

POSTGRADUATE PROGRAMS IN ERGONOMICS AT THE UNIVERSITY OF QUEENSLAND

The following programs are offered by the Faculty of Health Sciences, with contributions from staff from other faculties.

Graduate Certificate in Ergonomics -	GCErg
Graduate Diploma in Ergonomics -	GDipErg
Master of Ergonomics -	MErg

The programs are designed to be undertaken by part-time external students. Four of the core courses have been taught in a "mixed" mode in which remote study of provided materials is supplemented by a compulsory two day block attendance in Brisbane.

From 2007, the frequency with which the courses were made available has been reduced. This has the consequence that the programs may not be undertaken full-time. From 2008 the core courses will be converted to fully remote.

SUMMARY OF PROGRAMS

[Courses at The University of Queensland are sized by unit (#), with #8 being a full-time semester load.]

Graduate Certificate in Ergonomics - GCErg

Admission requirements: Approved degree or approved post-secondary study and relevant experience.

Total Units: #8

Program requirements:

#4 from

HRSS6009 - Principles of Ergonomics for Injury Prevention #2

HMST6611 - Principles of Ergonomics for Improving Performance #2

With the balance from HMST6617, HMST6612, HMST6846, HMST7611, the elective list or other course approved by the executive dean

Graduate Diploma in Ergonomics - GDipErg

Admission requirements: Either GCERG or approved degree.

Total Units: #16

Program requirements:

#12 from

HRSS6009 - Principles of Ergonomics for Injury Prevention #2

HMST6611 - Principles of Ergonomics for Improving Performance #2

HMST6617 – Principles of Occupational Health and Safety for Ergonomists #2

HMST7611 – Advanced Ergonomics Tools and Techniques #2

HMST6846 – Research skills #2

HMST6612 – Ergonomics project A #2

#4 from HMST7614, the elective list or other course approved by the executive dean

Masters of Ergonomics - MErg

Admission requirements: Either GDipErg, or approved 4 year degree, or approved 3 year degree and relevant experience.

Total Units: #24

Program requirements:

#10 from

HRSS6009 - Principles of Ergonomics for Injury Prevention #2

HMST6611 - Principles of Ergonomics for Improving Performance #2

HMST6617 – Principles of Occupational Health and Safety for Ergonomists #2

HMST7611 – Advanced Ergonomics Tools and Techniques #2

HMST6846 – Research skills #2

HMST7614 Ergonomics project B #4 **or** HMST7615 – Ergonomics thesis #8

and the balance from the elective list or other courses approved by the executive dean.

FEES

See http://www.uq.edu.au/study/fees_wizard_start.html for details of fees.

A loan scheme (FEE-HELP) exists for domestic students. For more information visit <http://www.uq.edu.au/study/index.html?page=21175>

Prospective applicants for these programs are invited to contact Robin Burgess-Limerick (07 3365 4718, robin@hms.uq.edu.au).

COURSE SUMMARY

Ergonomics Courses

HRSS6009 – Principles of Ergonomics for Injury Prevention #2
HMST6611 – Principles of Ergonomics for Improving Performance #2
HMST6617 – Principles of Occupational Health and Safety for Ergonomists #2
HMST7611 – Advanced Ergonomics Tools & Techniques #2
HMST6612 – Ergonomics Project A #2
HMST6846 – Research Skills #2
HMST7614 – Ergonomics Project B #4
HMST7615 – Ergonomics Thesis #8

Elective Courses

<i>Code</i>	<i>#</i>	<i>Title</i>
HMST7386	2	Functional Anatomy and Biomechanics
HUFA7500	2	Human factors in the minerals industry
PUBH7600	2	Introduction to epidemiology
PUBH7610	2	Applied study design
PUBH7630	2	Introduction to biostatistics

Electives listed are available in external more. Course availability is subject to change.

Postgraduate courses in related areas taken at other universities may also be credited as electives within the program. A copy of the profile for the course should be forwarded to the program coordinator in advance for approval. A certified transcript should be provided to the program coordinator on successful completion. As examples, suitable electives may be found in the following programs, as well as many others.

- Curtin University of Technology, Masters of Occupational Health and Safety
- University of South Australia Master of Human Factors and Safety Management Systems
- Swinbourne Master of Technology Management (Aviation Human Factors)
- University of Adelaide Master of Occupational Health and Safety
- Queensland University of Technology Graduate Diploma in Occupational Health and Safety
- QUT Graduate Certificate in Road Safety

Ergonomics Courses

Principles of Ergonomics for Injury Prevention (HRSS6009) #2

Ergonomics is the interdisciplinary scientific field concerned with understanding interactions between humans and the systems within which they exist. Ergonomists seek to apply this knowledge to enhance health and safety, comfort, and productivity. This course is designed for professionals concerned with injury control in the community generally and in their practice specifically. It aims to support practice with the theory and research on ergonomics for the prevention of injury. The fundamental principle is that design needs to fit the product or system to the person. The course applies ergonomic principles to prevention of discomfort, injury & disability rather than to rehabilitation. The goal is for students to be able to apply this knowledge in the design and redesign of the home and work environment.

Course Coordinator: Dr. Margaret Cook CPE m.cook4@uq.edu.au

Other staff: AProf Robin Burgess-Limerick CPE, Justin O'Sullivan CPE

Delivery mode: Fully remote in semester 1, 2009

Advanced Ergonomics Tools and Techniques (HMST7611) #2

This course provides an understanding of the theory and application of measurement tools and analysis techniques from a range of disciplines used in ergonomics including electromyography, kinematic and kinetic measurement, environmental variables, anthropometric techniques, risk assessment, accident and incident investigation, cognitive ergonomics, mental workload, and task analysis.

