the grade students receive literal feedback through the open comments box. In specified units students are given the opportunity to submit a draft of their work for feedback before their final submission. Students receive feedback immediately after their mock and final practical examinations by engaging with their assessor. In particular, detailed feedback is provided in cases where remedial work is necessary.</p>
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**Transferable skills**

Having successfully completed this course students will be able to:

D1 reflect on professional practice and think and write critically

D2 make reasoned judgements based on a range of evidence sources and in the absence of complete information

D3 acquire the ability to learn independently necessary for continuing professional development.

**Teaching and Learning Methods**

A range of teaching and learning methods are used. The primary learning environment is the clinical placement setting where practical skills are mostly attained. The student is expected to adopt self-directed learning strategies in which individual learning needs are identified within their own professional practice, learning achieved by appropriate means, and learning outcomes applied to meet these needs and change practice.

This reflective and critical thought learning model specifically demonstrates the transferable skills (D1-D3) and is mostly evident in the written coursework. Learning experiences in the clinical setting achieve many of the intellectual skills associated with professional practice and the ability to reflect on this (D1, D3)

**Assessment Methods**

The student will experience a variety of assessment methods to be able to demonstrate the learning outcomes. This allows for practical demonstration as well as critical thinking. LOs D1-D2 assessed in critical reflective written accounts in which critical thinking and critical writing skills are demonstrated. Clinical competency is assessed a portfolio including a record of clinical cases (portfolio) and a practical assessment (D1-3).

Students receive feedback (summative) on their written work through an assessment feedback form which grades individual assessment criteria and gives an overall grade for the work. In addition to the grade students receive literal feedback through the open comments box. In specified units students are given the opportunity to submit a draft of their work for feedback before their final submission. Students receive feedback immediately after their mock and final practical examinations by engaging with their assessor. In particular, detailed feedback is provided in cases where remedial work is necessary.

**Professional competencies**

Having successfully completed this course students will be able to

E1 practice in compliance within the respective code of professional conduct within the scope of practice, being responsible and accountable for decisions, actions and omissions.

**Teaching and Learning Methods**

LO E2 will be addressed and explored in formal seminars. Learning experiences in the clinical setting achieve many of the intellectual and professional skills associated with safe and ethical breast imaging practice and the ability to reflect on this (E1-2). The clinical setting allows the student to apply learning (E1-2).

<p>E2 demonstrate critical understanding of a broadened level of responsibility and autonomy and the limits of own competence and professional scope of practice, including when working with complexity, risk, uncertainty and incomplete information.</p>	<p><b>Assessment Methods</b></p> <p>The student will experience a variety of assessment methods to be able to demonstrate the learning outcomes. This allows for practical demonstration as well as critical thinking. LO E2 is assessed in critical reflective written accounts in which critical thinking and critical writing skills are demonstrated through critical written account and coursework/practical assessments. Clinical competency is assessed by a portfolio including a record of clinical cases (logbooks) and a practical assessments (E1-2).</p>
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<p><b>Intermediate exit award outcomes</b></p> <p><u>PG Cert MSK Medical Ultrasound</u></p> <p>A1 the science, operation and appropriate selection of ultrasound equipment</p> <p>A2 professional responsibility in safe and ethical ultrasound practice</p> <p>A3 the relevant anatomy and pathology in a named clinical application(s)</p> <p>A4 the techniques and use of diagnostic MSK ultrasound in a named clinical application(s)</p> <p>A5 how methodologies of research and audit enquiry are used to create and interpret knowledge (MSc stage only).</p> <p>B1 critically reflect on the practice of diagnostic MSK ultrasound</p> <p>B2 critically evaluate research and experiential evidence so as to develop reasoned arguments and arrive at valid conclusions</p> <p>B3 apply new knowledge and insight to inform and change professional practice within MSK ultrasound diagnosis</p> <p>B4 make sound diagnostic decisions from a range of information sources including MSK ultrasound images</p> <p>B5 synthesise existing knowledge and practice to identify areas amenable to research and other forms of investigation (MSc stage only)</p> <p>C1 demonstrate new skills for safe and competent ultrasound practice</p> <p>C2 acquire high quality MSK ultrasound images</p> <p>C3 effectively and sensitively communicate findings and conclusions to peers, colleagues and patients</p> <p>C4 demonstrate the ability to seek second and expert opinion</p> <p>C5 plan and undertake an original and systematic line of enquiry to inform professional practice</p> <p>D1 reflect on professional practice and think and write critically</p> <p>D2 make reasoned judgements based on a range of evidence sources and in the absence of complete information</p>
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D3 acquire the ability to learn independently necessary for continuing professional development.

