



Allied Health & Human Performance

IMSO Master of Medical Sonography (Cardiac)

IGSO Graduate Diploma in Medical Sonography (Cardiac)

Postgraduate Medical Sonography Supervisor Guide 2024

<https://www.unisa.edu.au/about-unisa/academic-units/allied-health-and-human-performance/>

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Thank you for supporting the professional development of our future sonographers. We acknowledge, recognise and appreciate the efforts of the clinicians and tutors in guiding and supporting our students throughout their training program.

Purpose of the supervisor's handbook

This guide is designed to give you a broad overview of issues pertaining to Cardiac Sonography clinical training supervision. It should be used in conjunction with the information provided to the students by the coordinators of the clinical courses.

We hope you find this handbook helpful but please contact the University of South Australia Postgraduate Medical Sonography team if you have further queries regarding our programs.

The School of Health Sciences, University of South Australia currently offer the following Postgraduate Medical Sonography programs.

1. Graduate Diploma in Medical Sonography (General, Cardiac, and Vascular streams)
2. Master of Medical Sonography (General, Cardiac, and Vascular streams)
3. Graduate Certificate in Breast Imaging

This handbook covers the Graduate Diploma and Masters (Cardiac).

The outlines for these programs are detailed in [Appendix 1](#).

The Postgraduate Medical Sonography programs are based on the following:

1. The Australian Sonographer Accreditation Registry (ASAR) Professional Competency Framework for Sonographers. The link to the ASAR Competency framework is here:
<https://www.asar.com.au/public/90/files/Professional%20Competency%20Framework%20for%20Sonographers.pdf>
2. The discipline-specific domains for cardiac diagnostic medical sonographers as identified by ASAR Standard for the Accreditation of Sonographer Courses. This document is available here:
<https://www.asar.com.au/public/90/files/ASAR%20Standards%20for%20the%20Accreditation%20of%20Sonographer%20Courses.pdf>
3. The Graduate Qualities of the University of South Australia ([Appendix 2](#)). These qualities define how our graduates will act when they exit the program and begin to practice as entry level sonographers.

What are the students' responsibilities?

It is the responsibility of the student to ensure that the following items are completed with their clinical supervisor/s and submitted as per specific instructions:

1. Clinical Placement form (for students who are in supervised scanning positions),
2. Learning Contract (when required for specific courses),
3. Logbook and formative milestone assessments, and
4. Clinical progress reports (for students enrolled in level 2 courses).

It is an expectation of the Clinical sites and the University of South Australia that students follow safe and professional practices whilst completing their clinical experience:

Safe Practice and Duty of Care:

The student must demonstrate safe practice in the clinical setting. Safe Practice will be demonstrated by the student who:

- Demonstrates awareness of manual handling principles in patient and staff safety
- Demonstrates the safe application of all equipment
- Is responsible for patient and personal safety
- Does not put other persons in the workplace at any risk
- Demonstrates an awareness of infection control practices
- Demonstrates an awareness of the ALARA principle

Professional and Ethical Conduct:

The student must behave in a professional and ethical manner, according to the ASA Code of Conduct as well as the University of South Australia Code of Conduct throughout the training placement.

Professional conduct is demonstrated by the student who:

- Is always punctual in accordance with the workplace policy
- Maintains confidentiality of staff and patient information
- Maintains personal hygiene and dress as stated in the workplace policy
- Behaves in a professional manner to colleagues, supervisors, patients and their families

Students are expected to follow the University of South Australia Code of Conduct for students as well as the ASA Code of conduct.

- University of South Australia Code of Conduct for students is available here:
 - <https://i.unisa.edu.au/policies-and-procedures/codes/students/>
- The link to the Australasian Sonographers Association (ASA) Sonographer Code of Conduct is here:
 - https://www.sonographers.org/publicassets/4f8cda47-6ad2-ec11-910e-0050568796d8/ASA_Sonographer_Code_of_Conduct_MAY_22_FINAL-v1.pdf

What are the responsibilities of a supervisor?

Primary purpose of position

To oversee, in close liaison with the UniSA Medical Sonography team, all aspects of the clinical hands-on training of the trainee sonographer or a group of trainees. This includes ensuring they are provided with the practical instruction, ongoing support, and appropriate assessment to enable them to meet the professional and educational requirements specified by ASAR.

Responsibilities of a supervisor include:

- Signing the Clinical Placement form (Appendix 3)
- Orientating students to the clinical site
- Assisting the student with identifying objectives and learning needs for the training position
- Directly supervising the student or allocating a suitable mentor to each student
- Development of a working relationship with the student
- Providing learning opportunities and resources that meet the student's learning goals
- Cross-checking and signing off each student's logbook regularly when required (Appendix 4).

It is a mandatory part of student assessment that a minimum of 2000 scans of cardiac specific experience are logged to be eligible to complete the courses which make up the Graduate Diploma (Cardiac), and as such meet the requirements for professional accreditation. Detailed information in relation to this is available in Appendix 4.

- Observation and provision of feedback to the student and supporting them with timely completion of formative clinical assessments
- Provision of a learning environment, which assists to stimulate the student's learning
- Evaluation of student performance via the Clinical Progress Report
- Signing the learning contract. (Appendix 5)
- Ensuring appropriate patients for the student to scan for their tutor assessment (Appendix 6)

This is one of the major responsibilities of the supervisor as satisfactory completion of the tutor assessment is required before a student is eligible to sit the final clinical practice exam (OSCE).

- Ensure safe practice and the safety of clients, with regard to student's involvement and activities with the organization
- Maintaining an overall awareness of the student's progress and wellbeing by discussion with the student and mentors and liaison with the University of South Australia Postgraduate Sonography team if any issues should arise.

It is an implicit understanding that supervisors signing off the Supervisor details form provide clinical supervision in accordance with the ASA Guideline: A sonographer's guide to clinical supervision.

What resources are available for supervisors for Professional Development to assist them in their role and help them provide effective supervision?

The UniSA Allied Health and Human Performance Academic Unit offers a free Clinical Supervisor Support program to Clinical Supervisor's supervising a UniSA student (at least 1 student per year and must be named on the Clinical Placement Unit documentation): <https://www.unisa.edu.au/connect/placements-employers/nursing-health-medical-sciences/clinical-supervisor-support-program/>

This includes benefits such as:

- Access to the UniSA library and databases
- Access to discipline specific placement induction programs, events and other supervisor and clinical facilitators activities
- Fee reduction for the Professional Certificate in Clinical Education (<https://study.unisa.edu.au/short-courses/professional-certificate-in-clinical-education/>)

The Medical Sonography Program website provides links to resources to assist with your supervisory role, such as provision of effective feedback including the Clinical Supervisor Support Program:

<https://lo.unisa.edu.au/course/view.php?id=3895>

You are an important component of your student's education, however of you answer yes to any of the following:

- Are you concerned about a student?
- Has there been an issue relating to misconduct?
- Or are you concerned about unsatisfactory progress?
- Please follow the following steps

Step 1.

