SCHOOL OF RADIOGRAPHY

POSTGRADUATE PROGRAMMES

Information for Applicants

PgCert, PgDip, MSc in Medical Imaging
PgCert, PgDip, MSc in Oncology Practice
PgCert, PgDip, MSc in Medical Imaging (Mammography)
PgCert, PgDip, MSc in Breast Evaluation

PG (L7) Module CPPD / Workforce Development / short course

September 2017
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Introduction

Thank you for your interest in the Postgraduate Programme.

The following pathways are available on the programme for practicing healthcare professionals with nationally recognised pre-registration qualifications:

- Medical Imaging: for diagnostic radiographers
- Medical Imaging (Mammography): for mammographers
- Oncology Practice: for therapeutic radiographers
- Breast Evaluation: for registered health professionals currently practicing within the breast diagnosis field

Some of the modules on a particular pathway are available to other healthcare professionals. These are highlighted where applicable.

This booklet contains information about how to enter onto the programme, registration procedures, structure of the programme, and various award pathways that will help you to make decisions regarding entry to awards or individual modules. In addition to this, the booklet also contains a brief description of all the modules that we offer on the programme. It is important that you read the whole booklet prior to making any decisions regarding your choice of award. It is also important that you complete the Application Form and the Module Choice Form in full as failure to do so may delay the admissions process.

Please feel free to contact us if you have any questions or need clarification:

Postgraduate Administrator:
Email: pgradiog@sgul.kingston.ac.uk
Telephone: 020 8417 5498

Postgraduate Programme Director, Sherril Spencer:
Email: S.Spencer@sgul.kingston.ac.uk
Entry requirements

You should normally provide evidence of the following:

1. a degree/diploma in radiography or equivalent qualification for the Medical Imaging and Oncology Practice pathways or a professional healthcare qualification for the Breast Evaluation pathway;
2. at least two years full-time clinical experience;
3. academic potential to study at Level 7 (by providing professional references, examples of previous academic work or performance at interview);
4. access to equipment and processes which are essential for the achievement of the competency elements of certain clinical modules;
5. a completed proforma confirming that you will have mentoring support from appropriate personnel at the workplace for those modules that contain a clinical element.

Students who are not eligible to be (or who are not) registered with the UK Statutory and Regulatory Body will not be able to undertake modules that incorporate a clinical component conducted within a UK NHS trust.

Admission with Advance Standing or credit through Recognition of Prior Learning (RPL)

If you have prior qualifications and learning you may be exempted from appropriate parts of the course. This is limited to qualifications obtained within the last five years. The Programme Director and the Head of School in association with the Faculty RPL Committee will have discretion over the level and amount of credit offered. RPL will not be granted automatically based on information provided on application form. A formal application must be made in writing to the Programme Director. A fee will be charged for this process. The minimum claim for prior credit will normally be 30 credits (one module).

Selection procedure

You must complete the Application Form, Module Choice Form and arrange for two referees to provide references before being considered for selection on the programme. In that paperwork, you must identify the award you initially wish to enrol for i.e. a single module, Postgraduate Certificate (PgCert); Postgraduate Diploma (PgDip); or Masters Degree (MSc). In addition, the Module Choice Form MUST also be completed in order to ensure that you receive information for the first module that you wish to attend. Students should supply a photograph via email for student records and ID cards. Application Forms must be received a minimum of 8 weeks prior to commencement of your first module.

Communication may be by telephone, e-mail or in certain circumstances a one-to-one interview with the Programme Director. This will follow a standard format to:

- discuss pathways and modules that are available;
- ensure that you meet the criteria for clinical aspects of the relevant modules;
- ensure the your ability to achieve the required academic standard;
- evaluate the your written and spoken English;
- ensure that there will be a suitable clinical practice provision supported by appropriate mentors.

There is the possibility that interviews may also be conducted by leaders of specific modules at collaborating sites (e.g. The Jarvis Breast Screening Diagnostic and Training Centre, St George’s Breast Screening Training Centre).
Registration

You can register for a single module (standalone) for CPPD purpose or the PgCert, PgDip, or MSc awards. If you are unable to present sufficient evidence to support your academic potential to study at Level 7, you are advised initially to register for a standalone module or for the award of Postgraduate Certificate with the opportunity to progress on successful completion. In order to remain registered on a course, you MUST study for at least one module in any academic year.

You may only enrol for one module (30 credits) from the programme as a standalone module. This is not encouraged, as it does not lead to an award.

Equal opportunities and disability

Admission procedures are designed to be consistent with Kingston University equal opportunities and disability policies.

A note on terminology: Level 7 is the terminology used to describe masters level education.
Structure of the postgraduate programme

Reflecting the two professional qualifications and subsequent registration with the UK Statutory & Regulatory Body i.e. diagnostic and therapeutic radiography, the names of the main awards are:

- Postgraduate Certificate/ Postgraduate Diploma / Master of Science in Medical Imaging
- Postgraduate Certificate/ Postgraduate Diploma/ Master of Science in Oncology Practice
- Postgraduate Certificate/ Postgraduate Diploma/ Master of Science in Breast Evaluation

Within the Medical Imaging route, there is further choice that students can make regarding the modules with clinical competency evaluation, and these will lead to an award of:

- PgCert / PgDip / MSc Medical Imaging (Mammography).

Criteria for awards

In order to qualify for an award, the total credits successfully completed at Level 7 is as follows:

- Postgraduate Certificate (PgCert) - (60 Level 7 credits)
- Postgraduate Diploma (PgDip) - (120 Level 7 credits which must include Research and Evidence Based Practice in Healthcare module or equivalent)
- Master of Science (MSc) - (180 Level 7 credits which must include Research and Evidence Based Practice in Healthcare module or equivalent and Dissertation module)

The tables on pages 9 – 12 demonstrate pathways for different named awards, reflecting the needs of the practitioner within the professional groups supported by the programme. With the exception of the Research and Evidence Based Practice in Healthcare module, the classification of a given module as ‘core’ and ‘option’ will vary depending upon the specific pathway.

Access to individual modules will be subject to specific pre-requisites as stated within the module descriptions.

Module choices

It is important for you to plan your selection of modules from the ‘alphabetical list of modules’ available in the programme on page seven, and then consult the list of modules on offer for the specific academic year, which is available separately within the information pack. It is important to note at this stage that not all modules will be offered every year. Some modules where there is a greater demand are offered twice per academic year, whereas other modules where there is less demand will be offered every alternate year.

It is important that you keep the Programme Administrator informed of your choice of modules as soon as you have made a decision, as there are limited numbers of places available for each module. However for academic advice and guidance, contact the Programme Director.

The modules will be delivered during an academic year, which is the period between September and June. Most modules will normally require you to attend the University site or one of the partnership sites (as indicated on page seven) for normally a five-day period of academic study (30 hours) and this may be slightly shortened or lengthened depending on
the module. This will be followed by completion of an assessment. The assessment completion time will vary from a period of six weeks where the assessment is an essay, to 10 months where you will have to accomplish a clinical task e.g. a logbook. The modules may be undertaken in any order, except for modules where there is a pre-requisite required. You may therefore proceed at your chosen pace within the regulations for minimum and maximum registration periods for the award.