E1 practice in compliance within the respective code of professional conduct within the scope of practice, being responsible and accountable for decisions, actions and omissions.

E2 demonstrate critical understanding of a broadened level of responsibility and autonomy and the limits of own competence and professional scope of practice, including when working with complexity, risk, uncertainty and incomplete information.

### **PG Dip MSK Medical Ultrasound**

A1 the science, operation and appropriate selection of ultrasound equipment

A2 professional responsibility in safe and ethical ultrasound practice

A3 the relevant anatomy and pathology in a named clinical application(s)

A4 the techniques and use of diagnostic MSK ultrasound in a named clinical application(s)

A5 how methodologies of research and audit enquiry are used to create and interpret knowledge (MSc stage only).

B1 critically reflect on the practice of diagnostic MSK ultrasound

B2 critically evaluate research and experiential evidence so as to develop reasoned arguments and arrive at valid conclusions

B3 apply new knowledge and insight to inform and change professional practice within ultrasound diagnosis

B4 make sound diagnostic decisions from a range of information sources including MSK ultrasound images

B5 synthesise existing knowledge and practice to identify areas amenable to research and other forms of investigation (MSc stage only)

C1 demonstrate new skills for safe and competent MSK ultrasound practice

C2 acquire high quality MSK ultrasound images

C3 effectively and sensitively communicate findings and conclusions to peers, colleagues and patients

C4 demonstrate the ability to seek second and expert opinion

C5 plan and undertake an original and systematic line of enquiry to inform professional practice

D1 reflect on professional practice and think and write critically

D2 make reasoned judgements based on a range of evidence sources and in the absence of complete information

D3 acquire the ability to learn independently necessary for continuing professional development.

E1 practice in compliance within the respective code of professional conduct within the scope of practice, being responsible and accountable for decisions, actions and omissions.

E2 demonstrate critical understanding of a broadened level of responsibility and autonomy and the limits of own competence and professional scope of practice, including when working with complexity, risk, uncertainty and incomplete information.

## Course Structure

### 5. Outline of course content

This course provides education and training to healthcare professionals employed in their respective working communities to acquire new knowledge and skills within MSK medical ultrasound at level 7. The course is designed to be flexible to the individual needs of practitioners working in different disciplines, enabling them to acquire diagnostic skills in different ultrasound skills. Application specialist units allow the student to acquire the clinical skills specific to their requirements as a clinician. Students are able to safely perform an MSK ultrasound scan on an area of clinical concern and report the findings making recommendations where necessary. To further enhance and adapt clinical skills, interventional clinical units (e.g., MSK Guided Injections) provide an expansion of knowledge on clinical skills that have already been obtained and provide an opportunity for those wishing to undertake advanced clinical roles. The addition of non-application specialist units including; Evidence based practice, Leadership and Interprofessional Learning and Professional Development allow the student to incorporate the 4 pillars of advanced practice to their clinical practice giving them the opportunity to demonstrate key abilities for Advanced Clinical Practice and Consultant Radiographer roles. In the academic context, this is a Level 7 course requiring critical thinking skills at all stages of the course. These skills are mostly demonstrated in critical writing skills. In the case of safe and competent practice skills, these can be acquired in a range of named clinical applications. This course is designed to be responsive to workforce shortages.

Students graduate with the award, PgCert/PgDip/MSc MSK Medical Ultrasound. There is also the opportunity for students to exit with stand-alone units/ credits who have met the pre-requisites of the individual units. It is the academic transcript that clearly shows the specific skills attainment and academic profile of the student. This is in line with other similar courses in the sector, and common practice to inform employers of the specific competencies attained.