In the first instance the supervisor should contact and discuss their concerns with the **STREAM COORDINATOR FOR THE STREAM THE STUDENT IS ENROLLED IN**. Please see contact details of Stream Coordinators given below.

Step 2.

Undertake the applicable workplace resolution practices to try and resolve the issue or concern.

Step 3.

Maintain regular contact with the Course Coordinator to inform them of progress or resolution.

Step 4.

Should the applicable workplace resolution practices be unsuccessful in resolving the situation, refer directly back to the Program Director.

In case of misconduct, the matter will be managed as per University policy.

Staff contact details:

The University of South Australia academics who teach in the Postgraduate Medical Sonography programs are:

Dr Bec Perry - Program Director: Medical Sonography

Tel: 08 8302 1895

Email: bec.perry@unisa.edu.au

Course Coordinator for:

- Advanced Cardiac Haemodynamics (RADY 5032)
- Advanced Cardiac Pathology (RADY 5033)
- Cardiac Sonography Portfolio (RADY 5035)

Emilie Rasheed

Tel: 08 8302 2708

Email: emilie.rasheed@unisa.edu.au

Course Coordinator for:

- Cardiovascular Anatomy and Embryology (RADY 5036)
- Cardiovascular Physiology and Pathology (RADY 5037)
- Clinical Applications of Echocardiography (RADY 5038)

Kate Lamb - Vascular sonography stream lead

Tel: 08 8302 2637

Email: kate.lamb@unisa.edu.au

Course Coordinator for:

- Vascular Sonography (RADY 5016)
- Advanced Vascular Sonography (RADY 5034)
- Clinical Sonography Portfolio (RADY 5026)
- Cardiovascular Sonography Portfolio (RADY 5035)

Sandy Maranna – General sonography stream lead

Tel: 08 8302 2896

Email: sandy.maranna@unisa.edu.au

Course Coordinator for:

- Breast Sonography (RADY 5002)
- Superficial Parts Sonography (RADY 5015)
- Obstetrics and Gynaecologic Sonography (RADY 5014)

Dr Jessie Childs

Tel: 08 8302 2243

Email: jessie.childs@unisa.edu.au

Course Coordinator for:

- Ultrasound Physics and Instrumentation (RADY 5030)

Angela Farley

Tel: 08 8302 2913

Email: angela.farley@unisa.edu.au

Course Coordinator for:

- Abdominal Sonography (RADY 5013)
- Musculoskeletal Sonography (RADY 5029)
- Advanced Musculoskeletal Sonography (RADY 5025)

Professor Nayana Parange

Tel: 08 8302 8525

Email: nayana.parange@unisa.edu.au

Course Coordinator for:

- Professional Issues for Sonographers (RADY 5024)
- Fetal Echocardiography (RADY 5027)
- Mammography (RADY 5003)
- Advanced Obstetrics and Gynaecologic Sonography (RADY 5031)

If you have an enquiry related to a particular course, please contact the relevant course coordinator as detailed above.

Definitions of terms

Course: At UniSA, a course is the basic component of an academic program. A course is identified by a course name (e.g., Cardiovascular Anatomy and Embryology), an area and catalogue number (e.g., RADY 5036) and a class number (e.g., 168221). Courses are usually 4.5 units.

Course ID: A unique six-digit code assigned to each course and used to identify the course on the University's record system.

Core course: A compulsory course within an academic program or specialisation designed to provide essential skills, knowledge and understanding in the field of study.

Course coordinator: An academic staff member of the University, or an organization with which the University has a formal contract, who is responsible for the academic management of a course.

Mode of delivery: The way a student is undertaking a program. There are two modes of delivery:

- **Internal mode** includes face to face components such as lectures, tutorials, practical's, workshops or seminars that may be offered at a University campus or delivered at another location. Courses delivered in internal mode may be offered as intensives which will allow them to be completed in a shorter period.
- **External mode** includes online, distance education, industry placement or directed research. Virtual classrooms are deemed to be an external mode of delivery. External model does not normally include a face-to-face component, however some courses offered in external mode may require a small component of on-campus activity.

All our Medical Sonography Programs are delivered via external delivery with a flexible learning environment which makes it very attractive to students who are working full-time, particularly in remote places or overseas

Flexible Learning Environment: A means of encouraging student engagement in learning activities. Creating a Flexible Learning Environment may include:

- re-configured teaching spaces
- ability to negotiate learning outcomes
- choice of courses
- delivery mechanisms and timing of delivery
- online and off-campus delivery

Online course: A course delivered externally where all communication and access to/distribution of learning resources occur electronically, usually via the internet.

Program: An approved combination of courses in which a student is enrolled during university study.

Program director: An academic staff member of the University, or an organization with which the University has a formal contract, who is responsible for providing academic leadership of a program, including leading the program team and supporting students, as agreed in the contract.

Unit value: Represents the hours of student work required for a course. One unit represents approximately 35 hours of student work, including contact and non-contact time.

Cardiovascular Sonography Portfolio (RADY 5035)

Upon enrolment in this course, students will be asked to provide the name and contact details of their supervising sonographer/s to the Course Coordinator. This course should be undertaken either as the last course in the program or with the last scanning course.

The Cardiovascular Sonography Portfolio course requires the preparation and submission of a clinical portfolio (also known as the logbook) detailing and authenticating the student's clinical knowledge and skills in cardiac sonography. To submit this portfolio, students must also provide evidence of completion of a minimum of 2000 scans (including specific pathology) verified by supervisor(s). This total number of scans is calculated on 48 weeks x 2 years x 22.5 hours (or 3 days/week over 2 years or equivalent).

