

## Course Specification

Course Summary Information		
1	<b>Course Title</b>	MSc Medical Ultrasound
2	<b>BCU Course Code</b>	PT1005
3	<b>Awarding Institution</b>	Birmingham City University
4	<b>Teaching Institution(s)</b> (if different from point 3)	
5	<b>Professional Statutory or Regulatory Body (PSRB) accreditation</b> (if applicable)	Consortium for Accreditation of Sonographic Education (CASE)

6	Course Description
	<p>The course is suitable for radiographers, midwives, nurses and doctors. So if you're a qualified professional wanting to extend your expertise into ultrasound scanning, imaging and interpretation of diagnostic ultrasound images, this course could be for you. You'll gain the core skills of a sonographer from practising professionals. The course is also open to anyone with a health-based or science degree and an agreed clinical placement.</p> <p>Ultrasound is used as a first-line investigation, in diagnosis, monitoring and treatment of disease and pathology having a great input into patient care and management. Sonographers work mainly in Radiology and ante-natal departments but also in community settings. Sonographers scan patients/clients with a variety of diseases and conditions and, under departmental protocols, produce a written report on the scan which they have performed.</p> <p><b>What's covered in the course?</b></p> <p>As a student on this course you will develop the core skills of a sonographer including, patient care and communication; technical skills, including scanning and use of equipment; clinical knowledge to make an accurate diagnosis and reporting skills. You will be taught by practising sonographers to further enhance your skills professionally, personally and practically.</p> <p>A variety of learning and teaching methods will be used for your development into a technically competent, caring and knowledgeable sonographer. These skills will be developed in the classroom, by self-study, e-learning, on ultrasound simulators and on real patients in the clinical setting. Embedded into our teaching is to respect diversity, ensure equality and to apply a sound understanding of legal, ethical and professional issues to positively impact on care scenarios and delivery.</p>

7	Course Awards		
7a	Name of Final Award	Level	Credits Awarded
	Master of Science Medical Ultrasound	7	180
7b	Exit Awards and Credits Awarded		
	Postgraduate Certificate Medical Ultrasound	7	60
	Diploma Medical Ultrasound	7	120

8	Derogation from the University Regulations
	<ol style="list-style-type: none"> <li>1. For modules with more than one item of assessment, all items of assessment must be passed in order to pass the module.</li> <li>2. For modules with more than one item of assessment, resits that are allocated a grade are capped at the item level.</li> <li>3. Compensation of marginally failed modules is not permitted.</li> <li>4. Condonement of failed modules is not permitted.</li> </ol>

9	Delivery Patterns		
Mode(s) of Study	Location(s) of Study	Duration of Study	Code(s)
Part Time (MSc)	City South	4 years	PT1005
Part Time (PG Dip)	City South	3 years	PT0861
Part Time (PG Cert)	City South	2 years	PT0860

10	Entry Requirements
	<p>The admission requirements for this course are stated on the course page of the BCU website at <a href="https://www.bcu.ac.uk/">https://www.bcu.ac.uk/</a>.</p>

11	Course Learning Outcomes
1	Adapt and support the implementation of changes in practice, where justified, in order to improve the patient experience, improve service delivery and drive the profession forward within an ever changing healthcare environment.
2	Demonstrate a critical knowledge of the requirements of a qualified practicing sonographer, these issues include: medico-legal, ethical, communication, consensual and organisational requirements, and patient safety.
3	Develop the qualities, reflective skills and desire to continue to learn and undertake appropriate further professional training once qualified, to the benefit of self, patient and healthcare team.
4	Integrate and analyse evidence to underpin practice and remain at the forefront of the profession to benefit of self, profession and patient.
5	Demonstrate knowledge and understanding of the theory and application of medical ultrasound.
6	To undertake a dynamic, proficient ultrasound examination within a range of ultrasound modalities, acquiring suitable anatomical images and accurate measurements where appropriate.
7	Demonstrate the ability to interpret the ultrasound findings and apply them to the clinical presentation, in order to produce a differential diagnosis, recognising and working within their scope of practice.
8	Apply knowledge of anatomy, physiology and pathology to clinically complex situations in a focussed area of ultrasound.
9	To demonstrate the awareness / underpinning knowledge of personal safe practice to reduce the risk of Work Related Musculoskeletal Disorders.