Full-time students are normally expected to complete the programme within 12 months. For part-time students, maximum periods of registration are:

- PgCert 2 years
- PgDip 4 years
- MSc 5 years

Please note that registration period will vary and in most cases be reduced if you have credits awarded via APEL process from previous studies either from Kingston University or other institutions.

To maintain registration on the programme, you MUST study a minimum of one module in any academic year. Failure to do so will lead to termination of your registration.
<table>
<thead>
<tr>
<th>Code</th>
<th>Module Title</th>
<th>Credits @ Level 7</th>
<th>Planned Frequency</th>
<th>Module Delivery &amp; Mode</th>
<th>Module Delivered in Collaboration With / At:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA7001</td>
<td>Advanced Practice – Negotiated Independent Work Based Learning</td>
<td>30</td>
<td>A</td>
<td>(*) (P)</td>
<td>Kingston University</td>
</tr>
<tr>
<td>RA7002</td>
<td>Advanced Principles And Practice Of Breast Interventional Techniques</td>
<td>30</td>
<td>A</td>
<td>(*) (P)</td>
<td>Jarvis Training Centre</td>
</tr>
<tr>
<td>RA7003</td>
<td>Clinical Breast Examination And Client Communication</td>
<td>30</td>
<td>B</td>
<td>(*) (P)</td>
<td>Jarvis Training Centre</td>
</tr>
<tr>
<td>RA7004</td>
<td>Contemporary Practice In Breast Cancer Genetics &amp; Diagnosis</td>
<td>30</td>
<td>Alt</td>
<td>(*)</td>
<td>Rose Centre St George’s</td>
</tr>
<tr>
<td>RA7005</td>
<td>Cross Sectional Imaging</td>
<td>30</td>
<td>Alt</td>
<td>(*)</td>
<td>Kingston University</td>
</tr>
<tr>
<td>RA7006</td>
<td>Dissertation@ Kingston</td>
<td>60</td>
<td>A</td>
<td>(*)</td>
<td>Kingston University</td>
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<tr>
<td>RA7009</td>
<td>Interpretation And Reporting In Mammography</td>
<td>30</td>
<td>A</td>
<td>(*) (P)</td>
<td>Jarvis Training Centre</td>
</tr>
<tr>
<td>RA7010</td>
<td>Management Of Resources And Quality Within Healthcare</td>
<td>30</td>
<td>Alt</td>
<td>(*)</td>
<td>Kingston University</td>
</tr>
<tr>
<td>RA7011</td>
<td>Oncology Practice</td>
<td>30</td>
<td>Alt</td>
<td>(*)</td>
<td>Kingston University</td>
</tr>
<tr>
<td>RA7012</td>
<td>Practice Education And Mentorship</td>
<td>30</td>
<td>A</td>
<td>(*)</td>
<td>Kingston University</td>
</tr>
<tr>
<td>RA7013</td>
<td>Professional Practice In Mammography (1)</td>
<td>30</td>
<td>B</td>
<td>(P)</td>
<td>Rose Centre St George’s</td>
</tr>
<tr>
<td>RA7014</td>
<td>Professional Practice In Mammography (2)</td>
<td>30</td>
<td>B</td>
<td>(P)</td>
<td>Rose Centre St George’s</td>
</tr>
<tr>
<td>RA7015</td>
<td>Research And Evidence Based Practice In Healthcare</td>
<td>30</td>
<td>A</td>
<td>(*)</td>
<td>Kingston University</td>
</tr>
<tr>
<td>RA7016</td>
<td>Ultrasound Of The Breast</td>
<td>30</td>
<td>A</td>
<td>(*) (P)</td>
<td>Jarvis Training Centre</td>
</tr>
<tr>
<td>RA7017</td>
<td>PACS (Picture Archiving and Communication System) Administration @ Kingston</td>
<td>30</td>
<td>Alt</td>
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</tr>
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<td>HP7038Z</td>
<td>Prescribing for AHPs (independent and supplementary prescribing) validated by St. Georges University of London. For full details please refer to <a href="http://www.healthcare.ac.uk/courses/workforce-development/modules/prescribing-pg/">http://www.healthcare.ac.uk/courses/workforce-development/modules/prescribing-pg/</a></td>
<td>60</td>
<td>A</td>
<td>(*)</td>
<td>St. Georges University of London</td>
</tr>
</tbody>
</table>

**KEY:**
- A = Annual; B = Biannual; Alt= Alternate year
- * = Multidisciplinary module available to other healthcare professionals as well as radiographers
- P = Module includes clinical practice elements
### Professional Pathways through the Programme

#### 1 Oncology Practice

<table>
<thead>
<tr>
<th>Award</th>
<th>Module type</th>
<th>Module(s) / Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post graduate certificate (PGC)</td>
<td>Options (#)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Free Choice (##)</td>
<td>Maximum of 30 credits</td>
<td></td>
</tr>
<tr>
<td>Post graduate diploma (PGD)</td>
<td>Core</td>
<td>Research and Evidence Based Practice in Healthcare</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Options (#)</td>
<td>Minimum of 30 credits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free Choice (##)</td>
<td>Maximum of 30 credits</td>
<td></td>
</tr>
<tr>
<td>Masters Degree (MSc)</td>
<td>Core</td>
<td>Dissertation</td>
<td>60</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
<th>Creds</th>
<th>Prereqs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core:</td>
<td>RA7015 Research and Evidence Based Practice in Healthcare (for PgD)</td>
<td>30 L7</td>
<td>PgC</td>
</tr>
<tr>
<td></td>
<td>RA7006 Dissertation (for MSc)</td>
<td>60 L7</td>
<td>PgD</td>
</tr>
<tr>
<td># Option:</td>
<td>RA7001 Advanced Practice – Negotiated Independent Work Based Learning</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>RA7005b Cross Sectional Imaging - Therapeutic</td>
<td>30 L7</td>
<td>None</td>
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<tr>
<td></td>
<td>RA7011 Oncology Practice</td>
<td>30 L7</td>
<td>None</td>
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<tr>
<td># # Free Choice:</td>
<td>RA7010 Management of Resources and Quality within Healthcare</td>
<td>30 L7</td>
<td>None</td>
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<tr>
<td></td>
<td>RA7012 Practice Education and Mentorship *</td>
<td>30 L7</td>
<td>None</td>
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</table>

*Satisfactory completion of Practice Education and Mentorship confers eligibility for application for accreditation under the College of Radiographers Practice Educators Accreditation Scheme (PEAS).*
## 2 Medical Imaging