On completion of this course, students will be able to:

- Prepare and submit a comprehensive clinical portfolio detailing and authenticating their clinical knowledge and skills in Cardiac Sonography;
- Communicate their specific learning needs clearly to their supervisor(s) and negotiate appropriate support and actions to meet their goals;
- Demonstrate competency in practical scanning within the workplace with assessment from a university nominated tutor (internal or external). This will occur within the student's workplace (unless pre-arranged by the supervisor and student at an external site) with the tutor observing the student performing a cardiac scan on 2 clinical patients (at least 1 patient must have significant pathology to assess). This assessment must be completed at least 3 months before the OSCE examination in the designated study period (unless pre-arranged with the course coordinator);
- Demonstrate competence in practical scanning skills and image interpretation which may include but it not limited to:
 - Valvular assessment – stenosis, regurgitation and prosthetic valves
 - Assessment of function – left and right ventricular (systolic and diastolic)
 - Congenital heart disease
 - Cardiomyopathies
 - Pericardial disease
 - Cardiac masses
 - Systemic diseases with cardiac manifestations
 - Instrumentation and ultrasound physics specific to cardiac sonography (including recognition of artifacts and image optimization)

Cardiovascular Sonography Portfolio Exam

During the COVID Pandemic, the University had to adapt its practice for the Objective Structured Clinical Examination (OSCE, clinical assessment). This process has provided us some excellent insight into student scanning abilities. The process included students submitting:

- The images from a clinical scan, with specific pathology
- A video of them performing this scan (with the video positioned to avoid the patient)
- A report of their finding of this clinical scan
- A reflection of this scan
- An online oral viva

Collectively, the range of assessments viewed together offer a great insight into student's work capacities. Can they scan, can they demonstrate good image optimization for review by cardiologists, can they review their scan and provide an overview?

As the world recovers from the pandemic, we have seen other issues relating to cost-of-living pressures. Recent Senate enquires into allied health students have highlighted the fact that financial pressures on students have been very severe. We are conscious of several students who are in non-paid clinical training roles, and finally we also are aware of issues relating to cheap flights being cancelled very often at the last minute.

It is with these considerations that we have decided to continue with the OSCE submissions that we have been managing over the last couple of years.

Should you as a supervisor have concerns about this process, we ask that this be highlighted in the learning contract and discussed at the zoom session, OR we can arrange a phone conversation at your convenience.

An OSCE is an assessment method used for examining various aspects of clinical competence e.g., history taking, data interpretation, examination skills, procedural skills, and communication skills.

Relevant University Policies

Credit or Recognition of Prior Learning (RPL)

It is possible for students to receive credit for studies undertaken at other academic institutions.

Students who have completed a Graduate Diploma will be eligible for some credit when enrolling into our master's program.

Credit is only provided for courses where there is a high proportion of 'like for like' content between the different institutions courses. Also note that credit is not provided for courses that were undertaken as part of an undergraduate degree.

Students may be able to see if they are eligible for credit for those particular courses by using a University of South Australia software program called Credit Assessor which can be located here: <https://my.unisa.edu.au/public/creditassessor/>

Regardless of the results from the Credit Assessor, students are still required to submit an application for credit using the form accessed via this link – <http://www.unisa.edu.au/credit>

Explanation of the terms Credit and Credit Assessor:

Credit: The term 'credit' is used in two ways at the University:

- a grade awarded for an assessment task (e.g., C = Credit); or
- the recognition of prior learning granted towards the requirements of an award program at the University based on prior study or prior work and/or life experience

Credit Assessor: A data base that lists clear precedent for credit arrangements and formal credit transfer agreements between University of South Australia and other education and training providers in Australia and internationally.

Student Grievance Resolution

The University is committed to providing a harmonious work and study environment. To this end, the University has procedures in place by which students may seek redress if they feel they have a complaint which requires action by the University. This can include complaints about academic programs and decisions, as well as complaints about individuals. We encourage students to raise complaints informally (either personally or through an advocate) in the first instance, as this is often the most effective way of resolving issues.

For more information about the University policy surrounding student grievances, please see:

<https://i.unisa.edu.au/policies-and-procedures/university-policies/corporate/c-17/>

UniSA postgraduate medical sonography program structure and clinical training requirements

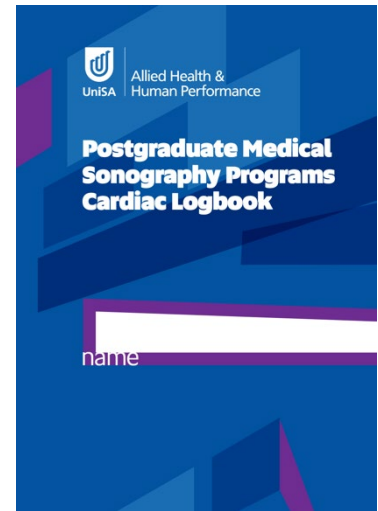
The Graduate Diploma of Medical Sonography (Cardiac) is offered only on a part-time basis which consists of 36 units and takes a minimum duration of 1 year (full-time equivalent) to complete. The program structure is split into Level 1 and Level 2 courses as per the table below. Students must complete all Level 1 courses prior to commencing the Level 2 courses; however special circumstances will be considered.

The Master of Medical Sonography (Cardiac) adds Level 3 courses onto the structure which consists of courses in which students can choose.

Level 1	Level 2	Level 3
Ultrasound Physics and Instrumentation	Clinical Applications of Echocardiography	Research Design and Development OR Allied Health Research Evidence Translation
Professional Issues for Sonographers	Advanced Cardiac Haemodynamics	Health Ethics
Cardiovascular Anatomy and Embryology	Advanced Cardiac Pathology	Research for Advancing Nursing, Midwifery and Health Care
Cardiovascular Physiology and Pathology	Cardiovascular Sonography Portfolio	Quantitative Design for Nursing, Midwifery and Health Research

Figure 1: Program Structure for the Post Graduate program at UniSA (Graduate Diploma only requires Level 1 and Level 2 – Master’s add onto the Level 3 courses)

1. Students cannot enroll into the Graduate Diploma or Master's program until they have secured a clinical training position. They may undertake a Professional Certificate in Sonographic Principles and Theory, which involved both Professional Issues for Sonographers and Ultrasound Physics and Instrumentation without a clinical training position.
2. It is recommended that students enroll in Professional issues and Cardiovascular Anatomy and Embryology before enrolling in Ultrasound Physics and Cardiovascular Physiology and Pathology.
3. All students will be provided with an electronic copy of the logbook when they commence the program, this will allow the students to log their scanning. Students are provided with instructions in how to fill in the logbook.
4. Students are required to complete and submit evidence of their training progress at set milestones: 400, 800, 1200, 1600 and 1800 scans. This is to ensure they request feedback from their supervisors at regular intervals throughout their training. Students will complete a self-appraisal which will allow them to reflect on their scanning ability. The supervisors and students will then come up with an action plan for improvement after completion of each milestone to ensure that the students are progressing at a steady rate.



Instructions for how to complete the logbook, which are provided to all students, can be found in Appendix 7.

