Self-Study Report. University of South Australia, 2021

GRADUATE DIPLOMA IN MEDICAL SONOGRAPHY (GENERAL)
MASTER OF MEDICAL SONOGRAPHY (GENERAL)
GRADUATE CERTIFICATE IN BREAST IMAGING

Student Information

Number of new enrolments in the program for the year	**2020 – full year** ICBR – 26 IGSO (Gen) –159 IMSO (Gen) – 42	**2021 – to 12/8** ICBR – 20 IGSO (Gen) – 188 IMSO (Gen) – 61
Number of ongoing enrolments	**2020 – full year** ICBR – 5 IGSO (Gen) – 302 IMSO (Gen) – 51	**2021 – to 12/8** ICBR – 23 IGSO (Gen) –308 IMSO (Gen) – 57
Number of completions	**2020 – full year** ICBR – 9 IGSO (Gen) – 117 IMSO (Gen) – 16	**2021 – to 7/7** ICBR – 1 IGSO (Gen) – 8 IMSO (Gen) – 5
Number of successful credit transfers (per 0.125 EFTSL equivalent subjects). This data includes internal and external credit transfers (ie: students transferring between our courses as well as from other institutions). NB: unsuccessful credit transfers are not reportable data. Most commonly, declined creditapplications came from private courses which aren't accredited with ASAR or registered with TEQSA, or from other institutions where the subject content did not align with set objectives of any of our subjects.	**2020 – full year** ICBR – 11 IGSO (Gen) – 37 IMSO (Gen) – 23	**2021 – to 7/7** ICBR – 7 IGSO (Gen) – 15 IMSO (Gen) – 18
Number of successful RPLs (students who have entered the Courses as Qualified Sonographers,including those with O/S qualifications, needingto meet Australian registration requirements).	**2020 – full year** ICBR – 0 IGSO (Gen) – 0 IMSO (Gen) – 7 with ASAR accreditation + 1 international	**2021 – to 12/8** ICBR – 0 IGSO (Gen) – 0 IMSO (Gen) – 12 with ASAR accreditation + 1 international
Number of withdrawals *Program Withdrawals* *Number of students that have formally withdrawn from UniSA. This figure does not include administrative withdrawals undertaken as part of regular processes or transfer into other Sonography programs or steams*	**2020 – full year** ICBR – 2 IGSO (Gen) – 4 IMSO (Gen) – 7 ICSO completions (Exit award) - 12	**2021 – to 12/8** ICBR– 1 IGSO (Gen) – 4 IMSO (Gen) – 6 ICSO completions(Exit award) - 9

Key: ICBR = Graduate Certificate in Breast Imaging; IGSO (Gen) = Graduate Diploma in Medical Sonography, General Stream; IMSO (Gen) = Master of Medical Sonography, General Stream; ICSO = Exit Graduate Certificate, taken by students

who successfully complete the initial four subjects of the IGSO or IMSO program, but are unable to obtain a training position

Changes in the past 12 months

Describe any changes that have been made in the past 12 months to:

Staffing (Provide details of new staff on the Staff Qualifications Matrix)

Associate Professor Nayana Parange returned to the program following a secondment to another unit within the University. Nayana has resumed her teaching role in the program. Subsequent to this, Mark Matheson who was employed for Nayana's secondment term, has left the program to return to his clinical work. All other staff roles remain unchanged since previous reports.

Facilities (Link to how they will be used for the course)

As described in our accreditation documentation, our Programs are delivered externally online. The University maintains and supports a quality learning platform Moodle for delivering online education. The library has an extensive collection of databases, journals, ebooks and online articles which are made available electronically as well as hard copy for students enrolled into the Program.

Excellent administrative services exist within the university. Campus Central is the first point of call for all student enquiries, and they help students with a wide range of administrative services through all stages of student life.

A wide range of IT facilities as well as other student services like Disability services, Counselling services, Language and Learning services, Learning and Teaching Services as well as Career services are available to support and help our students.

Equipment (Link to how they will be used for the course)

A range of equipment is available to the students for hands-on use on campus. These ultrasound machines, phantoms, and simulators are regularly being utilised in structured small group workshops to assist students with developing hands-on scanning skills as well as an understanding of sectional anatomy. We continue to enjoy our simulation and teaching space, with students free to book scanning time both within and outside normal business hours.

