Graduate Certificate in Applied Science (Breast Ultrasound) (PH60)

Year offered: 2010
Admissions: Yes
Course duration (part-time): 2 semesters (1 year)
Domestic fees (indicative): 2010: Full fee tuition $7,250 (indicative) per semester
Domestic Entry: February
Total credit points: 48
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Pam Rowntree
Discipline coordinator: Gillian Kennedy (Breast Ultrasound)
Campus: Gardens Point

Entry requirements
To be eligible to enrol, an applicant will normally be qualified as a medical imaging technologist (diagnostic radiographer) at degree or diploma level and have a minimum of two years experience in a clinical medical imaging practice. Students must give written proof of access to suitable clinical experience for the duration of the course. Applicants with other qualifications and appropriate experience may be permitted to enrol subject to approval.

Professional Recognition
This course is accredited with the Australasian Sonographer Accreditation Registry (ASAR).

Course Design
Students must be employed in a suitable clinical practice with adequate access to clinical experience for the duration of the course. Formal lectures are conducted in an intensive one-week block of classes at the beginning of each semester. Further academic requirements can be met without requiring on-campus attendance. If students are not based in Brisbane, this structure allows attendance by offering the formal classroom component in an intensive one-week block in each semester.

Overview
The Graduate Certificate in Applied Science (Breast Ultrasound) course offers studies specifically in breast ultrasound techniques. Students are given the scientific basis for understanding, using and evaluating relevant equipment and techniques. The course particularly suits radiographers, medical imaging technologists and sonographers who are interested in an in-depth study of this rapidly developing speciality area of ultrasound.

Further Information
For further information about this course, please contact the following:

Course Coordinator
Associate Professor Pam Rowntree
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Discipline Coordinator
Gillian Kennedy (Breast Ultrasound)
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Course structure
To complete the Graduate Certificate in Applied Science (Breast Ultrasound) students must complete the units listed below (total 48 credit points)

Semester 1
PCN162 Principles of Medical Ultrasound
PCN187 Specialist Studies
PCN397-1 Clinical Attachment

Semester 2
PCN184 Breast Imaging
PCN397-2 Clinical Attachment
NOTE: The PCN397 clinical attachment unit is a 2 semester unit

Potential Careers:
Sonographer.

UNIT SYNOPSES

PCN162 PRINCIPLES OF MEDICAL ULTRASOUND
This unit is designed to provide students with a thorough understanding of the physical processes involved in producing an ultrasound image, the features of ultrasound equipment and the role and responsibilities of the sonographer in producing a diagnostic examination. Topics include general scanning principles and considerations, care of equipment, physics of ultrasound, ultrasound equipment features, image production and processing, artefacts, image recording methods, quality control,
biological hazards and safety issues, principles of Doppler ultrasound, care of the patient and communication issues.  
**Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1

**PCN184 BREAST IMAGING**  
This unit includes the following: medical imaging of the breast; principles of mammographic and sonographic imaging; breast anatomy and physiology; pathological conditions affecting the breast and its appearance; advanced mammographic techniques; mammographic and sonographic quality assurance.  
**Credit points:** 12  **Contact hours:** 3 per week  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-2

**PCN187 SPECIALIST STUDIES**  
This unit allows students to explore specialist techniques and applications through self-directed study and research.  
**Credit points:** 12  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1

**PCN397 CLINICAL ATTACHMENT**  
This is a supervised practical program carried out in an approved medical imaging department. Students are required to undertake specified clinical practice as applicable to their area of specialisation and meet minimum requirements of clinical hours and case scope and numbers. (12 credit points achieved at completion of PCN397-1 and PCN397-2.)  
**Credit points:** 6  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-1

**PCN397 CLINICAL ATTACHMENT**  
This is a supervised practical program carried out in an approved medical imaging department. Students are required to undertake specified clinical practice as applicable to their area of specialisation and meet minimum requirements of clinical hours and case scope and numbers. (12 credit points achieved at completion of PCN397-1 and PCN397-2.)  
**Credit points:** 6  **Campus:** Gardens Point  **Teaching period:** 2010 SEM-2