<table>
<thead>
<tr>
<th>Award</th>
<th>Module type</th>
<th>Module(s) / Credits</th>
<th>Credits</th>
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<tr>
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<td>60</td>
</tr>
<tr>
<td>(PGC)</td>
<td>Free Choice (##)</td>
<td>Maximum of 30 credits</td>
<td></td>
</tr>
<tr>
<td>Post graduate diploma</td>
<td>Core</td>
<td>Research and Evidence Based Practice in Healthcare</td>
<td>30</td>
</tr>
<tr>
<td>(PGD)</td>
<td>Options(#)</td>
<td>Minimum of 30 credits</td>
<td>30</td>
</tr>
<tr>
<td>Masters Degree</td>
<td>Core</td>
<td>Dissertation</td>
<td>60</td>
</tr>
<tr>
<td>(MSc)</td>
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<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
<th>Creds</th>
<th>Pre-reqs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core:</td>
<td>Research and Evidence Based Practice in Healthcare (for PgD)</td>
<td>30 L7</td>
<td>PgC</td>
</tr>
<tr>
<td></td>
<td>Dissertation (for MSc)</td>
<td>60 L7</td>
<td>PgD</td>
</tr>
<tr>
<td># Option:</td>
<td>Advanced Practice – Negotiated Independent Work Based Learning</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7001</td>
<td>Cross Sectional Imaging - Diagnostic</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7005a</td>
<td>PACS (Picture Archiving and Communication System) Administration</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td># # Free Choice:</td>
<td>Management of Resources and Quality within Healthcare Practice Education and Mentorship*</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7010</td>
<td></td>
<td>30 L7</td>
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</tr>
<tr>
<td>RA7012</td>
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<td>30 L7</td>
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</tbody>
</table>

*Satisfactory completion of Practice Education and Mentorship confers eligibility for application for accreditation under the College of Radiographers Practice Educators Accreditation Scheme (PEAS).
## 2.2 Medical Imaging (Mammography)

<table>
<thead>
<tr>
<th>Award</th>
<th>Module type</th>
<th>Module(s) / Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post graduate certificate (PGC)</td>
<td>Core</td>
<td>Professional Practice in Mammography 1 and 2 OR equivalent Mammography and option module</td>
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</tr>
<tr>
<td>Post graduate diploma (PGD)</td>
<td>Core</td>
<td>Research and Evidence Based Practice In Healthcare</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Options (#)</td>
<td>Minimum of 30 credits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Free Choice (##)</td>
<td>Maximum of 30 credits</td>
<td></td>
</tr>
<tr>
<td>Masters Degree (MSc)</td>
<td>Core</td>
<td>Dissertation</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
<th>Creds</th>
<th>Pre-reqs</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA7013</td>
<td>Professional Practice in Mammography 1 ^</td>
<td>30 L7</td>
<td>corec</td>
</tr>
<tr>
<td>RA7014</td>
<td>Professional Practice in Mammography 2 ^</td>
<td>30 L7</td>
<td>corec</td>
</tr>
<tr>
<td>RA7015</td>
<td>Research and Evidence Based Practice in Healthcare (for PgD)</td>
<td>30 L7</td>
<td>PgC</td>
</tr>
<tr>
<td>RA7006</td>
<td>Dissertation (for MSc)</td>
<td>60 L7</td>
<td>PgD</td>
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<tr>
<td>RA7001</td>
<td>Advanced Practice – Negotiated Independent Work Based Learning</td>
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<td>None</td>
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<tr>
<td>RA7002</td>
<td>Advanced Principles and Practice of Breast Interventional Techniques</td>
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<td>None/</td>
</tr>
<tr>
<td>RA7003</td>
<td>Clinical Breast Examination and Client Communication</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7004</td>
<td>Contemporary Practice in Breast Cancer Genetics &amp; Diagnosis</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7005a</td>
<td>Cross Sectional Imaging - Diagnostic</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7009</td>
<td>Interpretation and Reporting in Mammography</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7016</td>
<td>Ultrasound of the Breast</td>
<td>30 L7</td>
<td>None</td>
</tr>
<tr>
<td>RA7017</td>
<td>PACS (Picture Archiving and Communication System) Administration</td>
<td>30 L7</td>
<td>None</td>
</tr>
</tbody>
</table>

^Satisfactory completion both Professional Practice in Mammography modules (1 & 2) confers eligibility for application to the College of Radiographers for the Postgraduate award in Mammography.

*Satisfactory completion of Practice Education and Mentorship confers eligibility for accreditation under the College of Radiographers Practice Educators Accreditation Scheme (PEAS).
3 Breast Evaluation

<table>
<thead>
<tr>
<th>Award</th>
<th>Module type</th>
<th>Module(s) / Credits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post graduate certificate</td>
<td>Options (#)</td>
<td>Minimum of 30 credits</td>
<td>60</td>
</tr>
<tr>
<td>(PGC)</td>
<td>Free Choice (##)</td>
<td>Maximum of 30 credits</td>
<td></td>
</tr>
<tr>
<td>Post graduate diploma</td>
<td>Core</td>
<td>Research and Evidence</td>
<td>30</td>
</tr>
<tr>
<td>(PGD)</td>
<td></td>
<td>Based Practice in Healthcare</td>
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</tr>
<tr>
<td></td>
<td>Options (#)</td>
<td>Minimum of 30 credits</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Free Choice (##)</td>
<td>Maximum of 30 credits</td>
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</tr>
<tr>
<td>Masters Degree</td>
<td>Core</td>
<td>Dissertation</td>
<td>60</td>
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<tr>
<td>(MSc)</td>
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<table>
<thead>
<tr>
<th>Module Code</th>
<th>Module Title</th>
<th>Creds</th>
<th>Pre-reqs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core:</td>
<td>RA7015 Research and Evidence Based Practice in Healthcare (for PgD)</td>
<td>30 L7</td>
<td>PgC</td>
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<td></td>
<td>RA7006 Dissertation (for MSc)</td>
<td>60 L7</td>
<td>PgD</td>
</tr>
<tr>
<td># Option:</td>
<td>RA7001 Advanced Practice – Negotiated Independent Work Based Learning</td>
<td>30 L7</td>
<td>None</td>
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<td>RA7002 Advanced Principles and Practice of Breast Interventional Techniques</td>
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<td>RA7003 Clinical Breast Examination and Client Communication</td>
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<td>RA7004 Contemporary Practice In Breast Cancer Genetics &amp; Diagnosis</td>
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<td>RA7009 Interpretation and Reporting in Mammography</td>
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<tr>
<td></td>
<td>RA7013 Professional Practice in Mammography 1 ^</td>
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<td>RA7014 Professional Practice in Mammography 2 ^</td>
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<td></td>
<td>RA7016 Ultrasound of the Breast</td>
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<tr>
<td># # Free</td>
<td>RA7010 Management of Resources and Quality within Healthcare</td>
<td>30 L7</td>
<td>None</td>
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<tr>
<td>Choice:</td>
<td>RA7012 Practice Education and Mentorship*</td>
<td>30 L7</td>
<td>None</td>
</tr>
</tbody>
</table>

^Satisfactory completion of both Professional Practice in Mammography modules (1 & 2) confers eligibility for application to the College of Radiographers for the Postgraduate Award in Mammography Practice.