SIMTICS modules continue to be used to support the students' learning of practical scanning approaches in our online environment.

Course Structure

To streamline staffing and some teaching requirements, three of the subjects within the Graduate Diploma of Medical Sonography (General) (Obstetric and Gynaecologic Sonography, Musculoskeletal Sonography, and Vascular Sonography) are now only offered once a year, rather than twice. This change was communicated to students with enough warning that they have had the opportunity to work with their training supervisors to set up their study plan accordingly.

Course Content (Provide a new Subject Outline that covers changes that have been made)

There have not been any content changes to subjects within the Graduate Diploma or Masters of Medical Sonography (General), or the Graduate Certificate in Breast Imaging courses.

Accreditation History

List other accreditations related to the course.

In addition to external accreditation with ASAR, all Medical Sonography Programs undergo evaluation and internal accreditation within the University.

As an education provider of the Mammography Courses, BreastScreen SA (BSSA), is required to undertake accreditation with the Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) every three years. BSSA education is currently accredited until October 2022.

Provide an overview of any changes made in those accreditations in the past 12 months (EG. Renewal).

Not applicable

If there is a condition on the course's registration, provide details of any actions taken to address the requirements of the condition

Not applicable

Satisfaction Data

Student satisfaction data. – are you meeting the needs / expectations of the students.

Course Evaluation Data for Courses across all the three Programs shows that student satisfaction and good teaching has been rated as high:

Student satisfaction with the program teaching was rated against the national benchmark of 75% across the programs, as measured by agreement rates for the six Good Teaching items.

ICBR: 75%
IGSO: 76.4%
IMSO: 91.7%

Overall Graduate satisfaction surveys show that Course (Program) satisfaction scores compared with the National Benchmark of 84.4%:

ICBR: 75%
IGSO: 96.6%
IMSO: 100%

Employer satisfaction data – are you meeting the needs / expectations of the employers.

Employers were invited to respond to a graduate satisfaction survey. Despite repeated reminders, there were no employers of our Graduate Certificate in Breast Imaging graduates who responded to their invitation to provide feedback. Please see appendix A for Employer satisfaction survey results.

Lecturer / trainer / assessor / supervisor feedback

Employer satisfaction survey results incorporate feedback and comments from supervisors.

Ongoing conversations via phone and email, as well as submissions through student clinical progress reports, indicate that students are performing well overall, and that supervisors are satisfied overall with student performance. Where issues have been noted, supervisors have appreciated the support from academic staff in regard to setting goals for future improvement.

Other stakeholder feedback.

The Program advisory committee has been useful in providing feedback from external stakeholders. Feedback obtained has been useful in making some changes and implementing steps to maintain ongoing communication with external stakeholders.

Identification of patterns/trends in the data.

Our students and recent graduates continue to do well overall in terms of meeting graduate competency outcomes.

Planning for the future

What are the strengths of the course?

All courses are delivered externally, allowing for students to study with flexible learning arrangements. This is attractive to the majority of students, who often also have full-time work commitments.

Our staff work strongly together as a collaborative team. We have a wide range of academic and professional backgrounds, which are all drawn on to produce relevant, authentic, and appropriately scaffolded teaching and learning approaches as students progress through their program.

What are the challenges for the course?

The challenges posed by COVID-19, which were reported on last year, continue on into 2021. We have had to continue with the changes to the program we made to address these challenges. The ongoing changes are outlined below as an addendum.

We continue to acknowledge the ongoing challenges our students have had in obtaining suitable training positions, and this has become more of a concern given the current COVID-19 situation. We understand that this is an industry-wide issue, and are determined to keep building our discussions with all stakeholders to improve this area. To reduce the impact of this on future students, we have been through the process of having changes to the entry requirements for IGSO and IMSO approved. These are outlined below.

What is the action plan for the coming 12 months?