### 6. Placements, work-based learning or other special features of the course

Medical Ultrasound course staff, to ensure an appropriate placement for applicants training requirements can be provided prior to registration onto the MSc Breast Imaging course.

The Practice Educators will be invited to attend an online Practice Educator day prior to the unit theory seminar days. This day will explain the University College's expectations of the placement sites and the Practice Educators and give the Practice Educators the opportunity to meet the unit leads and understand the expectations of the course. To provide support, each Practice Educator will be given the contact details of the relevant unit lead and Medical Ultrasound Course Lead for communication between placement sites and the University College for any concerns or queries which may present. Students are required to fill out placement feedback sheets each term. This will allow the student and their Practice Educator to evaluate and reflect on the learning and training in the placement site. This should identify areas of strength or opportunities for development. This will give the opportunity to critically reflect on practice and support decision making skills. The course and unit leads will assess these and contact either the student or placement site if necessary, to follow up any issues or concerns on either side.

## 7. Course structure, levels, units, credit and award

The level of study, units and credits required for the course and for final and exit awards are set out in the **course diagram** provided as [Appendix 1](#).

The **learning outcomes mapping document** at [Appendix 2](#) shows the relationship between ILOs for units and the overarching ILOs of the course.

The **Course summary document** at [Appendix 3](#) shows the structure of each unit in terms of summative assessment and gives an indication of learning hours/student workload for each unit.

## 8. Learning hours/student workload

AECC University College courses are made up of units of study, which are given a credit value indicating the notional amount of learning undertaken. One credit equates to ten student study hours, including student contact time, tutor guided learning time, and independent study (including assessment). 10 University credits are equivalent to five European Credit Transfer System (ECTS) credits.

**Student contact time** is a broad term, referring to the amount of time students can expect to engage with University College staff in relation to teaching and learning. It includes scheduled teaching sessions (sessions on a student and/or staff timetable), specific academic guidance (i.e. not broader pastoral support/guidance) and feedback. Contact time can take a wide variety of forms depending on the subject and the mode of study. It can include engagement both face-to face (in person) through on-campus seminars, labs, studios and workshops - and online, for example through Teams seminars, online discussion forums, webinars, e-mail or live chat. Online contact time can be synchronous or asynchronous. Online contact time is always characterised by personalised tutor presence and input within a specified timeframe.

Opportunities for one-to-one interaction with members of staff, during which students can receive individual help or personalised feedback on their progress, may not always present themselves as formal scheduled sessions. 'Office hours' for example are a frequent feature where members of staff are available for one-to-one sessions at set times. Interactions via email for e.g. is another example of contact time.

**Independent study** incorporates student-led activities (without the guidance of a member of teaching staff), such as preparation for scheduled sessions, reflecting on feedback received and planning for future tasks, follow-up work, wider reading (including reading beyond set topics), or practice, revision, and completion of assessment tasks.

Independent study helps students learn to manage their own learning as preparation for the expectations of a professional life that emphasises continuing professional development and life-long learning.

### Tutor-guided learning

Students on the September start date will have their application specialist units delivered in Semester 1 and January start dates will have their application specialist units delivered in Semester 2; non-application units will be delivered across semesters.

Tutor-guided learning will vary depending on the pathway that a student undertakes and will be less for those on standalone units compared to those on an exit award pathway. It is recommended that a student undertake a maximum of 60 credits per year although it is recognised that in some circumstances, students may wish to undertake more but counselling from the Course Lead must be given before a student makes a decision. For those who undertake the common pathway of 60 credits, this would equate to approx 58-70 hours of contact time which may include seminars, labs and practical's, workshops. Contact time may be face-to-face or on-line activities that are tutor-led or mediated.

### 9. Staff delivering the course

Students will be taught by AECC University College academic staff and external qualified professional practitioners with relevant expertise. Visiting subject specialist lecturers and workshop facilitators are brought in for some clinical units. Where appropriate, external teaching staff have professional registration and include consultant sport physicians, physiotherapists, radiographers and sonographers.

### 10. Progression and assessment regulations

The regulations for this course are the University College's Assessment Regulations which may be found from the [Latest Policies webpage](#).