*Satisfactory completion of Practice Education and Mentorship confers eligibility for accreditation under the College of Radiographers Practice Educators Accreditation Scheme (PEAS).
Learning and assessment strategies

Learning methods are carefully selected to suit the content and the learning outcomes of each module and also for the overall programme. Typically the strategy involves using lectures to ensure that students have the key theoretical knowledge relating to the module before using strategies that allow the students to apply this knowledge in a variety of ways. Through group discussions and seminar work, practical and role play sessions students are able to develop more individual and personal key skills. Debates will develop their critical skills. For the essential practice based and clinical skills, observational placement, demonstration and clinical assessments are employed.

Students will have shared learning across the Medical Imaging, Oncology Practice and Breast Evaluation fields. This inter-professional feature of some modules results in a unique learning experience provided by the exchange of dialogue between a wide range of professionals e.g. diagnostic radiographers, therapeutic radiographers, radiologists, breast physicians, nurses, surgeons, and physicists. Each student brings to the cohort their own particular insight and strength and this is seen as an important part of professional education and the reinforcement of the principles and skills required of working in a team.

Technology Enhanced Learning (TEL) is widely used within modules as part of a blended learning approach: web based materials supported by the virtual learning environment (VLE) enable students to develop an investigative, independent and individualised approach to learning skills vital for an autonomous practitioner.

The philosophy underpinning the programme’s assessment strategy is to provide a diverse range of assessments to enable students to demonstrate their own particular strengths. Students need to demonstrate that they have fulfilled the learning outcomes of the programme of study and achieved the standard required for level 7 award. The course combines academic rigour closely allied to professional development [clinical competence]. These include knowledge, analysis and decision making, clinical safety and accuracy, and research methodology.

Assessment strategies are also considered within the study skills guidance and students are offered the opportunity to present a draft for comment by the module leader.
Description of Modules

MODULE CODE | RA7001 | LEVEL | 7 | CREDITS | 30

**TITLE:** ADVANCED PRACTICE – NEGOTIATED INDEPENDENT WORK BASED LEARNING MODULE

**PRE-REQUISITES:** NONE

**CO-REQUISITES:** NONE

**MODULE SUMMARY (INDICATIVE)**

This module is an independent learning module that is available to a wide range of practitioners and of particular value to Advanced Practitioners or those preparing for an advanced practice role. In consultation with the module leader, students will identify a particular topic that is of interest to them or pertinent to their practice or role. This negotiated specified area of practice forms the foundation of the module; students will address each learning outcome in relation to their specified area of practice. The module learning outcomes and activities are generic and based around the knowledge and skills required in order to be able to effectively function as an Advanced Practitioner.

Any subject may be negotiated. It is anticipated that specified areas of practice may be related to a particular:

- Imaging or treatment modality e.g. CT, MRI, RNI, US, bracytherapy
- Aspect of practice (clinical or theory bases) e.g. forensic radiography, CT Angiography, financial management, radiobiology
- Aspect of patient care or management, e.g. stroke, wound care, on-treatment review
- Professional concepts e.g. continuing Professional Development, evidence based practice, team working
- Aspect of practice role such as clinical leadership, research, education, service improvement and development

Students will be assigned an academic tutor who will provide guidance through a series of tutorials. Students will be expected to complete this module within a period of 6 months. Within the assessment students are required to complete a series of tasks and address these in the context of their specified area of practice. Guidance is provided through a series of tutorials with the module leader or assigned academic tutor.

Students can select to take this module on two occasions. However on the second occasion the specified area of practice MUST differ from previous module.

**AIMS (DEFINITIVE)**

- To develop competence and expertise in a specific area of practice
- To facilitate applied knowledge and understanding in relation to professional activities associated with advanced practice.

**CURRICULUM CONTENT (INDICATIVE)**

The content of study will depend on the individual student’s circumstance and chosen area of study. This may include

- Legislative frameworks and codes of practice
- Professional career pathways; associated roles and responsibilities
- Professional issues and debates underpinning the chosen topic
- Concepts, theories and models associated with the topic
• Reflective practice
• Critical appraisal
• Evidence based practice
• Development models
• Personal development planning

MAJOR CATEGORIES OF ASSESSMENT

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Log Book or Profile</td>
<td>Pass / Fail</td>
</tr>
<tr>
<td>Portfolio</td>
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</table>
TITLE: ADVANCED PRINCIPLES AND PRACTICE OF BREAST INTERVENTIONAL TECHNIQUES

PRE-REQUISITES: ULTRASOUND OF THE BREAST MODULE (RA7016) OR EQUIVALENT FOR ULTRASOUND GUIDANCE TECHNIQUES.

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is designed around attendance of 2-3 days to provide the foundation for both the academic and clinical components of a variety of breast interventions, either using either X-ray or ultrasound guidance. It is then followed by 12 months of learning in a professional environment within healthcare. This is a very student centered module in that each student designs their own learning outcomes, in addition to those given in the module descriptor. This enables them to personalise the outcome to their scope(s) of practice of interventional methods, within the Breast Screening Unit or Imaging department. The assessments are equally adaptable being a Logbook of clinical cases, plus a Portfolio with several listed components such as a Mapping Document, Theoretical mini-essays, Audit on practice and self-assessment, and a Reflective Summary.

AIMS (DEFINITIVE)
• To equip students with the theoretical and practical underpinning knowledge and skill to enable them to become competent to perform those interventions appropriate to the advanced practitioner’s role within their workplace;
• To enable students to identify and manage their learning which is relevant to their intended scope of practice within their workplace;
• To gain an understanding of the assessment process and associated interventions which determines the relevance of underlying pathology, abnormal clinical or imaging findings;
• To enhance the student’s ability to liaise with members of the Unit’s professional team, to be an effective member of the multidisciplinary breast care team and contribute to the debate on patient management in a very complex area of healthcare.

CURRICULUM CONTENT (INDICATIVE)
• Benefits and risk of diagnostic intervention
• Contra indication to interventions
• Complication of procedures, resuscitation procedure, practice of breast interventional techniques, administration of local anaesthetic, selection and use of equipment
• Abnormal mammograms, with respect to anatomy and pathology related to mammographic features
• Classification of lesions, their location and their relationship to normal and abnormal anatomy
• Principles and practice of current and developing interventional techniques to include: cyst aspiration, fine needle aspiration cytology, core biopsy, vacuum assisted biopsy, localisation procedures including stereotaxis and ultrasound.
• Overview of relevant breast imaging methods and techniques; ultrasound, MRI and any new developments
• Image guided fine needle aspiration and core biopsy
• Defining identifiable outcomes
• Critical reasoning and the decision making process and report writing
• Personal performance management and self evaluation.
**MAJOR CATEGORIES OF ASSESSMENT**

| Objective Structured Clinical Examination | 20% |
| Clinical Logbook                          | Pass / Fail |
| Portfolio                                  | 80% |
TITLE: CLINICAL BREAST EXAMINATION AND CLIENT COMMUNICATION

PRE-REQUISITES: NONE

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is designed around an attendance of one week to provide the foundation for understanding and relating all of the key processes involved in breast diagnosis. It is then followed by 6 months of learning in a professional environment within healthcare. This develops and extends the participants’ clinical expertise necessary to contribute to the multidisciplinary approach to the diagnosis of breast disease. It will facilitate the participants’ decision making skills based on a broad appreciation of the tools and techniques that underpin the diagnosis of breast abnormalities and incorporates both academic and clinical components. The module will also facilitate and enhance the necessary development and application of the participant’s communication, counselling and interpersonal skills and will include interactive participatory learning.