Changes to entry requirements

To acknowledge the difficulties students have in obtaining training positions, and in response to the increasing number of students who enter the program without a strong understanding of the profession and who are unable to complete the Graduate Diploma component of their studies due to not obtaining a position, we have changed the entry requirements through the University approval processes. In addition to the relevant undergraduate qualifications and prerequisite knowledge, applicants for the Graduate Diploma in Medical Sonography (General), and the Master of Medical Sonography (General) now must provide evidence of a secured training position in a suitable workplace. From 2022, the entry requirements will be:

Graduate Diploma in Medical Sonography (General)

Applicants are required to meet the following criteria:

- Complete a letter of support confirming a training position within a General ultrasound department that will be supervised by an accredited medical sonographer who is registered with ASAR (Australian Sonographer Accreditation Registry); AND EITHER
- A Bachelor Degree or higher in an approved Field of Education (FOE), and completion of the prerequisite courses at a Bachelor level or higher within the last 10 years (or prior completion with evidence of clinical application of prerequisite knowledge); OR
- A Graduate Certificate in Medical Sonography Principles and Theory (General); OR
- Current registration with the Medical Radiation Practice Board of Australia (or

overseas equivalent, where accreditation was awarded following completion of a recognised degree)

All applicants are required to complete the Additional Information Form and provide supporting evidence.

Prerequisite courses

Applicants are required to provide evidence of satisfactory completion of the following prerequisite courses:

- 0.125 EFTSL of Human Anatomy, which includes anatomy of the head and neck, thorax, abdomen and pelvis, and the musculoskeletal and vascular systems; AND
- 0.250 EFTSL of Human Physiology; AND
- 0.125 EFTSL of Human Pathology or Pathophysiology

Approved Fields of Education

Applicants are required to have completed a program of study (at Bachelor level or higher) in one of the following approved Fields of Education (FOE):

- Medical Studies
- Nursing
- Pharmacy
- Radiography
- Rehabilitation Therapies (excluding Audiology and Massage Therapy)
- Dentistry
- Optometry
- Human Movement
- Paramedical Studies
- Health Science

Applicants with a qualification from a FOE not listed above may be considered on a case-by-case basis.

Note: Applicants are advised that the program requires the completion of 2200 hours of supervised clinical sonography experience. Applicants are responsible for organising and maintaining an ongoing training position to acquire the requisite experience; progression through the program is conditional upon meeting prescribed milestones.

Master of Medical Sonography (General)

Professional Practice

- Current registration as a General Sonographer with the Australian Sonographer Accreditation Registry (or overseas equivalent, where accreditation was awarded following completion of a recognised degree)

OR

Higher Education Study

- Complete a letter of support confirming a training position within a General ultrasound department that will be supervised by an accredited medical sonographer who is registered with ASAR (Australian Sonographer Accreditation Registry); AND EITHER

- A Bachelor Degree or higher in an approved Field of Education (FOE), and completion of the prerequisite courses at a Bachelor level or higher within the last 10 years (or prior completion with evidence of clinical application of prerequisite knowledge); OR
- A Graduate Certificate in Medical Sonography Principles and Theory (General); OR
- Current registration with the Medical Radiation Practice Board of Australia (or overseas equivalent, where accreditation was awarded following completion of a recognised degree)

All applicants are required to complete the Additional Information Form and provide supporting evidence.

Prerequisite courses

Higher Education Study applicants are required to provide evidence of satisfactory completion of the following prerequisite courses:

- 0.125 EFTSL of Human Anatomy, which includes anatomy of the head and neck, thorax, abdomen and pelvis, and the musculoskeletal and vascular systems; AND
- 0.250 EFTS of Human Physiology; AND
- 0.125 EFTSL of Human Pathology or Pathophysiology

Approved Fields of Education

Higher Education Study applicants are required to have completed a program of study (at Bachelor level or higher) in one of the following approved Fields of Education (FOE):

- Medical Studies
- Nursing
- Pharmacy
- Radiography
- Rehabilitation Therapies (excluding Audiology and Massage Therapy)
- Dentistry
- Optometry
- Human Movement
- Paramedical Studies
- Health Science

Applicants with a qualification from a FOE not listed above may be considered on a case-by-case basis.

Note: Applicants who are not already registered with ASAR as a general sonographer are advised that the program requires the completion of 2200 hours of supervised clinical sonography experience. Applicants are responsible for organising and maintaining an ongoing training position to acquire the requisite experience; and progression through the program is conditional upon meeting prescribed milestones.

Entry requirements for the Graduate Certificate in Breast Imaging remain unchanged.