Where specific requirements apply – for example, where Professional, Statutory and Regulatory bodies have additional or alternative requirements this is specified in the relevant course-specific section of the Assessment regulations.

### 11. Employment progression routes

A PgCert, PgDip or MSc in MSK Medical Ultrasound will give the students the qualifications to work as within a department within their chosen clinical specialties. The unit options within this course give the students opportunities to practice enhanced and advanced clinical practice roles.

Students are encouraged to continue life-long learning, education and research to evidence the 4 pillars of advanced or consultant practice. Students may also wish to complete standalone units in a specific clinical discipline appropriate to their workplace requirements. These students will gain credits in their specified clinical unit, without an exit award.

### 12. Additional costs and special or unusual conditions which apply to this course

Additional costs are mandatory or optional costs which students will need to meet in order to fully participate in and complete their course. Students will need to budget for these costs separately as they are not included in the overall Tuition Fee they are charged.

'Special or unusual conditions' are aspects of the course which students may not be expecting and which may therefore have an impact on whether or not they wish to undertake the course.

Information about additional costs and special or unusual conditions applying to students on this course can be found in the **Important information to take into account when choosing your course** available from the [Latest Policies webpage](#)

Other specific costs include the following:

- Students will be responsible for funding their own travel and accommodation when attending unit delivery and assessment.
- Students who undertake their clinical placements outside of the United Kingdom will be responsible for the associated costs of assessments in those countries.

### 13. Methods for evaluating the quality of learning and teaching

Students have the opportunity to engage in the quality assurance and enhancement of their courses in a number of ways, which may include:

- Completing student surveys annually to give feedback on individual units and on the course as a whole
- Completing the National Student Survey in the final year of the course [delete where not applicable)

- Taking part in focus groups as arranged
- Seeking nomination as a Student Union representative OR engaging with these elected student representatives
- Serving as a student representative on Course Consideration panels for course approval/review
- Taking part in Course Consideration or professional body meetings by joining a group of students to meet with the panel
- Taking part in meetings with the external examiner(s) for the course (such meetings may take place virtually)

The ways in which the quality of the University College's courses is monitored and assured, both inside and outside the institution, are:

- Annual monitoring of units and courses
- Periodic Course review, at least every six years.
- External examiners, who produce an annual report
- Oversight by Academic Standards and Quality Committee (which includes student representation), reporting to Academic Board
- Professional body accreditation and annual reports to these bodies

A detailed Clinical Placement Agreement Form allows the assessment of a quality placement site. To ensure quality placement learning once the course has commenced, various methods are adopted throughout the year. It is suggested that the We suggest the Clinical Placement site hold monthly meetings and book dates well in advance. This is to identify any areas of strength or opportunities for development that the student has/needs. This will give the student the opportunity to critically reflect on their practice and support decision making skills.

Progress reports are completed by both the student and the Practice Educator as well as Practice Educator questionnaires. These are read by the Course Lead and Unit Leads and any identifiable issue will be addressed with the relevant individuals e.g. placement site, Practice Educator and/or student.

End of term progress reports can be used to highlight any areas of concern, however any urgent issues affecting training should be communicated to the Medical Ultrasound team before the end of term report so these can be addressed as soon as possible. There may be occasions in placement when the performance of a student is such that additional action is required beyond the normal systems of support and assessment. In such cases, Clinical Mentors and/or Clinical Managers must contact the Course Leader or course administrators to request a meeting with a Unit/Course Leader. This process aims to provide an early managed and focused response in situations where student performance requires additional attention beyond the normal systems of support and guidance. The process gives all parties a formal way of addressing a range of concerns to provide positive support to the student and their clinical mentor. As such it is advised that the process should be triggered as soon as possible in order to allow the student to identify and respond to any concern(s). This allows us to acknowledge and record that concern regarding student progress in their clinical placement and ensuring the student receives appropriate support.

It is strongly recommended as per CASE that a student undertake a mock assessment on clinical placement for application specialist units.