AIMS (DEFINITIVE)
• To empower the student to become an effective clinical member of the multidisciplinary breast care team and to respond appropriately to the needs of women requesting or requiring breast screening or breast care;
• To develop the student’s clinical skills related to the diagnostic procedures in assessing breast abnormalities to a standard which ensures a high sensitivity and specificity in definitive diagnosis;
• To enable the student to appreciate the expertise underpinning the multidisciplinary roles of health care professionals involved in breast diagnosis;
• To develop the students’ knowledge and understanding to enable them to apply appropriate communication, counselling or interpersonal skills to prevent or minimise the distress of women attending breast units.

CURRICULUM CONTENT (INDICATIVE)
• Concept and general principles of diagnosis: sensitivity, specificity, bias, sources of error
• Anatomy, physiology, and pathology of the breast in benign and malignant conditions
• Symptoms and signs of breast disease
• Informed consent
• Clinical examination of the breast and multidisciplinary approach to breast evaluation
• Overview of current and developing breast imaging procedures
• Principles of current and developing interventional techniques to include: fine needle aspiration cytology, core biopsy, localisation procedures including stereotaxis and ultrasound
• Relevance of hormone replacement therapy
• Breast pain and management
• Benign and malignant breast disease
• Overview of family history and breast cancer genetics
• Client management
• Overview of communication theories and models of counselling
• Communication analysis: stereotypes, expectations, perceptions, barriers
• Effective communication e.g. doctor client interaction, breaking bad news
• Medico-legal, ethical and statutory considerations - retention of images, reports and records

MAJOR CATEGORIES OF ASSESSMENT

| Objective Structured Clinical Examination | 20% |
| Essay (3,000 words)                      | 30% |
| Clinical Logbook                         | 50% |
TITLE: CONTEMPORARY PRACTICE IN BREAST CANCER GENETICS & DIAGNOSIS

PRE-REQUISITES: NONE

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is designed for multi-disciplinary healthcare practitioners working in the field of breast cancer diagnosis and care. This module will develop and extend the participants’ clinical expertise necessary to contribute to the multidisciplinary approach to the diagnosis of breast disease. It will facilitate the participants’ broader appreciation of the tools and techniques that underpin the diagnosis of breast abnormalities from the academic perspective. The module will explore a full range of current and future practice relating to modern and developing breast cancer services.

AIMS (DEFINITIVE)
• To empower the student to become an effective clinical member of the multidisciplinary breast care team and to respond appropriately to the needs of the client and the breast cancer service;
• To develop the student’s academic skills in diagnostic procedures related to current breast genetic and imaging assessment;
• To develop the student’s knowledge and understanding to enable them to apply appropriate decision making skills regarding the clinical application of contemporary imaging to optimise the clients’ diagnostic pathway.

CURRICULUM CONTENT (INDICATIVE)
• Concept and general principles of breast cancer diagnosis
• Anatomy, physiology, and pathology of the breast in benign and malignant conditions
• Current and developing breast imaging procedures to include: Magnetic Resonance Imaging (MRI), Digital imaging, Computer Assisted Diagnosis (CAD), Tomosynthesis, Elastography, Positron Emission Tomography CT, Digital thermal imaging, Radionuclide imaging and Molecular imaging
• Family history and breast cancer genetics
• Principles of current and developing advanced biopsy techniques.
• Relevance of the dense breast and Hormone Replacement Therapy
• Imaging the augmented breast; (implants)

MAJOR CATEGORIES OF ASSESSMENT

| Coursework | Essay - (Family history & genetics) 2500 words | 50% |
| Review of the literature (relating to current & future trends in imaging) (1500 words) | 25% |
| Scenario (practical application of future trends) (1500 words) | 25% |
TITLE: CROSS SECTIONAL IMAGING - DIAGNOSTIC

PRE-REQUISITES: EXPERIENCE OF / CURRENTLY WORKING WITH / CT / MR

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is designed for diagnostic radiographers and will be delivered jointly with the Cross Sectional Imaging - Therapeutic (RA7005b) module. Although the contents of the two modules are similar, there are distinct differences in the application of practice which will be evident in the assessment presentation. The module will bring together the physical principles and clinical applications of computed tomography and magnetic resonance imaging. The aim of the module is to help diagnostic radiographers at all levels to make effective and safe use of contemporary imaging systems found in imaging departments. In addition by critically exploring technological advances in cross sectional imaging systems the module will also help prepare the radiographer for the future developments in imaging practice.

AIMS (DEFINITIVE)
• To consolidate and further develop the practitioner’s understanding of the underpinning physical principles of computed tomography and magnetic resonance imaging;
• To enable practitioners to make effective and safe use of computed tomography and magnetic resonance imaging;
• To critically explore technological advances in computed tomography and magnetic resonance imaging.

CURRICULUM CONTENT (INDICATIVE)
• Physical principles of computed tomography (including PET CT) and magnetic resonance imaging
• Contrast mechanisms and enhancement strategies in computed tomography and magnetic resonance imaging
• Clinical diagnostic applications of computed tomography (including PET CT) and magnetic resonance imaging
• Quality Assurance and safety considerations
• Cross section anatomy and pathology

MAJOR CATEGORIES OF ASSESSMENT

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<tr>
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<td>Poster</td>
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MODULE CODE: RA7005b  LEVEL: 7  CREDITS: 30

TITLE: CROSS SECTIONAL IMAGING - THERAPEUTIC

PRE-REQUISITES: EXPERIENCE OF / CURRENTLY WORKING WITH / CT / MR

CO-REQUISITES: None

MODULE SUMMARY (INDICATIVE)
This module is aimed for therapeutic radiographers and will be delivered jointly with the Cross Sectional Imaging - Diagnostic (RA7005a) module. Although the contents of the two modules are similar, there are distinct differences in the application of practice which will be evident in the assessment presentation. The module will bring together the physical principles and clinical applications of computed tomography and magnetic resonance imaging. The aim of the module is to help therapeutic radiographers at all levels to make effective and safe use of contemporary localisation systems found in oncology practice. In addition by critically exploring technological advances in cross sectional imaging systems the module will also help prepare the radiographer for the future developments in oncology practice.