5. Logbook updates are required to be submitted by students towards the end of the semester for the level 2 courses; Clinical Applications of Echocardiography, Advanced Cardiac Haemodynamics and Advanced Cardiac Pathology, to demonstrate that they are meeting the co-requisite of 200 scans during that semester.
6. Overall scanning requirement is 2000 cardiac specific scans, of which they need to have completed 1800 scans before enrolling in the final Cardiovascular Sonography Portfolio course.
7. Students will have onsite tutor assessments and must pass their Objective Structured Clinical Examinations (OSCEs) before they are able to graduate from the course. All information in relation to tutor assessments and OSCEs are made available to students in the Cardiovascular Sonography Portfolio course. We advise the students to share details of assessments and clinical requirements with their supervisors to help them plan their training program.

On campus workshops for students

Several courses in our Postgraduate Medical Sonography program have optional on-campus workshops at the City East campus of the University of South Australia included in their scheduling.

Students are advised to check their course outline on the Learnonline site for details regarding optional on-campus workshops for the courses in which they are enrolled.

Supervisors are advised to encourage their students to attend and participate in these workshops.

Part time study

All of the Medical Sonography programs at UniSA are only offered as part time programs – this means students can only do a maximum of two courses per study period. It is suggested that for each course a student undertakes an equivalent of 10-15 hours per week of study needs to be achieved.

For the majority of the IGSO and IMSO programs students will be employed during the day as a trainee sonographer to fulfil the clinical training requirements.

Based on this it is impossible for a student to undertake more than two courses whilst working which is why the IMSO and IGSO programs are NOT offered on a full-time basis.

Online lectures

Given students are often working during 'normal' office hours, a lot of the teaching in the Medical Sonography programs is pre-loaded online for students to view in their own time. In addition to this, course coordinators may hold online teaching sessions after hours, to allow for a greater student participation rate. These sessions are recorded, so those students who are not able to attend virtually at the designated time can view the session after the event. These sessions allow students to participate in regular case discussions, and to interact with their course coordinators and peers.

Traineeships / Placements – frequently asked questions by students

Do I need to be performing ultrasound whilst undertaking these programs?

There are multiple courses offered across the IGSO and IMSO programs that require students to be performing cardiac ultrasound scans in a clinical setting whilst concurrently undertaking the course.

Details of the Graduate Diploma course structure are available from the program websites:

[IMSO Master of Medical Sonography \(Cardiac\)](#)

[IGSO Graduate Diploma in Medical Sonography \(Cardiac\)](#)

Students will need to secure their own training position in an ultrasound department to meet their scanning requirements.

When I undertake these scanning courses what hours do I need to do?

Students need to be documenting their supervised cardiac sonography scans and getting regular signatures from their supervisors.

2000 scans roughly equate to two years of scanning at 3 days per week, or 1.2 years of full-time scanning. Information relating to the clinical experience record/logbook used for these scans can be found on the Learnonline sites of the courses and in the Cardiac Sonography Logbook.

This 2000 scan requirement assists in fulfilling the criteria set down by the Australian Sonographers Accreditation Registry (ASAR) as to gain accreditation as an accredited medical sonographer (AMS) in the cardiac sonographer category. For ASAR eligibility these scanning hours need to be undertaken in an Australian or New Zealand clinical setting.

Does the university provide a training position?

No, the university does not provide a training position. Applicants are responsible for organising their own training position in an ultrasound department to acquire the scanning experience.

What happens if I am enrolled as a domestic student, but I undertake clinical training overseas – do those scanning hours count?

The scanning requirements for the IGSO courses and logbook do not need to be logged just whilst you are working in Australia. The program is offered externally, and we have several international students who are doing it in their home country. Graduates of the program are eligible to apply for full professional accreditation from the Australian Sonographer Accreditation Registry (ASAR) under the Cardiac Sonography category BUT under the ASAR guidelines, evidence of scanning experience in an Australian or New Zealand clinical setting is required for such accreditation.

So, the short answer is yes – students can be undertaking the scanning courses as a domestic student whilst training overseas and those scans can be logged for the logbook/clinical experience record. This is allowed from a University of South Australia program perspective. However, please be aware that the time spent in a clinical setting overseas is not time that the ASAR shall consider when reviewing your accreditation application on completion of the program. They will require evidence of scanning experience in an Australian or New Zealand clinical setting.

Applicants with 40% or more of their clinical experience obtained offshore during their study will be assessed on a case-by-case basis by the ASAR regarding accreditation.

Please contact ASAR directly for further information - <http://www.asar.com.au/>

APPENDIX 1: Program outlines

Descriptions of all courses in this program can be obtained from the University program websites:

[IMSO Master of Medical Sonography \(Cardiac\)](#)

[IGSO Graduate Diploma in Medical Sonography \(Cardiac\)](#)

Suggested study plan for maximum of 2 core courses per study period

Graduate Diploma or Master of Medical Sonography (IMSO) (Cardiac)

Note – this is the minimum amount of time that the program can be undertaken without credit for recognition of prior learning. Many students choose to enrol in one core level 1 / theory course per semester, which gives them a timeframe of 2 years to obtain a training position. We have also found that some students choose to enrol in one core level 2 / scanning course during some study periods whilst they are gaining confidence and competency in clinical ultrasound.

CORE COURSES (totalling 36 units)		
Please note; the following is a recommended study plan only.		
Suggested order for courses 1 and 2 (Level 1 courses) - First study period of enrolment		
RADY 5024	Professional Issues for Sonographers	This course is a pre-requisite for the level 2 'scanning courses'.
RADY 5036	Cardiovascular Anatomy and Embryology	This course is a pre-requisite for the level 2 'scanning courses'.
Suggested order for courses 3 and 4 (Level 1 courses) - Second study period of enrolment		
RADY 5030	Ultrasound Physics and Instrumentation	This course is a pre-requisite for the level 2 'scanning courses'.
RADY 5037	Cardiovascular Physiology and Pathology	This course is a pre-requisite for the level 2 'scanning courses'.
Suggested order for courses 5 and 6 (Level 2 courses) - Third study period of enrolment		
RADY 5038	Clinical Applications of Echocardiography	Co-requisite requirement to complete 200 supervised scans throughout the study period plus logbook requirements*
RADY 5032	Advanced Cardiac Haemodynamics	Co-requisite requirement to complete 200 supervised scans throughout the study period plus logbook requirements*
Suggested order for courses 7 and 8 (Level 2 courses) - Fourth study period of enrolment		
RADY 5033	Advanced Cardiac Pathology	Co-requisite requirement to complete 200 supervised scans throughout the study period plus logbook requirements*
RADY 5035	Cardiovascular Sonography Portfolio	Students must have accrued a minimum of 1800 supervised scans before enrolling in this course. This is the final course for IGSO students.