<b>10</b>	Demonstrate an awareness of patient safety in the clinical setting.
<b>11</b>	Critically appraise the role of the sonographer within the multidisciplinary team, and communicate effectively with other members to promote patient care
<b>12</b>	Verbally communicate a clinical report to clinicians and other professionals, working effectively in a multidisciplinary team.
<b>13</b>	Recognise the advantages of interdisciplinary working in the clinical department in order to optimise patient care.
<b>14</b>	Recognise professional scope of practice and make referrals where appropriate;
<b>15</b>	Produce a clear, concise written report for the referring clinician, with guidance for patient management where appropriate.
<b>16</b>	Recognise and escalate unexpected and clinically significant findings which result from the ultrasound examinations undertaken.
<b>17</b>	Where appropriate discuss the ultrasound findings directly with the patient, clearly, empathetically and using appropriate terminology.
<b>18</b>	Contribute to risk management activities such as; clinical discrepancy audit , equipment evaluation and other quality assurance procedures;
<b>19</b>	Demonstrate an awareness of the worldwide role of ultrasound and the role of the sonographer, in the production of a differential diagnosis
<b>20</b>	Demonstrate an awareness of how to adapt behaviours in accordance with diverse patient needs.
<b>21</b>	Demonstrate an awareness of historic and social processes which can impact on the lives and collective experience of minority and diverse groups.

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<b>12a</b>	<p><b>Level 7:</b> <i>In order to complete this course a student must successfully complete the core modules relevant to the level of study.</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #ffffcc;">Module Code</th> <th style="background-color: #ffffcc;">Module Name</th> <th style="background-color: #ffffcc;">Credit Value</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="background-color: #ffffcc;"><b>Core module for the award of PG Cert (20 credits):</b></td> </tr> <tr> <td>LBR7545</td> <td>Fundamentals of Ultrasound</td> <td>20</td> </tr> <tr> <td colspan="3" style="background-color: #ffffcc;"><b>Core modules for the award of PG Dip (40 credits):</b></td> </tr> <tr> <td>LBR7545</td> <td>Fundamentals of Ultrasound</td> <td>20</td> </tr> <tr> <td>LBR7339</td> <td>Research: Methods of Enquiry</td> <td>20</td> </tr> <tr> <td colspan="3" style="background-color: #ffffcc;"><b>Core modules for the award of MSc (60 credits):</b> <b>On successful completion of the PG Cert and PG Dip, to progress to MSc, a student must successfully complete <u>either</u> study Option 1 or Option 2 below.</b></td> </tr> <tr> <td colspan="3" style="background-color: #ffffcc;"><b>Option One</b></td> </tr> <tr> <td>LBR7558</td> <td>Leadership for Advanced Professional Practice</td> <td>20</td> </tr> <tr> <td>LBR7467</td> <td>Dissertation</td> <td>40</td> </tr> <tr> <td colspan="3" style="background-color: #ffffcc;"><b>Option Two</b></td> </tr> <tr> <td>LBR7337</td> <td>Dissertation</td> <td>60</td> </tr> </tbody> </table> <p><b>Optional modules to be studied alongside the core modules:</b></p> <ul style="list-style-type: none"> <li>• <b>For the award of PG Cert (60 credits) – <i>A minimum of 40 credits must be clinically based.</i></b></li> <li>• <b>For the award of PG Dip (120 credits) – <i>A minimum of 60 credits must be clinically based</i></b></li> <li>• <b>For the award of MSc (180 credits) – <i>A minimum of 60 credits must be clinically based</i></b></li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #ffffcc;">Module Code</th> <th style="background-color: #ffffcc;">Module Name</th> <th style="background-color: #ffffcc;">Credit Value</th> </tr> </thead> <tbody> <tr> <td>LBR7547</td> <td>*Obstetric Ultrasound</td> <td>40</td> </tr> <tr> <td>LBR7550</td> <td>Abdominal Ultrasound</td> <td>40</td> </tr> <tr> <td>LBR7548</td> <td>Vascular Ultrasound</td> <td>40</td> </tr> <tr> <td>LBR7637</td> <td>Musculoskeletal Ultrasound</td> <td>40</td> </tr> <tr> <td>LBR7546</td> <td>Gynaecological Ultrasound</td> <td>20</td> </tr> <tr> <td>LBR7544</td> <td>**Ultrasound in Early Pregnancy</td> <td>20</td> </tr> <tr> <td>LBR7549</td> <td>Negotiated Specialist Subject</td> <td>20</td> </tr> <tr> <td>LBR7639</td> <td>****Negotiated Specialist Subject 2</td> <td>20</td> </tr> </tbody> </table>		Module Code	Module Name	Credit Value	<b>Core module for the award of PG Cert (20 credits):</b>			LBR7545	Fundamentals of Ultrasound	20	<b>Core modules for the award of PG Dip (40 credits):</b>			LBR7545	Fundamentals of Ultrasound	20	LBR7339	Research: Methods of Enquiry	20	<b>Core modules for the award of MSc (60 credits):</b> <b>On successful completion of the PG Cert and PG Dip, to progress to MSc, a student must successfully complete <u>either</u> study Option 1 or Option 2 below.</b>			<b>Option One</b>			LBR7558	Leadership for Advanced Professional Practice	20	LBR7467	Dissertation	40	<b>Option Two</b>			LBR7337	Dissertation	60	Module Code	Module Name	Credit Value	LBR7547	*Obstetric Ultrasound	40	LBR7550	Abdominal Ultrasound	40	LBR7548	Vascular Ultrasound	40	LBR7637	Musculoskeletal Ultrasound	40	LBR7546	Gynaecological Ultrasound	20	LBR7544	**Ultrasound in Early Pregnancy	20	LBR7549	Negotiated Specialist Subject	20	LBR7639	****Negotiated Specialist Subject 2	20
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LBR7638