#### **14. Inclusivity statement**

AECC University College is committed to being an institution where students and staff from all backgrounds can flourish. AECC University College recognises the importance of equality of opportunity and promoting diversity, in accordance with our Equality, Diversity and Inclusion Policy. We are committed to a working and learning environment that is free from physical, verbal and non-verbal harassment and bullying of individuals on any grounds, and where everyone is treated with dignity and respect, within a positive and satisfying learning and working environment.

#### 14. Inclusivity statement

AECC University College seeks to ensure that all students admitted to our courses have the opportunity to fulfil their educational potential. The interests of students with protected characteristics will be taken into consideration and reasonable adjustments will be made provided that these do not compromise academic or professional standards as expressed through the learning outcomes.

#### 15. External reference points

The level of all units on the programme are level 7, the following reference points were used to inform the development of this programme:

- The Framework for Higher Education Qualifications of UK Degree-Awarding Bodies (2014)
- Guidelines for Professional Ultrasound Practice (BMUS)
- Preceptorship and Capability Framework (BMUS)
- HCPC Standards of Conduct, Performance and Ethics (2016)
- HCPC Standards of Education and Training Guidance (2014)
- Knowledge and Skills Framework (NHS 2010)
- Clinical Leadership Competency Framework (NHS 2011)
- Long Term Plan (NHS 2019)
- Multiprofessional framework for advanced clinical practice in England (NHS 2017)
- Validation Handbook (CASE)
- Standards for Sonographic Education (2022)

#### 16. Internal reference points and policy frameworks

AECC University College Strategic Plan

AECC University College Course Design Framework

AECC University College Feedback on Assessments policy

The course conforms fully with the University College's academic policies and procedures applicable to Taught Courses.