AIMS (DEFINITIVE)
- To consolidate and further develop the practitioner’s understanding of the underpinning physical principles of computed tomography and magnetic resonance imaging;
- To enable practitioners to make effective and safe use of computed tomography and magnetic resonance imaging;
- To critically explore technological advances in computed tomography and magnetic resonance imaging.

CURRICULUM CONTENT (INDICATIVE)
- Physical principles of computed tomography (including PET CT) and magnetic resonance imaging
- Contrast mechanisms and enhancement strategies in computed tomography and magnetic resonance imaging
- Clinical /localisation applications of computed tomography (including PET CT) and magnetic resonance imaging
- Quality Assurance and safety considerations
- Cross section anatomy and pathology

MAJOR CATEGORIES OF ASSESSMENT

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<th>Assessment</th>
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<tbody>
<tr>
<td>Essay (2500)</td>
<td>50%</td>
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<td>Poster</td>
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</table>
PRE-REQUISITES: RESEARCH AND EVIDENCE BASED PRACTICE IN HEALTHCARE (RA7015) / PGD

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module builds upon the principles outlined and knowledge acquired during the Research and Evidence Based Practice in Healthcare module (RA7015). It provides the component beyond postgraduate diploma to enable the completion of a Masters degree. Professionals are consistently expected to be able to provide an evidence base to prove the effectiveness of their professional interventions. This module provides students with the experience of utilising all principles of research design. Following submission and approval of a dissertation proposal the student is provided with a project supervisor to facilitate support for both the project and dissemination material. The students will be required to undertake an independent piece of research study into a topic relevant to their own field. The aim of the module is to develop in-depth theoretical, analytical and research skills.

AIMS (DEFINITIVE)
• To allow students to either undertake clinical or laboratory research into a topic relevant to some aspect of medical imaging, oncology practice or breast care in order to develop in-depth theoretical, analytical and research skills;
• To become familiar at an advanced level of some aspect of research relevant to medical imaging, oncology practice or breast care;
• To facilitate the student in undertaking a piece of independent research and effectively communicate the findings.

CURRICULUM CONTENT (INDICATIVE)
The module will build upon the fundamental theories and principals associated with undertaking and applying research skills in practice, in relation to the following key areas:
• Critical reading and critical analysis
• Measurement issues: levels of measurement; variables; reliability and validity and sampling techniques
• Justification of the selected research method(s)
• Ethical considerations and integrity in research
• Data collection techniques and analysis of the data specific to the research question.
• Evaluation of research and managing and planning the project
• Quantitative and/or qualitative data analysis
• Management of information interpreting the evidence and reporting the findings
• Using SPSS to produce tables, graphs, histograms
• Dissemination of the findings: writing for peer review journals or poster presentation

MAJOR CATEGORIES OF ASSESSMENT

| Written Report (10,000 words) | 70% |
| Dissemination of findings | 30% |
TITLE: INTERPRETATION AND REPORTING IN MAMMOGRAPHY

PRE-REQUISITES: NONE

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is designed around an attendance of one week to provide the foundation for understanding and relating all of the key processes involved in ‘reading’ breast images followed by 9 months of learning in a professional environment within healthcare. This module is designed for health care professionals, such as breast clinicians or radiographers who wish to perform as Advanced Practitioners. It is related to the image interpretation of screening mammograms, detecting & identifying any abnormalities, classifying those possible abnormalities, and then making a decision on the likely probabilities whether to recall the woman for further clinical assessment, with all the associated patient anxieties. The module assessment components consist of evaluating clinical skills, self analysis, and academic skills of essay writing on an associated topic.

AIMS (DEFINITIVE)
• To enable the student to develop the skills necessary to extend their role, as a competent, independent advanced practitioner, as a mammography image reader to a standard measured by a customised set of images, and approved by the NHSBSP and examiners from the professional body;
• To enhance the students perceptual and conceptual skills when reading mammograms;
• To facilitate the development and the practice of reliable and accurate interpretation of radiological mammographic abnormalities.

CURRICULUM CONTENT (INDICATIVE)
• Breast anatomy and pathology
• Abnormal mammograms, with respect to anatomy and pathology related to mammographic features
• The effect of hormone replacement therapy (HRT) and age on breast patterns
• Specific structured training relating to mammographic abnormalities
• Feature analysis-benign, malignant or indeterminate
• Classification of lesions, their location and their relationship to normal and abnormal anatomy
• Reasoning and decision making process, report writing
• Evaluation of visual evidence and interpretation of its significance in the assessment or symptomatic clinic
• Mentoring and developing mentoring relationships
• Evaluation of published literature

MAJOR CATEGORIES OF ASSESSMENT

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<th>Assessment Component</th>
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<tr>
<td>Reflective Summary</td>
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</table>
TITLE: MANAGEMENT OF RESOURCES AND QUALITY WITHIN HEALTHCARE

PRE-REQUISITES: NONE

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is designed for healthcare professionals undertaking professional and managerial tasks. The module can be taken as an option module for any pathway. The module focuses on making effective use of resources; adding value to personal and organisational effectiveness such that quality of service can be achieved. The module aims to raise awareness of key concepts and theory associated that can be applied in order to manage people, co-ordinate streams of activity and achieve quality outcome measures. The module explores a range of contemporary issues and highlights the impact of these on the provision of service to the clients. The assessment utilises Problem Based Learning and encourages students to consider practical solutions in the context of practice which is complex and multifaceted in nature.

AIMS (DEFINITIVE)
• To facilitate applied knowledge and understanding of theoretical concepts in relation to management of resources and quality measures;
• To facilitate reflection and analysis of personal experiences and skills, encouraging personal development and effectiveness and a rational approach to management of professional activity and service delivery;
• To provide a group participatory Problem Based Learning approach in determining practical solutions combined with relevant informing methods.

CURRICULUM CONTENT (INDICATIVE)
• Key concepts and theories relating to operational and strategic management roles and responsibilities
• Human resource management to include recruitment selection, skills training, personal development, performance appraisal
• Managing people i.e. concept of working through others, individual needs of motivation, learning styles, type of support required, reinforcement methods
• Team Building to include characteristic and dynamics, leadership styles, organisational culture
• Enhancing working relationships – dealing with conflict and stress, handling conflicts within working relationships and dealing with personal stress
• Identifying external influences on organisations and practices, exploring theory associated with the process of managing internal change
• Managing service and quality of care through workforce planning and personal development
• Mechanism to monitor and measure performance and quality e.g. patient satisfaction, effective communication etc

MAJOR CATEGORIES OF ASSESSMENT

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<thead>
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<td>Presentation and critical analysis report of a workplace scenario (2000 words)</td>
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<tr>
<td>Written report based on a scenario (2000 words)</td>
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**MODULE CODE** | RA7011  
---|---  
**LEVEL** | 7  
**CREDITS** | 30  

**TITLE:** **ONCOLOGY PRACTICE**

**PRE-REQUISITES:** NONE

**CO-REQUISITES:** NONE

**MODULE SUMMARY (INDICATIVE)**
This module is available only to registered therapeutic radiographers within the oncology practice pathway. It builds on a pre-existing base knowledge and explores through the use of case based learning, the multidisciplinary approach to cancer management. It provides an opportunity for students to explore and study in depth, the principles and practice of professional radiographers, and encourages the development of advanced roles in radiotherapy services. It is complimentary to the Image Guided Radiotherapy Verification module and thus does not cover topics related to the verification of radiotherapy treatments. Expert speakers also provide key lectures on particular aspects of management and the principals of novel interventions.