*Each level 2 course requires students to be in a scanning position where they will be able to accrue a minimum of 200 supervised cardiac sonography scans throughout the duration of the course

Upon completion of the above 8 courses in the IMSO program, students can then apply for accreditation as an Accredited Medical Sonographer (AMS) with the Australian Sonographer Accreditation Registry (ASAR) in the category of Cardiac Sonography.

If you intend to enrol in 1 non-scanning course in your first study period in the program, it is recommended to enrol in RADY 5024 Professional Issues for Sonographers first, followed by RADY 5030 Ultrasound Physics & Instrumentation in your second study period.

Level 3 courses

CORE COURSES (4.5 units)

Please note; the following is a recommended study plan only. Students are required to choose one of the following research-based courses.

Suggested order for course 1 (Level 3 courses)

HLTH 6014 (4.5 units)	Research Design and Development
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or

REHB 5118 (4.5 units)	Allied Health Research Evidence Translation
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ELECTIVE COURSES (13.5 units)

Please note; the following is a recommended study plan only. Students are required to complete 13.5 units of elective courses.

Elective course options (Level 3 courses)

HLTH 5002 (4.5 units)	Health Ethics
NURS 5153 (9.0 units)	Research for Advancing Nursing, Midwifery and Health Care
NURS 5152 (4.5 units)	Quantitative Design for Nursing and Health Research

Students are only able to enrol in a maximum of 9.0 units of courses per study period. Some of these courses are only offered during a particular study period. Please check this prior to enrolment.

APPENDIX 2: GRADUATE QUALITIES INDICATORS

Graduate Qualities of the University of South Australia Medical Sonography graduate

The Postgraduate Medical Sonography programs have been designed to produce graduates who are life-long learners who can cope with an environment of rapidly changing technologies, with the necessary skills, knowledge and attitudes to enable them to gain accredited practitioner status. The clinical program aims to develop professional knowledge, skills and attitudes using an integrated approach where placements are preceded by on campus academic learning.

The Postgraduate Medical Sonography programs are based on the Australian Sonographer Association (ASA) competency standards for the entry level sonographer, the discipline-specific domains for cardiac diagnostic medical sonographers as identified by Australian Sonographer Accreditation Registry (ASAR) and the graduate qualities of the University of South Australia. These qualities define how our graduates will act when they exit the program and begin to practice as entry level sonographers.

Graduate Qualities

There graduate qualities of the Medical Sonography graduate are listed below:

1. Body of knowledge: Graduates will

- a) Demonstrate a broad and thorough knowledge/understanding of key underpinning theory (discipline specific, physics, biologic science, humanities and behavioural, IT, research).
- b) Demonstrate a broad and thorough knowledge of scope of clinical skills and practice underpinning each discipline (in principles, clinical application, procedures, participation with other health care members, information management, confidentiality, scope of practice and role within team).

2. Lifelong learning: Graduates will

- a) Demonstrate commitment to ongoing professional development; using professional standards of practice to self-assess, participate regularly in professional development and self-directed learning, participate in training programs related to the introduction of new technologies and procedures.
- b) Play an active role in mentoring/teaching; participate in education of students and graduates undertaking supervised clinical practice, contribute to learning experiences and professional development of others, evaluate progress towards expected training outcomes.
- c) Participate in research; demonstrate an understanding of the significance of research in contemporary practice, participate in and contribute towards research, reasoning and problem solving, conduct evidenced based practice, evaluate practice systematically and participate in audit processes.

3. Problem solving/critical thinking and evaluation: Graduates will

- a) Assess clinical situation, to determine key issues and deliver a timely and quality outcome by; applying critical thinking and problem-solving skills to formulate appropriate clinical decisions, applying critical thinking skills to time management and resource utilization, and evaluate the appropriateness of patient and clinical information.
- b) Analyse and respond to problems related to patient treatment and care by; identifying problems as they arise in clinical practice, applying knowledge and experience to solve problems and ensure care is delivered to achieve best practice, apply reasoning and problem-solving skills to determine appropriate clinical decisions, and reflect on decisions to modify future practices.
- c) Analyse and respond to problems of operation and management by; identifying situations requiring problem solving and apply a systematic and logical approach, initiating resolution of problems to ensure prescribed protocols are maintained, and prioritizing issues for management of time and resources.
- d) Initiate and evaluate research outcomes and incorporate into evidence-based practice.
- e) Evaluate and implement processes and procedures for ensuring quality outcomes by; ensuring all services and interventions are provided in accordance with definitive protocols and standards of practice, evaluating practice in an ongoing basis, and analyse and document issues related to reportable incidents, with recommendations for future corrective actions.

4. Act ethically and responsibly/professional & ethical practice: Graduates will

- a) Act to ensure that patient welfare and rights are appropriately respected (patient advocacy) by; implementing procedures to meet statutory and ethical health and safety requirements, engaging effectively in ethical decision making, ensuring patient confidentiality of information, implementing procedures relating to discipline, acting to ensure the rights of individuals are not compromised.
- b) Act to preserve the safety of individuals and groups at all times by; demonstrating a thorough knowledge of radiation safety to a level that supports safe practice, acting to minimize infection risk, practicing within the framework of accepted policies and procedures (e.g., radiation safety, OHS), and reporting incidents.
- c) Display a commitment to manage quality issues and relating to effective practice by; evaluating the quality of practice in the clinical setting, auditing, reflecting upon and reviewing practice, make reasoned decisions to initiate, continue, modify or cease treatment or the use of techniques or procedures and communicate the decisions and reasoning appropriately.
- d) Display an ability to perform quality control for equipment, for patient interventions, image processing and displays a commitment to quality improvement.
- e) Promote the profession in the community and the workplace.
- f) Be aware of industrial and professional issues.

The following qualities are the clinical competencies required from a UniSA sonography graduate

5. Work autonomously and collaboratively: Graduates will

- a) Operate effectively as an autonomous and responsible practitioner by assuming responsibility for own actions, make independent professional decisions within their SOP, responding to and recognizing own abilities and level of professional competence, maintaining effective communication and ensuring documentation is accurate and maintains confidentiality.
- b) Be guided in action by their own and others SOP by; recognizing and operating within own scope of practice, recognizing limitations of an experienced and student practitioner, consulting with other health care professionals when issues are beyond own scope of practice.
- c) Establish and maintain appropriate collaborative relationships with colleagues and members of the multidisciplinary team by; working effectively within the organization, advising members of the multidisciplinary team about individual patient needs and know when to make appropriate referrals, demonstrating respect for colleagues and other members of the multidisciplinary team, participating in other health care members of team in decision making, recognizing the need for team participation in the development of resources.