Course coordinator: AProf Robin Burgess-Limerick CPE robin@hms.uq.edu.au

Delivery mode: Fully remote in semester 2, 2009

Principles of Ergonomics for Improving Performance (HMST6611) #2

Ergonomics is the interdisciplinary scientific field concerned with understanding interactions between humans and the systems within which they exist. Ergonomists seek to apply this knowledge to enhance health and safety, comfort, and productivity. The purpose of the course is to provide students with an understanding of constraints on the performance of occupational tasks. The goal is for students to be able to apply this knowledge in the design and redesign of the home and work environment.

Course coordinator AProf Robin Burgess-Limerick CPE robin@hms.uq.edu.au

Delivery mode: Fully remote in semester 1, 2008

Principles of OHS for Ergonomists (HMST6617) #2

This course provides an overview of occupational health and safety as it relates to the Australian working environment. The course will commence with an overview of the legal framework for OHS and continue on to explore some of the key contemporary issues in OHS including: work-related illness and disease, hazardous substances, workplace violence and harassment, plant and machine guarding, working at heights, and OHS in emerging industries.

Course Coordinator: Dr. Margaret Cook CPE m.cook4@uq.edu.au

Delivery mode: Fully remote in semester 2, 2008

Research Skills (HMST6846) #2

Research skills needed by students undertaking postgraduate studies in diverse areas of human movement studies. Provides skills needed to interpret research, to formulate, investigate, analyse and report research.

Course Co-ordinator: AProf Robin Burgess-Limerick CPE robin@hms.uq.edu.au

Delivery Mode: Remote, semester 1, all years.

Ergonomics Project A (HMST6612) #2

Individual workplace based project in any area of ergonomics. *Agreement of approved supervisor and course coordinator required.*

Course coordinator AProf Robin Burgess-Limerick CPE robin@hms.uq.edu.au

Delivery mode: Remote, any semester.

Ergonomics Project B (HMST7614) #4

Individual workplace based project in any area of ergonomics. *Agreement of approved supervisor and course coordinator required.*

Course coordinator AProf Robin Burgess-Limerick CPE robin@hms.uq.edu.au

Delivery mode: Remote, any semester.

Ergonomics thesis (HMST7615) #8

Individual research project in any area of ergonomics. Students taking over a full year year and enrolling in semester 1 enrol in HMST7615, students taking course over full year and enrolling in semester 2 enrol in HMST7616, students taking the course for one semester enrol in HMST7617. *Requires agreement of approved supervisor, and course coordinator, and prior completion of research methods course (eg., one of HMST6846/PUBH7600/PUBH7630 or other approved course).*

Course coordinator: Robin Burgess-Limerick CPE robin@hms.uq.edu.au

Delivery mode: Remote, any semester.

Course Schedule

	sem 1/08	sem 2/08	sem 1/09	Sem 2/09
HRSS6009			x	
HMST6611	x			
HMST6617		x		
HMST7611				x
HMST6846	x		x	

HMST6612, HMST7614 & HMST7615 are available all semesters with approval

Electives

Human Factors in the Minerals Industry (HUFA7500) #2

This course will improve awareness of the critical contribution of the human factor to the successful design, implementation and risk management of complex systems. It will provide practical knowledge of how to identify risks due to the presence of people in work systems.

Course Co-ordinator: Sue Leveritt s.leveritt@mishc.uq.edu.au

Other staff: Prof Jim Joy, AProf Robin Burgess-Limerick CPE

Delivery Mode: Remote

Introduction to Epidemiology (PUBH7600) #2

This subject introduces the basic principles and methods of epidemiology as it is concerned with the identification, control and prevention of ill health in the community. It addresses aspects relating to the collection and interpretation of epidemiological data, issues of major public health importance both within Australia and overseas, and provides students with the essential skills for logical, scientific assessment of the health and medical literature.

Course Co-ordinator: Andrew Page a.page@sph.uq.edu.au

Delivery Mode: Internal and remote, both semesters.

Introduction to Biostatistics (PUBH7630) #2

To be able to read, interpret the public health literature and to apply research findings in real life situations, an understanding of the basic principles and methodology of biostatistics is necessary. Moreover, to understand the underlying trends or important features of data, biostatistical analytical techniques are invariably required. This course introduces some of these principles, methodologies and techniques. However, the field of biostatistics is large and rapidly expanding and so this course is necessarily confined to the more established and commonly used techniques. In particular, the emphasis in this subject will be on reading and interpreting the results of statistical analyses as presented in figures, tables and text. The themes will be descriptive statistics, sampling methods, statistical inference, study design and methods of analysis.

Course Co-ordinator: TBA

Delivery Mode: Internal and remote, both semesters

Applied Study Design (PUBH7610) #2

This subject provides the opportunity for students to reinforce the knowledge and skills acquired in the introductory epidemiology and biostatistics subject by applying them to the task of preparing a hypothetical grant application to NHMRC. The theoretical and practical difficulties encountered in designing an epidemiological research study from the ground up will set the topics to be addressed in class. Topics include developing research questions and hypotheses, critically appraising the literature and writing a literature review, study design, selection and recruitment of study participants, methods of data collection and measurement of variables, data management and ethical considerations. Students will have the opportunity to gain experience in both written and oral presentation of epidemiological research.

Course Co-ordinator: Prof Chris Bain c.bain@sph.uq.edu.au

Prerequisite: PUBH7600

Delivery Mode: Internal and remote, semester 2.

