



ENTRY REQUIREMENTS

GRADUATE CERTIFICATE IN OCCUPATIONAL HYGIENE PRACTICE

The Graduate Certificate program has been designed as an entry course for those who may not have an undergraduate degree but have relevant work experience and have completed a 'Fundamentals in Occupational Hygiene' course offered by an acceptable professional society or equivalent. The program is designed so that students may progress from the Graduate Certificate through to the Masters degree, provided a credit average is maintained throughout the Graduate Certificate.

MASTER OF SCIENCE (OCCUPATIONAL HYGIENE PRACTICE)

The Master of Science program is for those who want to pursue a career in Occupational Hygiene. Applicants with a Bachelor degree with at least one year of science subjects or a credit average in the Graduate Certificate in Occupational Hygiene Practice may apply.

LECTURERS

All lecturers are highly experienced in their area of specialisation with many currently practising in the field. The course is coordinated by Associate Professor Brian Davies who has many years of industry experience in the steel, mining and aviation sectors prior to joining the University of Wollongong.

PROFESSIONAL ACCREDITATION

The MSc Occupational Hygiene Practice has been accredited by the Australian Institute of Occupational Hygienists and the British Occupational Hygiene Society.

For full details on accreditation status please contact Associate Professor Brian Davies.

HOW DO I APPLY?

You can apply online at apply.uow.edu.au, download an application form from www.uow.edu.au/future/apply or call 1300 367 369 for one to be sent to you.

Should you require any further assistance, please contact us on 1300 367 869. You can also email us at uniadvice@uow.edu.au or visit: www.uow.edu.au/future/postgrad

For further information regarding these courses please contact Associate Professor Brian Davies at bdavies@uow.edu.au or +61 2 4221 4438.

ABOUT UOW

The University of Wollongong is an award-winning university on the south coast of New South Wales, approximately 80km south of Sydney.

Wollongong is easily accessible by rail and road from Sydney and Canberra. Its blend of lifestyle, natural beauty, culture and entertainment makes this cosmopolitan city a great place to live and study. It's also a very affordable place to live, with a relatively low cost of living and reasonably priced entertainment and leisure options.

The University's nine faculties currently offer nearly 120 undergraduate and 150 postgraduate courses to more than 15,000 students. Courses from Bachelor to PhD level are available across 12 faculties and schools: Arts, Commerce, Creative Arts, Education, Engineering, Health & Behavioral Sciences, Informatics, Law, Science and the Graduate Schools of Business and Medicine.

Recent UOW accolades include:

RANKED IN TOP 2% WORLDWIDE

The 2008 Shanghai Jiao Tong Academic Ranking of World universities and The Times Higher Education – QS World University Rankings 2008 have both confirmed UOW's position in the top 2% of universities worldwide. These rankings review a wide range of criteria including research quality, graduate and employer satisfaction, and academic peer review.

A FIVE-STAR EDUCATION

The 2009 Good Universities Guide* confirms UOW's longstanding position as one of the country's leading universities. UOW received five stars in six key areas—under the Guide's ranking system, only the top 20 per cent of universities can be awarded a five-star rating in any one category. The six areas are:

- Getting a Job
- Positive Graduate Outcomes

- Graduate Starting Salary
- Research Intensity
- Graduate Satisfaction
- Generic Skills

AWARD-WINNING TEACHERS

UOW was the only university in the country to be awarded the maximum 10 citations from the Australian Learning and Teaching Council in 2008, placing us as number one in Australia. This is the third year in a row that UOW has been in the top five performers nationwide.

* 2009 Good Universities Guide (Universities & Private Colleges) 17th Edition

The University of Wollongong attempts to ensure that the information contained in this booklet is correct at the time of production (October 2008), however, sections may be amended without notice by the College in response to changing circumstances or for any other reason. Applicants should check with the University at the time of application/enrolment whether any later information is available.

CRICOS Provider No. 00102E

GRADUATE CERTIFICATE OCCUPATIONAL HYGIENE PRACTICE MASTER OF SCIENCE (OCCUPATIONAL HYGIENE PRACTICE)

MSc ACCREDITED BY THE AIOH AND BOHS

COURSE STRUCTURE

GRADUATE CERTIFICATE (24 CREDIT POINTS)

SHS 974	Measurement of Hazardous Substances	6 credit points
SHS 976	Noise – Measurement and its Effects	6 credit points
SHS 977	Control of Hazardous Substances	6 credit points
SHS 980	Epidemiology & Toxicology for OHS Practitioners	6 credit points

MASTER OF SCIENCE (48 CREDIT POINTS)

Graduate Certificate subjects plus

SHS 983	Project that demonstrates the application of research methods, critical thinking and reporting	6 credit points
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And choice of three electives from the following:

SHS 975	Thermal Environment	6 credit points
SHS 978	Asbestos and Other Fibres	6 credit points
SHS 979	Ergonomics Essentials	6 credit points
SHS 981	Occupational Hygiene in the Oil & Gas Industry	6 credit points
SHS 982	Occupational Hygiene in the Mining Industry	6 credit points

The International Occupational Hygiene Association defines Occupational Hygiene as the discipline of anticipating, recognising, evaluating and controlling health hazards in the working environment with the objective of protecting worker health and well being and safeguarding the community at large. The practitioners of this discipline, Occupational Hygienists, are qualified to recognise and evaluate a range of hazards likely to be encountered in the workplace. These include hazardous substances such as dusts, gases, vapours, mists and fumes; ionising and non ionising radiation, noise and vibration, lighting, thermal stress, biological hazards and musculoskeletal stressors.