\*\*\*Theoretical Fetal Medicine

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**To be noted:**

\* If **option one** for the MSc is selected students must complete LBR7558 (leadership) prior to enrolment on LBR7467 (dissertation).

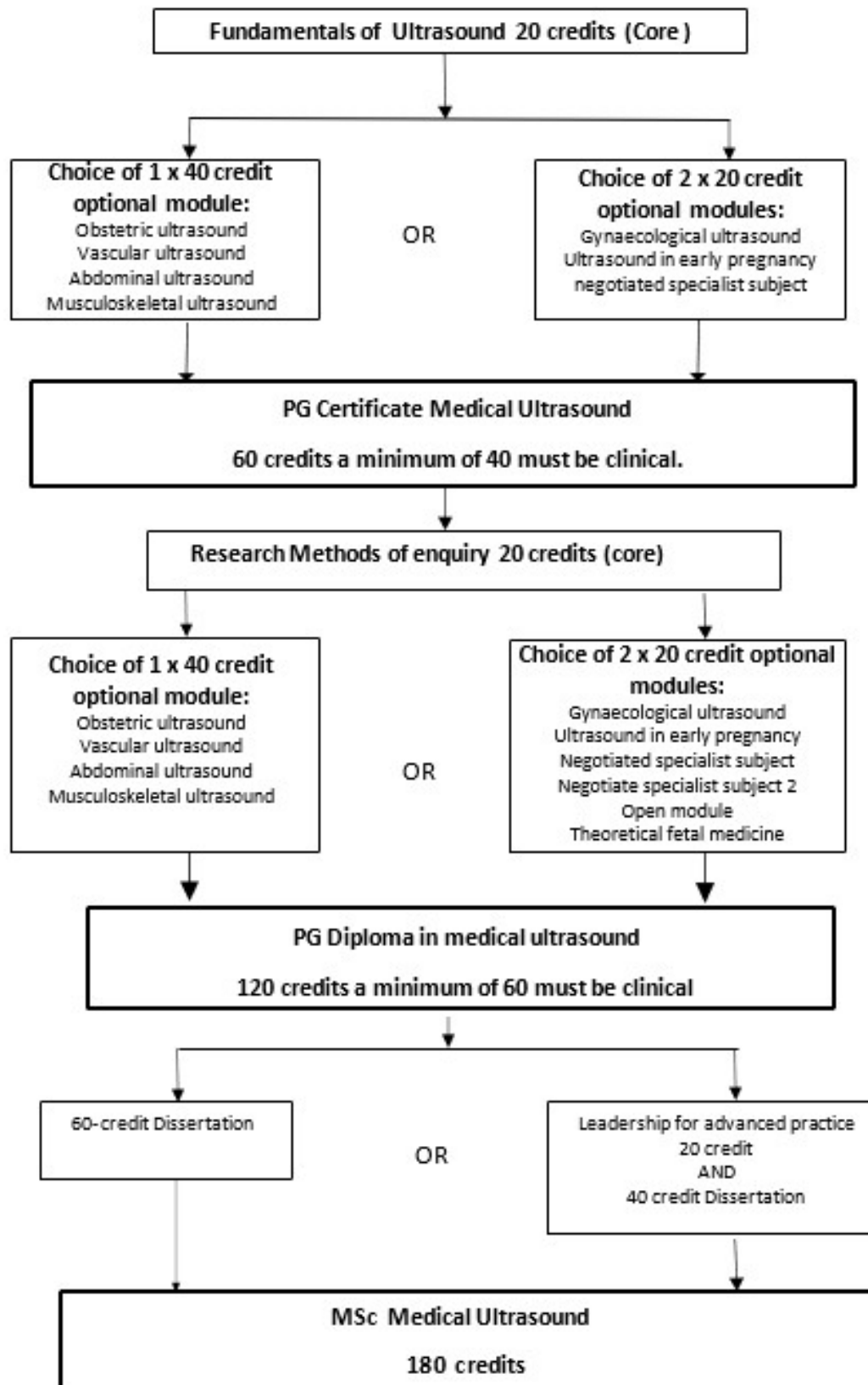
\*\* The early pregnancy component is taught as part of LBR7547 (obstetric ultrasound) and LBR7544 (Ultrasound in early pregnancy) and as university academic regulations state a student cannot be assessed on the same taught content more than once, only **one** of these modules can be studied by any one student.