**AIMS (DEFINITIVE)**
- To facilitate discussion on the multidisciplinary management of cancer;
- To promote evidence based practice;
- To enhance the holistic care of the cancer patient;
- To foster an awareness of contemporary and contentious issues in radiotherapy practice.

**CURRICULUM CONTENT (INDICATIVE)**
- Epidemiology and aetiology of cancer
- Impact of genetics in cancer
- Health education and screening strategies for cancer
- Role of surgery, radiotherapy, chemotherapy including endocrine therapy and biological therapies in the management of a range of tumours
- Principles of fractionation
- Technology and techniques for targeted therapies
- Ionising Radiation Regulations
- Supportive and End of life care
- Professional role development

**MAJOR CATEGORIES OF ASSESSMENT**

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<td>Annotated bibliography (2000 words)</td>
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<tr>
<td>Case study will be chosen by the student and the suitability will be discussed with the module leader. The case study should allow all the learning outcomes to be assessed. (3000 words)</td>
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TITLE: PACS (PICTURE ARCHIVING AND COMMUNICATION SYSTEMS) ADMINISTRATION

PRE-REQUISITES: NONE

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module provides the student with a broad overview of Picture Archiving and Communication Systems (PACS) from image capture and storage, to operational management within the modern healthcare environment. The module aims to develop the knowledge required to enable Healthcare Professionals to provide effective day to day PACS administration within a modern Radiology Department.

Furthermore, the student will be able to appreciate the application of digital imaging technologies at an advanced level within their own working practice. This knowledge will in turn lay the foundation for a more strategic managerial understanding of the use of digital imaging systems as a critical part of radiology service management.

AIMS (DEFINITIVE)
- To critically enhance the student’s understanding of the digital imaging process and the technology that underpins it;
- To develop a critical knowledge of technical and medical aspects of the formation, transmission and storage of diagnostic digital images;
- To provide the knowledge and skills that are necessary for effective trouble shooting with respect to radiology IT systems, and examination management;
- To critically enhance the Healthcare Professional’s awareness of digital imaging technologies and how they can affect the clinical environment;
- To critically develop advanced imaging practice within radiology service management.

CURRICULUM CONTENT (INDICATIVE)
- Equipment used to produce digital medical images
- Computer networks that can transmit and store digital images
- The operational impact of using digital imaging systems within a clinical environment
- Digital Image quality, evaluation and post production
- PACS management, troubleshooting and strategic planning

MAJOR CATEGORIES OF ASSESSMENT

<table>
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<th>Exam</th>
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<tr>
<td>Coursework</td>
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September 2017 Information for Applicants
TITLE: PRACTICE EDUCATION AND MENTORSHIP

PRE-REQUISITES: NONE

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is of value to practitioners who educate and mentor learners within the clinical setting. The module focuses on developing appropriate knowledge and skills in order to effectively facilitate the development of others. Throughout the module students draw upon their clinical experiences and relate these to theoretical frameworks. The module places emphasis on the development of self, through personal development planning. Throughout the module participants engage with a wide range of learning activities which augment learning and act as a foundation for reflection.

AIMS (DEFINITIVE)
• To promote an understanding of the relevant principles and theories that underpin practice education and mentorship;
• To facilitate the acquisition of knowledge and skills in order to effectively develop and maintain personal competence as a practice educator or mentor.

CURRICULUM CONTENT (INDICATIVE)
• Clinical governance, professional accountability, roles and responsibilities
• Models and concepts of clinical supervision, education and mentorship
• Learning theories and taxonomies
• Models and theories of professional competence
• Contemporary issues, organisational, professional and social influences
• Principles of planning and facilitating learning
• Principles of assessment and feedback
• Personal qualities and expectations
• Developing supportive and professional relationships
• Self evaluation and peer assessment
• Self awareness and reflective practice
• Personal development planning

MAJOR CATEGORIES OF ASSESSMENT

<table>
<thead>
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<th>Assessment Type</th>
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<tr>
<td>Structured Essay (3500 words)</td>
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MODULE CODE | RA7013 | LEVEL | 7 | CREDITS | 30

| TITLE: PROFESSIONAL PRACTICE IN MAMMOGRAPHY 1 |

PRE-REQUISITES: NONE

CO-REQUISITES: PROFESSIONAL PRACTICE IN MAMMOGRAPHY 2 (RA7014)

MODULE SUMMARY (INDICATIVE)
This module is a core module in the MSc in Medical Imaging (Mammography) and runs concurrently with Professional Practice in Mammography 2 (RA7014). The module introduces students to the basic knowledge and skills in mammography to enable them to develop professional clinical competencies. The module will also develop critical evaluation of the basic mammographic technique in the clinical environment. Core factual material is provided via keynote lectures during attendance of the identified academic week.

AIMS (DEFINITIVE)
• To facilitate the professional development of the student to enable them to gain the experience and expertise necessary to become an effective, competent, independent mammography practitioner within the multidisciplinary breast care team in which they are a member;
• To provide the skills and knowledge in mammography to enable the student to develop the competencies to practice in a range of environments to the professional and national standard;
• To facilitate the critical evaluation of the chain of care and practices provided by health care professionals for the women, from access of the service to diagnosis and treatment and associated support services, and to make recommendations with regard to the quality of the service offered.

CURRICULUM CONTENT (INDICATIVE)
• Concepts and general principles of the National Health Service Breast Screening Programme (NHSBSP)
• Anatomy and physiology of the breast
• Ergonomics of Mammography and Analysis of Technique
• The Role of Total Quality Management (TQM) and Clinical Audit
• Study skills for Masters Level learning (Level 7)
• Critical Analysis of the Literature
• Introduction to Mammography Physics
• Symptoms and signs of breast disease and the treatment pathway
• Supporting the woman attending for screening and assessment clinics
• Overview of communication skills in the clinical environment
• Clinical visits to observe and evaluate quality of care for clients/patients
• Multidisciplinary visits and meetings to evaluate the role of the team dynamics in supporting the client through their management pathway

MAJOR CATEGORIES OF ASSESSMENT

<table>
<thead>
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<tr>
<td>Essay (3000 words)</td>
<td>75%</td>
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</table>

September 2017 Information for Applicants 28
MODULE CODE  | RA7014  | LEVEL  | 7  | CREDITS  | 30

TITLE: PROFESSIONAL PRACTICE IN MAMMOGRAPHY 2

PRE-REQUISITES: NONE

CO-REQUISITES: PROFESSIONAL PRACTICE IN MAMMOGRAPHY 1 (RA7013)

MODULE SUMMARY (INDICATIVE)
This module is a core module in the MSc in Medical Imaging (Mammography) and runs concurrently with Professional Practice in Mammography 1 (RA7013). It further develops the knowledge and skills obtained from Professional Practice in Mammography 1 (RA7013) module and introduces additional mammographic assessment technique and associated breast pathologies. The module will also develop the student's role as a mentor enabling educational support to junior colleagues. Core factual material is provided via the keynote lectures during attendance of the identified academic week.