Option for applicants without training positions

For those without a training position, we now offer a Professional Certificate, which allows

students to enroll in the first two subjects of the IGSO and IMSO programs: Ultrasound Physics and Instrumentation, and Professional Issues for Sonographers. These credits will transfer across with students once they obtain a training position and can enter the IGSO and IMSO programs. Worksites support this approach as this allows potential trainees to complete introductory subjects prior to starting a clinical training position.

Research activities

Jessie Childs continues to develop her research base as an Early Career Researcher, leading and being a part of a range of research projects which have been successful in securing grant funding.

Brooke Osborne and Sandy Maranna are enrolled as PhD candidates, and Angela Farley is working towards a Masters in Research.

All staff continue to build their involvement in larger projects and consultancy activities across other areas of the University (Nursing, Exercise Science, Allied Health, Education, Nutrition), larger Government research groups (ie: South Australian Health and Medical Research Institute), and through industry groups (ASAR, ASUM, ASA).

Professional development activities for staff

Teaching as a skill remains a focus for all staff in the Medical Sonography Programs. Staff are encouraged to be active in local teaching and learning and curriculum development committees, as well as to consider peer partnering, to examine and reflect upon their own teaching practice.

ADDENDUM: COVID-19

Given the restrictions that were put in place due to COVID-19, the following actions were taken in 2020, and persist into 2021:

Our course delivery (teaching and learning activities) has remained unchanged, given that all our students are external. Students continued to attend virtual lectures or have access to the recordings if they were unable to log on at the time.

Several of our subjects offer optional scanning workshops for those students who wish to attend some face-to-face teaching. The academic staff leading each of these subjects provided extra online tutorial activities and some further resources to provide some more context around the skills which would have been covered in those workshops. These have been particularly beneficial for students who cannot travel.

Access to the ultrasound simulator suite continues to be limited, and particularly so for student who are unable to travel into South Australia during various stages of lockdowns and travel restrictions. This limited the opportunity for students to have access to the equipment which is often used to support their initial skills development or departmental training activities.

Rather than being held in external examination venues, all written exams continue to be online, uninvigilated, open book exam activities. Given the change in format, these exams have been altered such that, rather than examining a wide amount of knowledge which relied on student recall, the ability for students to apply their learned knowledge to particular scenarios is examined. Students are required to demonstrate a higher order of thinking in order to be successful in these exams. The results from these exams show a similar spread to what is normally seen, with the usual number of 'fail' results – seemingly from those students who believed that they could rely on the open book nature of the exam to get them through.

Last year, we reported the largest adjustment which needed to be made to the assessment of students in the programs: that of the changes to the OSCE examination in our capstone subject, Clinical Sonography Portfolio. The changes made in 2020 continue to be in effect through 2021, due to the limited travel options for students across the country. We again welcome any feedback ASAR may have regarding the changes we have needed to make to any of our assessment formats.

Appendix A – Employer Satisfaction Data

In response to the Graduate's ability to meet the overarching course objectives:

Deliver safe, patient-centred services

Below acceptable	1
Acceptable	0
Good	5
Excellent	14
N/A	0

Practice within professional and ethical frameworks

Below acceptable	1
Acceptable	2
Good	5
Excellent	12
N/A	0

Locate, analyse and synthesis information to support evidence-based practice

Below acceptable	1
Acceptable	2
Good	10
Excellent	7
N/A	0

Contribute to workplace health and safety and quality assurance

Below acceptable	1
Acceptable	4
Good	10
Excellent	5
N/A	0

Appendix A – Employer Satisfaction Data

Communicate effectively

Below acceptable	0
Acceptable	2
Good	5
Excellent	13
N/A	0

Plan and conduct examinations (Abdominal)

Below acceptable	0
Acceptable	2
Good	1
Excellent	17
N/A	0

Plan and conduct examinations (Musculoskeletal)

Below acceptable	2
Acceptable	6
Good	8
Excellent	4
N/A	0

Plan and conduct examinations (Obstetric and Gynaecologic)

Below acceptable	1
Acceptable	2
Good	10
Excellent	7
N/A	0

Appendix A – Employer Satisfaction Data

Plan and conduct examinations (Paediatric)

Below acceptable	1
Acceptable	5
Good	10
Excellent	1
N/A	3

Plan and conduct examinations (Superficial Parts)

Below acceptable	0
Acceptable	3
Good	10
Excellent	7
N/A	0

. Plan and conduct examinations (Vascular)

Below acceptable	1
Acceptable	5
Good	12
Excellent	2
N/A	0

Appendix A – Employer Satisfaction Data

In your opinion, what are the two main strengths of the new graduate?