\*\*\* To study LBR7638 (fetal medicine) students must be able to evidence previous Obstetric study to an appropriate level.

\*\*\*\* LBR7639 (negotiated specialist subject 2) cannot be studied as part of a PGCert.

*Please note list of optional modules is indicative only. Students' choice will not be guaranteed for optional modules but a fair and transparent process will be adopted and shared with students.*

**12b Structure Diagram**



<b>SEMESTER ONE</b> <b>Core:</b> LBR7545 Fundamentals of Ultrasound <b>Core:</b> LBR7339 Research: Methods of Enquiry	<b>SEMESTER TWO</b> <b>Core:</b> LBR7339 Research: Methods of Enquiry
<b>Option modules</b> LBR7558: Leadership for Advanced Professional Practice LBR7537: Open Module LBR7549: Negotiated Specialist Subject LBR7547: Obstetric Ultrasound LBR755: Abdominal Ultrasound LBR7548: Vascular Ultrasound LBR7546: Gynaecological Ultrasound LBR7544: Ultrasound in Early Pregnancy LBR7637: Musculoskeletal Ultrasound LBR7638: Theoretical Fetal Medicine LBR7637: Negotiated Specialist Subject 2	

### 13 Overall Student Workload and Balance of Assessment

Overall student *workload* consists of class contact hours, independent learning and assessment activity, with each credit taken equating to a total study time of around 10 hours. While actual contact hours may depend on the optional modules selected, the following information gives an indication of how much time students will need to allocate to different activities at each level of the course.

- *Scheduled Learning* includes lectures, practical classes and workshops, contact time specified in timetable
- *Directed Learning* includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning
- *Private Study* includes preparation for exams

The *balance of assessment* by mode of assessment (e.g. coursework, exam and in-person) depends to some extent on the optional modules chosen by students. The approximate percentage of the course assessed by coursework, exam and in-person is shown below.

#### Level 7 – PG Cert

#### Workload

**10% time spent in timetabled teaching and learning activity**

Activity	Number of Hours
Scheduled Learning	60
Directed Learning	180
Private Study	360
<b>Total Hours</b>	<b>600</b>

**Balance of Assessment**

Assessment Mode	Percentage
Coursework	40%
Exam	20%
In-Person	40%

Assessment is shared between coursework, exam or in-person viva. The percentage will alter slightly depending on the option chosen.

**Level 7 – PG Dip**
**Workload**
**11% time spent in timetabled teaching and learning activity**

Activity	Number of Hours
Scheduled Learning	136
Directed Learning	364
Private Study	700
<b>Total Hours</b>	<b>1200</b>

**Balance of Assessment**

Assessment Mode	Percentage
Coursework	50%
Exam	10%
In-Person	40%

Assessment is shared between coursework, exam or in-person viva. The percentage will alter slightly depending on the option chosen.

**Level 7 – MSc**
**Workload**



**10% time spent in timetabled teaching and learning activity**

Activity	Number of Hours
Scheduled Learning	172
Directed Learning	379
Private Study	1249
<b>Total Hours</b>	1800

**Balance of Assessment**

Assessment Mode	Percentage
Coursework	65%
Exam	5%
In-Person	30%

Assessment is shared between coursework (dissertation) and in-person presentation. The percentage will alter slightly depending on the option chosen.