AIMS (DEFINITIVE)
• To facilitate the professional development of the student to enable them to gain the experience and expertise necessary to become an effective, competent, independent advanced mammography practitioner within the multidisciplinary breast care team in which they are a member;
• To provide the skills and knowledge in additional mammographic assessment techniques and associated breast pathology to enable the student to develop the competencies to practice in a range of environments to the professional and national standard;
• To provide the skills and knowledge necessary for the student to undertake the role of mentor and provide educational support for the assistant practitioner workforce and other junior members of staff with whom they work.

CURRICULUM CONTENT (INDICATIVE)
• Concepts and general principles of the National Health Service Breast Screening Programme (NHSBSP)
• Analysis of Advanced Mammography Technique
• Critical Analysis of the Literature
• Quality Assurance Testing in the NHSBSP
• Signs and symptoms of breast disease and the treatment pathway
• Analysis of effective communication skills, expectations and potential barriers in the clinical environment
• Mentoring skills
• Overview of current and developing breast imaging technology e.g. Advanced Ultrasound, MRI, PET CT
• Histology & Cytology related to breast disease
• The role of the Multi-Disciplinary Meeting (MDM) in diagnosis of breast disease
• Introduction to pattern recognition of common breast disease on mammography

BREAKDOWN OF MAJOR CATEGORIES OF ASSESSMENT

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Objective Structured Clinical Examination (OSCE 2)</td>
<td>25%</td>
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<tr>
<td>Assessment of Clinical Competence</td>
<td>PASS/FAIL</td>
</tr>
<tr>
<td>Reflections (3000 words)</td>
<td>75%</td>
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</tbody>
</table>
TITLE: RESEARCH AND EVIDENCE BASED PRACTICE IN HEALTHCARE

PRE-REQUISITES: NONE

CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
The module is designed to foster an understanding of the research process, hone skills of critical appraisal and develop research skills as applied to both quantitative and qualitative research. The delivery follows a logical progression which starts with the scientific process and hypothesis formulation and ends with the production of a research protocol. Along the way reviewing the literature, selecting an appropriate research method, sampling, data collection analysis and presentation and ethical issues are covered. The module has preparatory work, a taught component and self-directed learning/assignment time. The taught component is delivered in two parts, a two day introduction/critical reasoning component and a five day research methods component. The preparation time prior to the two periods of attendance, the guided study/exercises between the two periods of attendance and the self-directed learning/assignment time after the second period of attendance are equally important parts of the module as a whole. The preparatory work includes pre-reading of recommended texts and the basic critique/critical analysis of provided materials, papers and evidence with the emphasis being on the ease of information extraction and strength of evidence. StudySpace is used to support learning and provide clarification and practice via student based activities.

AIMS (DEFINITIVE)
• To facilitate the participant’s review of different research designs and methods and appreciation of the advantages and limitations of data collection and analysis;
• To enable the participant to appraise the body of the literature and critically evaluate the strength of evidence;
• To develop the participant’s own research skills to enable them to contribute to the development of research based practice.

CURRICULUM CONTENT (INDICATIVE)
• The research process: development of hypotheses or research questions, research design, data collection, data analysis and presentation
• Approaches, strengths and limitations of quantitative and qualitative research
• Methodological approaches
• Measurement issues: Levels of Measurement; Variables; Reliability; Validity; Credibility; Transferability; Dependability and Confirmability.
• Introduction to statistical analysis – selecting the appropriate analysis
• Ethical considerations of research
• Evaluation of research and critical review of evidence.

MAJOR CATEGORIES OF ASSESSMENT

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Critical review – (3000 words)</td>
<td>50%</td>
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<tr>
<td>Research proposal – (2000 words)</td>
<td>50%</td>
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</table>
TITLE: ULTRASOUND OF THE BREAST

PRE-REQUISITES: NONE
CO-REQUISITES: NONE

MODULE SUMMARY (INDICATIVE)
This module is designed around an attendance of one week to provide the foundation for understanding and relating all of the key processes involved in breast diagnosis. This is then followed by 6 months of learning in a professional environment within healthcare. The module is designed to provide the academic and clinical components to enable students to fulfil their role in reviewing current application and uses of ultrasound to detect and evaluate breast abnormalities and then to interpret and report on findings. It will facilitate the participants’ decision making skills based on a broad appreciation of the equipment available and scanning techniques that underpin the diagnosis of breast abnormalities. The module also focuses on the necessary physical processes underlying safe ultrasound practice.

AIMS (DEFINITIVE)
- To provide the opportunity for students to gain the knowledge and skills necessary for the appropriate and safe use of breast ultrasound scanning equipment, for the production of clinically useful images;
- To enable students to detect and evaluate breast abnormalities and to provide accurate and reliable diagnostic interpretation of the ultrasound information to aid diagnosis of clinical findings or mammographic abnormalities and to add value to the assessment of breast symptoms.

CURRICULUM CONTENT (INDICATIVE)
- Physics of ultrasound: production of sound waves, transducers, reflection of sound waves at tissue interface
- Physical principles of artefacts
- Breast anatomy including cross sectional anatomy and pathology pertaining to ultrasound
- Imaging equipment including appropriate selection and safety aspects
- Imaging recording methods
- Practical Application - techniques used in scanning the breast and axilla, potential complications
- Ultrasound appearances of the breast: artefacts, normal appearances, physiological changes and pathology
- Image evaluation, interpretation and reporting
- Potential limitations and future development of ultrasound.
- Doppler ultrasound of breast lesions and axillary lymph nodes
- Advantages and disadvantages of ultrasound as an imaging modality.

MAJOR CATEGORIES OF ASSESSMENT

<table>
<thead>
<tr>
<th>Objective Structured Practical Examination</th>
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<tbody>
<tr>
<td>Clinical Logbook</td>
<td>50%</td>
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Finally……
I hope we have provided sufficient information for you to be able to complete your application form and make a choice of what you wish to study.

I also hope that you have found the choice of modules that meets your professional needs. If you feel that we could provide additional information, please do not hesitate to contact us at Kingston University or at any of the partnership sites.

We hope you will consider joining our programme and we look forward to receiving your application.

Good luck with your studies!

**Sherril Spencer**  
Associate Professor / Postgraduate Programme Director