6. Communicate effectively in professional practice and as a member of the community: Graduates will

- a) Demonstrate oral, written, mathematical and visual literacy's as appropriate to the discipline or professional area.
- b) Display sensitivity to the audience in organizing and presenting ideas.
- c) Communicate appropriately with professional colleagues and the public.
- d) Demonstrate a knowledge and understanding of indigenous community protocols and communication styles.

7. Demonstrate international perspectives: Graduates will

- a) Display an ability to think globally and consider issues from a variety of perspectives.
- b) Demonstrate an awareness of their own culture and its perspectives and other cultures and their perspectives.
- c) Appreciate the relation between their field of study locally and professional traditions elsewhere.
- d) Recognize intercultural issues relevant to their professional practice.
- e) Appreciate the importance of multicultural diversity to professional practice and citizenship.
- f) Appreciate the complex and interacting factors that contribute to notions of culture and cultural relationships.
- g) Value diversity of language and culture.
- h) Appreciate and demonstrate the capacity to apply international standards and practices within the discipline or professional area.
- i) Demonstrate awareness of the implications of local decisions and actions for international communities and of international decisions and actions for local communities.

8. Care and clinical management: Graduates will

- a) Fulfil the duty of care in clinical practice by acting to ensure rights of individuals are not compromised, demonstrating a duty of care in patient management (informed consent).
- b) Maintain patient comfort, privacy and safety.
- c) Establish and maintain effective interpersonal relationships with patients and others by showing empathy towards individuals, their carers or colleagues, applying strategies to promote individual or group esteem, act to maintain integrity and dignity of individuals or groups.
- d) Respond appropriately in culturally sensitive situations by acting in ways that demonstrate respect for values, custom, spiritual beliefs and practices of individuals.
- e) Demonstrate effective clinical management of individuals by identifying individual patient health issues and refer to appropriate professional groups within the multidisciplinary team, develop and document clinical procedures, participate in individual care in consultation with the team, assess the individual's condition and appropriateness to the prescribed procedure, monitor the patient.

9. Provide services: Graduates will

- a) Competently provide patient services within the scope of an accredited Cardiac Sonographer.

APPENDIX 3: COREQUISITE FORM - CLINICAL PLACEMENT DETAILS

It is an ASAR requirement that training placement details for students completing the Master of Medical Sonography & Graduate Diploma in Medical Sonography are documented. This includes the details of supervising sonographers.

Please refer to the Program Clinical Training page: <https://lo.unisa.edu.au/course/view.php?id=4428>.

Students will find the relevant form/s (under Clinical Placement Unit), which students will need to upload via the clinical placement unit's InPlace system.

Students in unpaid placements: any student who is in an unpaid placement and who are not already covered by professional insurance must submit:

1. A completed [FS23 Student Insurance Form](#) to the CPU Office at least two weeks before the beginning of each study period. A [Checklist](#) is also available to assist students in completing this form correctly. Note that UniSA student insurance only covers a single study period (up to 20 weeks).
2. Evidence of a current national Criminal History Record Check or a National Police Clearance (as appropriate to your state) to the CPU. Please see the [CPU website](#) for further information about how to apply for these checks.

Level 3 students (qualified sonographers): Qualified sonographers studying Level 3 courses are not required to submit this form.

This form must be completed every semester

Placement Details Form:

Master of Medical Sonography
Graduate Diploma in Medical Sonography

Student Details				Office Use Only		
Full name						
ID Number						
ASAR student number						
Placement Period	Year		Study Period			
Is the student in an unpaid placement?	<input type="checkbox"/> Yes <input type="checkbox"/> No*					
Host Organisation						
Name						
Full Address						
Telephone						
Email						
Primary Supervisor						
Note that each supervisor must also submit a separate Supervisor Details and Experience Form. Please ensure that you have approval from the individual concerned to submit their details.						
Full name						
Current Position						
Email						
Telephone						
ASAR Accreditation Number						
Name of other accrediting body and Registration Number						

By submitting this form electronically, the student declares all information provided is true and correct to the best of their knowledge and that they have received approval from the individual supervisor concerned to submit their details.

*Note: Where the student is not an employee of the host placement organisation, the student will also need to complete all compulsory conditional evidence documentation as set out in the UniSA Allied Health and Human Performance Sonography Program Student Checklist.

Placement Details Form:

Master of Medical Sonography
Graduate Diploma in Medical Sonography



Allied Health &
Human Performance

Supervisor Details and Experience

Qualifications	
Full name of award 1	
Subject area / Major	
Full name of Awarding Institution	
Year of Award	
Full name of award 2	
Subject area / Major	
Full name of Awarding Institution	
Year of Award	
Previous Relevant Experience	
Position Title 1	
Employment period	
Name of employer	
Responsibilities	
Position Title 2	
Employment period	
Name of employer	
Responsibilities	
Other relevant information (e.g., professional and/or honorary memberships, directorships, key publications)	
Supervisor Declaration	
<p>As the immediate supervising sonographer or employer of the University of South Australia Master of Medical Sonography, Graduate Diploma in Medical Sonography, I am able to verify to the University of South Australia that students enrolled in 2nd year courses will be engaged in at least 200 hours of Sonography during the above stated study period. I also grant permission to be contacted by the Course Coordinator at any time during the Study Period. I will advise the Clinical Placement Unit of any changes to my details, and/or any changes to the supervision arrangements 14 days prior.</p> <p>Supervisor Name: _____</p> <p>Supervisor Signature: _____ Date: _____</p>	

APPENDIX 4: LOGBOOK DETAILS

It is a mandatory part of students' assessment that a minimum of 2000 cardiac sonography scans need to be logged to successfully pass the course.

Once students are undertaking at least half of the ultrasound examination, students can then start to log the examinations in their logbook.

The amount of time students scans each week is entirely between the student and their supervisor; however, the following is a guide to the length of time students may take to complete their program.

We recommend that students never scan less than 15 hours per week during your training.

- 2 days week = 3 years
- 3 days week = 2 years
- 4 days week = 1.5 years
- 5 days week = 1.2 years

Students have been provided with:

A Medical Sonography Logbook which includes:

1. Supervisor's signoff form, which needs to be attached to the very front of the clinical experience record.
2. Supervisor's cover letter if need proof of scanning outside of logbook submissions.
3. Instructions on how to fill the logbook
4. Clinical Progress Reports
5. Clinical milestone assessments

There are a few important points that supervisors need to ensure are covered by the logbooks.