### Record of Modifications

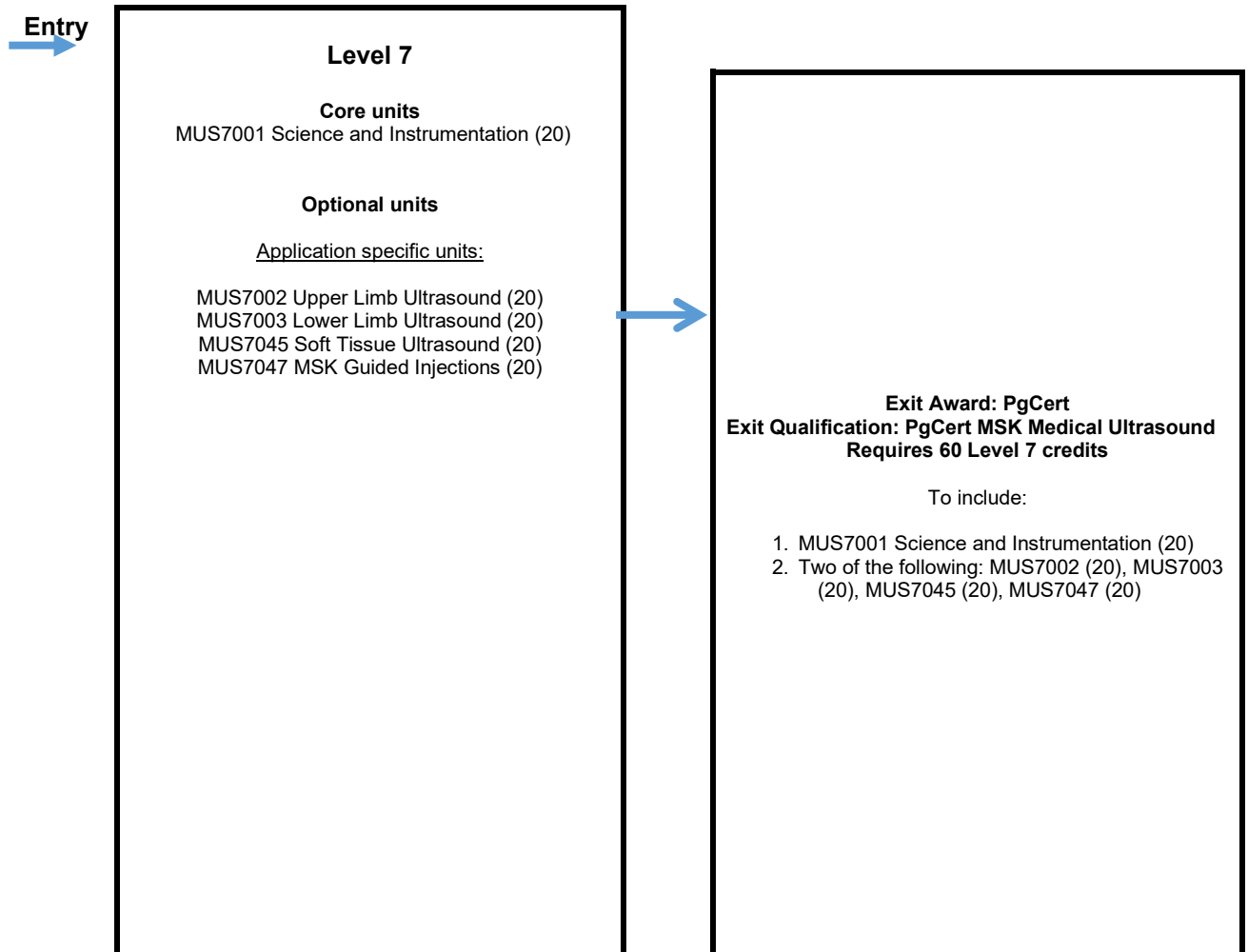
#### Course level

Description of Modification	Date approved	Intake to which modification applies

#### Unit level

Unit code and title	Nature of modification	Date of approval/ approving body	Intake to which modification applies

## Appendix One - Course Diagram PgCert MSK Medical Ultrasound



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Conferment of Award/Graduation  
**PgCert MSK Medical Ultrasound**

# Course Diagram PgDip MSK Medical Ultrasound

Entry  
→

**Level 7**

**Core units**  
MUS7001 Science and Instrumentation (20)

**Optional units**

Application specific units:

MUS7002 Upper Limb Ultrasound (20)  
MUS7003 Lower Limb Ultrasound (20)  
MUS7045 Soft Tissue Ultrasound (20)  
MUS7047 MSK Guided Injections (20)

Non-application specific optional units

MPH7008 Professional Development (20)  
MPH7009 Leadership and Interprofessional Working (20)  
MPH7005 Evidence Based Practice (20)



**Exit Award: PgDip**  
**Exit Qualification: PgDip MSK Medical Ultrasound**  
**Requires 120 Level 7 credits**

To include:

1. MUS7001 Science and Instrumentation (20)
2. Two of the following: MUS7002 (20), MUS7003 (20), MUS7045 (20), MUS7047 (20)

Plus

3. One other application specific unit
4. Any other units either application specific or non-application specific unit



Conferment of Award/Graduation  
**PgDip MSK Medical Ultrasound**



## Course Diagram MSc MSK Medical Ultrasound

Entry



### Level 7

#### Core units

MUS7001 Science and Instrumentation (20)

PSY7001 Research methods (20)

MUS7065 Dissertation (40)

PPR7008 Service Improvement Project (40)

#### Optional units

##### Application specific units:

MUS7002 Upper Limb Ultrasound (20)

MUS7003 Lower Limb Ultrasound (20)

MUS7045 Soft Tissue Ultrasound (20)

MUS7047 MSK Guided Injections (20)

##### Non-application specific optional units

MPH7008 Professional Development (20)

MPH7009 Leadership and Interprofessional Working (20)

MPH7005 Evidence Based Practice (20)



#### Exit Award: MSc

**Exit Qualification: MSc MSK Medical Ultrasound  
Requires 180 Level 7 credits**

To include:

1. MUS7001 Science and Instrumentation
2. Three of the following: MUS7002, MUS7003 or MUS7045, MUS7047
3. Any other units either application specific or non-application specific unit

Plus

4. PSY7001 Research Methods (20)

And either:

5. MUS7065 Dissertation (40) or
6. PPR7008 Service Improvement Project (40)

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Conferment of Award/Graduation

**MSc MSK Medical Ultrasound**



**Appendix 2: Learning outcomes mapping document template**

This table shows where a learning outcome referenced in the course specification may be **taught (T)**, **developed (D)** and/or **assessed (A)** within a unit. The numbers A1 A2 B1 B2 etc refer back to the learning outcomes listed under Subject Knowledge and Understanding, Intellectual Skills, Practical Skills and Transferable skills in this course specification template (Course [Intended Learning Outcomes](#)).