Occupational Hygienists require knowledge of toxicology, physiology, occupational diseases, epidemiology, ergonomics and occupational health and safety law. They also require an understanding of the principles of hazard control including process modification, ventilation and personal protective equipment and associated administrative measures.

Globally, demand for Occupational Hygienists is increasing, albeit not necessarily in the traditional developed centres of the world. There is also evidence that the ability to recruit appropriate personnel in many parts of the world, and the lack of suitable training courses, are barriers to the development of the profession in these locations.

These courses at the University of Wollongong have been developed in partnership with industry to address this global shortage of trained Occupational Hygienists.

SUBJECT CONTENT

Measurement of Hazardous Substances – SHS 974

The aim of this subject is to outline the general approach advocated for the assessment of potential health risks associated with exposure to hazardous substances, and then focus in detail on the role and application of atmospheric monitoring. It addresses the theory of sampling, practical sampling and analytical considerations as well as the calculation and presentation of results. Practical exercises to demonstrate the correct use of monitoring equipment are a significant part of the course.

Thermal Environment – SHS 975

This subject develops the professional knowledge and skills needed to effectively manage the thermal environment in a workplace setting. It will provide students with a sound understanding of the physiological effects of the thermal environment on workers in a variety of settings; develops the skills necessary to assess the degree of risk in a wide variety of work situations both hot and cold and provide guidance on those control measures that can be used to minimise the effects of adverse thermal conditions in the workplace.

Noise – Measurement and its Effects – SHS 976

This subject aims to provide students with an outline of the nature of noise hazards in the workplace and the effects of noise on people. The course also details the approaches

in conducting noise assessments and determining the significance of measurement data in relation to compliance standards.

Control of Hazardous Substances – SHS 977

The aim of this subject is to provide the student with an appreciation of workplace processes and practices where hazardous substances occur and the methods that can be used to control employee exposures to those hazardous substances. Additionally, the subject details the approach in conducting assessments of ventilation systems (a key control technology) in the workplace to establish if the ventilation system is effective and operating to its design specifications.

Asbestos and Other Fibres – SHS 978

The aim of this subject is to enhance students' knowledge of Occupational Hygiene practice in relation to fibrous dusts such as asbestos, synthetic mineral fibres (glass fibre, rock wool etc.) and Aramids (Nomex, Kevlar, Twaron etc.) the latter of which are increasingly found in industry. This subject provides guidance as to how these products can be managed so as to minimise employee exposures. This includes understanding the health effects, evaluating workplace exposures and managing fibrous materials in workplaces.

Ergonomics Essentials – SHS 979

The aim of Ergonomics Essentials is to provide the student with a broad-based introduction to ergonomic principles and their application in the design of work, equipment and the workplace. Specific consideration will be given to musculoskeletal disorders,

manual handling, ergonomic aspects of the environment, as well as to the social aspects of work and relevant international standards.

Epidemiology & Toxicology for OHS Practitioners – SHS 980

This subject aims to provide students with a sound knowledge of the principles of industrial toxicology and epidemiology and its relevance with workplace health. This will assist with their understanding of the basis of workplace exposure standards and how they can be applied in the working environment. Students will also gain experience as to how they should research the toxicological effects of various contaminants in the workplace.

Occupational Hygiene in the Oil & Gas Industry – SHS 981

The aim of this subject is to provide the student with specialist information relating to workplace situations likely to arise in the oil and gas industry. Specific information will be provided as to how various situations can be identified, assessed and controlled. Topics covered include: exposure assessment; the role of the Occupational Hygienist; design and construction risks; risk communication; specific risks in upstream and downstream sites; and emergency response.

Occupational Hygiene in the Mining Industry – SHS 982

The aim of this subject is to provide the student with specialist information relating to workplace situations likely to arise in the mining industry. Specific information will be provided as to how various situations can be identified, assessed and controlled. Topics covered include exposure assessment, role of the Occupational Hygienist, design and construction risks, risk communication, specific risks in mining and mineral processing sites and emergency response.

Project – SHS 983

For successful completion of this subject each student will be required to undertake a suitable occupational hygiene project associated with their employment and research the issue(s) identified. The project should focus on a workplace where a potential for exposure from a chemical, physical or biological contaminant may exist and provides the opportunity to collect and critically evaluate data and prepare a report. For those students who cannot undertake a project at their workplace, suitable alternate projects will be provided.

Each student will have access to a mentor who will help to guide them through the project.