- The supervisor should have a minimum of 2 years clinical experience post qualification.
- It is not enough to just have the supervisor's name printed in the logbook. There needs to be an accompanying signature (so not just initials).
- The logbook IS NOT to contain any patient identification, stickers, etc.
- Students must enter details of the pathology in the logbook, it is not enough to just provide a cover letter and a token study period or so of logged studies.
- For those students who have come from another academic institution and have just started now, students will be required to complete a cover sheet in lieu of the logged hours but are expected to be keeping a logbook for this study period.
- This Supervisors cover letter IS NOT to be used in lieu of the logbook though for students who have been enrolled in the program from the beginning.

APPENDIX 5: LEARNING CONTRACT DETAILS

Students are provided the Learning Contract form as soon as they enroll into the Cardiovascular Sonography Portfolio course, which is the last course students must complete before graduating from the Program.

- The learning contract is an important document and essential to pass the Course.
- The learning contract requires students to set down a few key dates and assessment.
- This must be in communication and negotiation with the Supervisor(s).
- Clinical supervisors are an important part of each student's successful completion of this course and need to be aware of the required assessments.
- All of the supervisors for the study period need to be listed in the learning contract.
- Once submitted, if there are any changes to the supervising sonographer(s) details you will need to send in an amended contract to the course coordinator, informing them of the changes.
- Even if the student chooses to submit a new learning contract with different supervisors, the learning contract needs input from the new supervisor as well, also notifying the Course Coordinator of any changes in the learning contract.
- Learning contract template will be made available to the students via the Learnonline site.
- We advise that all supervisors keep an electronic/hard copy of all the learning contracts/forms signed for students in the eventuality of any dispute arising later.

APPENDIX 6: TUTOR ASSESSMENTS DETAILS

As part of students' compulsory assessments, students will need to undertake and successfully pass 2 practical assessments under the supervision of their supervisor and using the proforma which will be provided once they enroll into the Cardiovascular Sonography Portfolio course.

Due date of individual assessments will be as per the student's own personal Learning Contract. The student will be required to scan 2 patients with specific pathology on their preferred equipment. The specific pathology types will be:

- Left ventricular dysfunction
- At least moderate valvular regurgitation of the mitral or aortic valve

Within these areas, the following are required inclusions:

- Knowledge of relevant anatomy, embryology, physiology and pathology.
- Identification and understanding of the sonographic implications of the clinical questions.
- An understanding of appropriate scanning techniques and acquisition of sonographic information, including appropriate measurements.
- Interpretation of sonographic findings with an analytical and critical approach.
- An understanding of the presentation of sonographic images demonstrating a logical and methodical approach to scanning.

Level of competency

- By ASAR guidelines competency means – *'The competent sonographer can perform the required ultrasound examination safely, in a timely manner and without direct supervision'*
- **The tutor assessment scan must be completed within a 60-minute time period.**
- Students can have 'practice runs' with their supervising sonographer using the assessment template, however this will not be used in place of the official tutor assessments.
- If a student fails their tutor assessment, they will not be eligible to sit their OSCE and will require the student to repeat the course of Cardiovascular Sonography Portfolio in its entirety.

The Practical Tutor Assessment template will be provided to students once they are enrolled in the Cardiovascular Sonography Portfolio course. Supervisors are encouraged to discuss this with students.

APPENDIX 7: LOGBOOK INSTRUCTIONS

Logbook for Clinical Supervised Ultrasound Training

The Australian Sonographers Accreditation Registry (ASAR) provides recommendations in relation student training. It is recommended that Students document a minimum of 2000 cases of supervised clinical experience during their training. This will allow students to gain accreditation as an Accredited Medical Sonographer (AMS) in the Cardiac Sonographer category. For ASAR eligibility, these scanning hours need to be undertaken in an Australian or New Zealand clinical setting.

Students are expected to begin logging their clinical experience as soon as they secure a training position and commence scanning. The compact format of the logbook is designed so that students are able to keep their record of scanning in a simplified manner.

Important Information:

- **This is an important document. Passing the logbook is essential to be eligible to graduate.**
- **Students are required to document a minimum of 2000 cases to be eligible to sit for their OSCEs (Objective Structured Clinical Examination) which are run as the final assessment for the Cardiovascular Sonography Portfolio course.**
- **Following completion, the logbook will be checked carefully by the academics in the Medical Sonography Program at University of South Australia.**
- **Students with incomplete or inadequate logbook documentation will not be allowed to pass the Cardiovascular Sonography Portfolio course and hence be unable to complete the Program.**
- **If this document is lost, students will be asked to redo the logbook again.**
- **To ensure backup of the logbook, students will be required to upload a copy of the logbook pages to their e-portfolio as they progress through their clinical scanning.**

What is in the logbook?

Documents included in the logbook are as follows:

Covering letter supervisor declaration page (for proof of scanning prior to Program entry)

Section A:

Authorisation of signatures (Mandatory submission)

Main logbook (Mandatory submission)

Summary of student progress (Mandatory submission, every 400 scans)

Training review by Student and Supervisor (Optional but preferred)

Section B:

Specialised Echocardiogram Studies (Mandatory submission)

Clinical Supervisor declaration – if proof of scanning prior to program entry is required

CLINICAL SUPERVISOR DECLARATION

Supervisors cover letter if need proof of scanning outside of log book submissions prior to entry into this Program

I,
(full name of supervisor)

of
.....
(work address and contact number)

declare that
(full name of student)

was employed at
(full name of employer)

during the period between/...../..... and/...../.....

During this period the Student scanned on average.....cases per day taking over 50% of the images themselves.

The Student has logged a total of scans.

During this period, the Student obtained experience in these types of examinations (left ventricular dysfunction, aortic stenosis, aortic regurgitation, mitral stenosis, mitral regurgitation, congenital heart disease, stress echocardiography, transoesophageal echocardiography), please list.

.....
.....
.....
.....

Signature of Supervisor..... date/...../.....

Supervisor ASAR AMS number

or equivalent, provide details of accreditation

Signature of Student..... date/...../.....



This form is only to be used by students who had commenced their Ultrasound training prior to entry into the Cardiac Sonography programs at the University of South Australia. This may include those who commenced their studies at another academic institution.
This declaration **IS NOT** to be used in lieu of the logbook for students who have been enrolled in the program for the entirety of their Ultrasound training. i.e.: the dates listed on this form must not overlap with dates that the student has been enrolled in a Cardiac Sonography program at the University of South Australia.

Authorisation of signatures (mandatory)

AUTHORISATION OF SIGNATURES (Mandatory)

To be completed by the Clinical Supervisors

This page documents the details of all clinical trainers involved in supervision of the student over the ASAR stipulated requirement of a minimum of 2000 cardiac sonography cases.

This information is requested to meet ASAR accreditation requirements.