Unit Code	Level	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	D1	D2	D3	E1	E2
MUS7001 Science and Instrumentation of Ultrasound	7	x	x		x		x	x	x	x		x	x				x	x		x	
MUS7002 Upper Limb Ultrasound	7	x	x	x	x		x	x	x	x		x	x	x	x		x	x	x	x	x
MUS7003 Lower Limb Ultrasound	7	x	x	x	x		x	x	x	x		x	x	x	x		x	x	x	x	x
MPH7005 Evidence-based Practice	7		x			x	x	x	x		x				x	x	x	x	x		
MUS7045 Soft Tissue Ultrasound	7	x	x	x	x		x	x	x	x		x	x	x	x		x	x	x	x	x
MUS7047 MSK Guided Injections	7	x	x	x	x		x	x	x	x		x	x	x	x		x	x	x	x	x
MPH7008 Professional Development	7	x	x				x	x	x						x	x	x	x	x		
MPH7009 Leadership and Interprofessional Working	7	x	x	x	x		x	x	x	x		x	x	x	x		x	x	x		

Unit Code	Level	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	D1	D2	D3	E1	E2
PSY7001 Research Methods (20)	7					x	x	x	x		x					x	x	x	x		
MUS7065 Dissertation (40)	7		x			x	x	x	x		x					x	x	x	x		
PPR7008 Service Improvement Project (40)			x			x	x	x	x		x					x	x	x	x		

## Appendix 3 Course summary

### PgCert MSK Medical Ultrasound, PgDip MSK Medical Ultrasound & MSc MSK Medical Ultrasound

Unit details						Assessment Component Weightings (%)*						Prof. body requirement applies*	Estimated learning hours		
Code	Title	Version	Credits	Core/Option	Pre/ co requisites	Exam 1	Exam 2	Cwk 1	Cwk 2	Prac 1	Prac 2		scheduled contact	directed non-contact	self-directed
MUS7001	Science and Instrumentation	3.0	20	Core	N/A			60%	40%			Y	30	40	130
MUS7002	Upper Limb Ultrasound	3.0	20	Option	Co: MUS7001			P/F	100%				25	35	140
MUS7003	Lower Limb Ultrasound	3.0	20	Option	Co: MUS7001			P/F	100%				25	45	130
MPH7005	Evidence-based Practice	1.1	20	Option	N/A			100%					9	41	150
MUS7045	Soft Tissue Ultrasound	3.0	20	Option	Co: MUS7001			P/F		100%			15	40	145
MUS7047	MSK Guided Injections	3.0	20	Option	Co: MUS7001 & MUS7002 or MUS7003			P/F		100%			15	40	145
MPH7008	Professional Development	1.1	20	Option	N/A			100%					9	41	150
MPH7009	Leadership and Interprofessional Working	1.1	20	Option	N/A			100%					9	41	150
PSY7001	Research Methods	2.0	20	Core	N/A			100%					32	64	104
MUS7065	Dissertation	1.0	40	Core	Co: PSY7001			80%		20%			36	36	328
PPR7008	Service Improvement Project	1.1	40	Core	Co: PSY7001			100%					36	36	328

#### Progression requirements:

**PgCert MSK Medical Ultrasound** requires 60 credits at Level 7 and successful completion of MUS7001, plus two of the following units: MUS7002 MUS7003, MUS7045, MUS7047.

**PgDip MSK Medical Ultrasound** requires 120 credits at Level 7 and successful completion of MUS7001, plus three application specific units, plus any other combination of application or non-application units to equate to 120 credits.

**MSc MSK Medical Ultrasound** requires 180 credits at Level 7 and successful completion of MUS7001, three application specific units, two other units (application specific and/or non-application specific) plus PSY7001 and either MUS7065 OR PPR7008.

**\* If this box is marked 'yes,' then it is a requirement set by the relevant professional body that the pass mark must be achieved in all components of assessment to pass the unit, regardless of the overall aggregated mark.**