Decisiveness, confidence
Well rounded knowledge base and understanding of ultrasound as well as patient care
Pleasant personality.
Have learnt to be part of a productive team and are professional,reliable and know their limitations
communication skills. Good theoretical knowledge
Sound knowledge base, developed research skills
Knowledge of how to access resources. Has good network of sonographets to contact for advice.logical thought processes.previous studies undertaken have been advantageous
Good clinical and communication skills
Knowledge of pathologies and thoroughness of scanning.
no strengths
Verbalising findings. Communicating with patients.
Can keep to time with a fully booked list
Good technical skills. Quick learner
1)Strong communication skills 2) Demonstrates empathy to patients
Quick learner with Very good fundamental scanning techniques and
Patient care and multitasking
Studious and Hard working
Knowledge and professionalism
professional and empathathic with all patients. a thirst for knowledge and desire to keep learning

Appendix A – Employer Satisfaction Data

In your opinion, what are the two main weaknesses of the new graduate?

Poor listener, careless.
Exposure to full variety of scans
Slow scanning.
All new graduates require time to gain more confidence and experience and so require mentoring
n/a
OG course from last few graduates deemed to be disorganised and not streamlined enough, not uniformity of practical exams
Ultrasound experience. Will develop with time
Overconfident and needs to be aware of their limitations.
Verbal communication and overcalling pathologies
Graduated but cannot scan
Confidence in completing ultrasound examination.
A little obstinate in furthering scan types especially in MSK. Rebooks ankles and wrists and renal artery studies for other sonographers despite been shown and trained - citing not enough knowledge to perform these scans.
Conversation with patients re findings.
1) Need to make more effort to do difficult scans. 2) Need to be more confident
Pathology knowledge; correlation with X ray or CT imaging
Doing perfect imaging for Obstetrics, CVIs
Confidence and communication
Confidence and MSK
to broaden the range u/s exams done but in this era specialization seems to be the outcome .

Appendix A – Employer Satisfaction Data

In response to the Graduate's ability to meet the University's graduate outcomes:

. Operates effectively with and upon a body of knowledge of sufficient depth to begin professional practice

Below acceptable	1
Acceptable	3
Good	12
Excellent	4
N/A	0

. Is prepared for life-long learning in pursuit of personal development and excellence in professional practice

Below acceptable	1
Acceptable	3
Good	8
Excellent	8
N/A	0

Is an effective problem solver, capable of applying logical, critical, and creative thinking to a range of problems

Below acceptable	1
Acceptable	3
Good	10
Excellent	6
N/A	0

. Can work both autonomously and collaboratively as a professional

Below acceptable	1
Acceptable	3
Good	7
Excellent	9
N/A	0

Appendix A – Employer Satisfaction Data

. Is committed to ethical action and social responsibility as a professional and citizen

Below acceptable	0
Acceptable	3
Good	9
Excellent	7
N/A	1

Communicates effectively in professional practice and as a member of the community

Below acceptable	1
Acceptable	1
Good	8
Excellent	9
N/A	1

Demonstrates international perspectives as a professional and as a citizen

Below acceptable	0
Acceptable	4
Good	10
Excellent	5
N/A	1

Appendix A – Employer Satisfaction Data

Please share any other comments you have below:

The obstetrics and gynaecology subject should be split in half with gynae as a seperate subject. Knowledge base for gynae not as good as it could be. Paediatrics exams in the small parts subject should be removed and instead a seperate paediatrics subject for masters should be offered.
Alot of the positivity of my responses has been directly related to the candidates dedication to study as well a the excellent practical trainers we have on site assisting with her development.
Quality student
many students fudge their logbooks in order to graduate. There have been at least 3 we have come across in the past year
Never stop learning in ultrasound. Continuing education will improve the skills of sonographer
None
more and more sonographers are choosing to say that they do not scan obst vascular advanced MsK is this leading to specialization and will this mean credition for each specialality?