Duration <small>Dates to be specified here</small>	Supervisor Sonographer's / Doctor's Name and Qualifications	Contact Work Phone	Contact Work Email and Address	Supervisor Signature

It is a requirement of your logbook submission that **all** Sonographers who sign off the student's logbook provide their contact and qualification details. There are multiple spaces provided to accommodate the range of supervisors which a student may have throughout their training.

Main logbook

Main logbook

Number	Date	Please tick		Pathology
		Full supervision	Partial supervision	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				

Your logbook will detail the date, whether fully or partially supervised as well as the pathology. It is important that you gain as much experience in a range of clinical settings.

Criteria for a student's level of involvement in an examination

The level of involvement the student has in the scan is important for the logbook:

- Observed - If the student performed less than 50% of an examination, this cannot be recorded in the logbook. These scans will **NOT** contribute to the accumulated logbook scan numbers.
- Full Supervision – This would be selected where the student was responsible for somewhere between 50 and 99% of the examination, with the supervisor with the student and the patient for the whole time.
- Partial Supervision – The student performs the entire examination without assistance, with the supervisor happy that the student can work relatively independently.

We are aware that these categories will represent different levels of supervision across the range of departments in which our students train.

Why cases and not hours:

The Cardiac sonography stream at UniSA has been structured for students to obtain experience with scanning cases – and not hours – Note also there is a requirement for students to ensure they obtain experience with various types of pathologies.

For example, students need to ensure they've experienced scanning significant valvular aortic stenosis.

It is felt that this number will provide a good foundation for students who seek to sit the final OSCE exams during the Cardiovascular Sonography Portfolio course – and be granted graduate level entry to the ASAR registry.

The examinations listed in this log reflect the requirements from ASAR for graduate Cardiac Sonographers. It is acknowledged that this list is not exhaustive but is enough for the student to be able to demonstrate that they meet these requirements.

A supervisor's signature must be provided at the end of every group of 400 studies. A supervisor is only able to sign here if they have provided their details in the 'Authorisation of signatures' table.

Summary of Student progress at the end of 400, 800, 1200, 1600 and 1800 scans (mandatory)

**Summary of Student progress at the end of 400 scan milestone
(Mandatory)**

Student ID Number:

Student Family name: _____

Student Given name/s: _____

Student signature: _____

I confirm the Student has completed the type and number of scans under supervision: Yes/No

Supervisor Signature: _____

Supervisor Name: _____

If you have any concerns regarding the student, please contact the Course Coordinator

This page is found following each block of 400, 800, 1200, 1600 and 1800 scans in the logbook.
This must be signed by the supervisor.

Training review by student and supervisor at 400, 800, 1200 and 1600 scans (optional but strongly recommended)

Training review by Student and Supervisor at 400 scan milestone (Optional)

Student Family name: _____

Student Given name/s: _____

Supervisor Name: _____

Training Dates for review period:

Start ____/____/____ End ____/____/____

Student reflective comments

Supervisor comments on student progress, including areas for future development.

I *believe/do not* believe this student is progressing satisfactorily with his/her training.

(Please cross out as appropriate)

Supervisor Signature: _____

Supervisor Name: _____

Date: ____/____/____

It is strongly recommended that, at the end of 400, 800, 1200 and 1600 scans, the student and supervisor take the chance to reflect on and discuss the student's performance. By using the summary table in the logbook, the student and supervisor will be able to comment on progress and areas for future development.

Section B

Specialised Cardiac Studies – All must be completed to pass this program

These specialised cardiac studies are mandatory. Students must obtain experience for each of the study areas.

Please read each of the study areas carefully, and ensure you understand your requirements.

Type of scan	Volume required
Left ventricular dysfunction (where the LVEF<50%)	100
At least moderate aortic stenosis where the aortic valve area is calculated	15
Aortic regurgitation where the regurgitation is quantified	15
At least moderate mitral regurgitation where the regurgitation is quantified	15
Mitral stenosis where the mitral valve area is calculated	5
Congenital heart disease with at least 2 case more complex than an isolated atrial or ventricular septal defect	10
Stress echocardiography (exercise and/or dobutamine) observed or scanned	20
Transoesophageal echocardiography (observed)	10

Students should set themselves a task of acquiring these requirements during their level 2 courses. Note that a learning contract will be entered into when studying level 2 courses which will clearly identify a commitment to be obtaining these advanced examinations whilst enrolled in one of the following subjects

- RADY 5038 Clinical Applications of Echocardiography
- RADY 5032 Advanced Cardiac Haemodynamics
- RADY 5033 Advanced Cardiac Pathology
- RADY 5035 Cardiovascular Sonography Portfolio

Students will also need to ensure they have completed and submitted their placement details to the Clinical Placement Unit. Information about this can be found on the Program Clinical Training Page:

<https://lo.unisa.edu.au/course/view.php?id=4428>

Students wishing to complete Cardiovascular Sonography Portfolio must have completed each of the mandatory milestones found in Section B. Should any of these sections remain incomplete, students will not be able to sit final OSCE exams.

Section C

Section C consists of the template for the formative tutor assessment milestones to be submitted via the ePortfolio at 400, 800, 1200, 1600 and 1800 scans.

Evidence of completion of logbook hours must be backed up in the student's ePortfolio.

The secret URL must be submitted to the Program Clinical Training page as each milestone is completed.

A template collection for students' logbook submissions is available via the ePortfolio site and must be adhered to. This collection also requires the student to upload copies of each completed logbook page. In this part of the logbook, Section A will be completed by the trainee. Section B will be completed by the trainee's supervisor.

IT IS THE STUDENTS RESPONSIBILITY TO ENSURE THAT THESE ASSESSMENTS ARE UNDERTAKEN AT THE APPROPRIATE TIME.

Once both sections are completed, trainees must arrange to meet with their supervisor and discuss the appraisal and formulate an action plan for improvement. In particular, differences between the student's self-assessment and the tutor's assessment should be discussed.

It is expected that students will demonstrate and advancement in their capabilities at each milestone report.

If there are any issues or concerns, we advise you to talk to one of the members of the Cardiac Medical Sonography Program Team.

The logbook and ePortfolio

Students of the Medical Sonography programs at the University of South Australia are required to keep and maintain an ePortfolio. Information and instructions for the ePortfolio are provided on the Program clinical training page: <https://lo.unisa.edu.au/course/view.php?id=4428>.

Not only does the ePortfolio provide a medium for students to record and reflect on their studies, it also allows for a central electronic storage of documents required throughout the program – such as the logbook.

The logbook will be submitted at the very end of the program. The pages of the logbook can be scanned or photographed, and a copy uploaded to the ePortfolio as required. Instructions for logbook submissions via ePortfolio will be provided at the relevant times.