

Waste Management

Year and Campus:	2016
Coordinator:	Assoc Prof Graham Moore (Engineering)
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Overview:	<p>Waste Management is offered as a major field of study in the Master of Environment degree.</p> <p>Waste is more than just what people throw in the bin. There are air-borne emissions, liquid wastes that impact on water supplies as well as the complex waste streams produced by industry that can have toxic impacts on the environment.</p> <p>Waste Management is concerned with the management of various waste streams. We study waste avoidance and minimisation, best environmental practice and provide the tools for sound decision making at the design and implementation phases of waste management projects.</p> <p>By studying Waste Management, you'll develop theoretical and practical skills for working in environmental control authorities, industry and elsewhere. If you are a student with an undergraduate degree in another discipline, gain investigative and management skills as part of an engineering education.</p> <p>You can expect to find employment in environmental control authorities, urban and industrial workplaces, local government, education, or as a consultant.</p>
Learning Outcomes:	<p>Students who complete the Master of Environment will have:</p> <ul style="list-style-type: none"> # Knowledge to undertake professional practice in environment or sustainability, including: <ul style="list-style-type: none"> # Specialised knowledge in an environmental discipline or field of practice, including knowledge of recent developments in this field # Knowledge of the cross-disciplinary nature of environmental issues and professional practice to promote sustainable futures # Knowledge of research principles and methods applicable to specialist field of environmental inquiry # Skills for collaborative and creative problem solving in environmental practice, including: <ul style="list-style-type: none"> # Ability to critically analyse and synthesise environmental knowledge # Ability to envision environmental change and propose pathways to realise this change # Ability to communicate complex environmental knowledge and research effectively to a range of audiences # Ability to work effectively in cross-disciplinary teams # Technical skills for professional practice and research in field of specialisation # Demonstrated capacity to: <p>Upon successful completion of the Development specialisation, students will be able to:</p> <ul style="list-style-type: none"> # Analyse various waste streams and identify opportunities for waste avoidance and minimisation # Design and implement strategies for waste management <p>Integrate knowledge and collaborate across disciplines and sectors to ensure the effectiveness of waste management projects</p>
Structure & Available Subjects:	<p>Students will be required to complete the two core subjects, plus choose three subjects from the compulsory specialisation subject list. Students in the 200 point pathway must take at least 12.5 points of subjects from the compulsory capstone subjects – these subjects enable students to complete an independent project in the area of waste management. Students in the 100 point pathway will not normally be required to complete this component. Students must also undertake electives to make up the balance of the award. The selection of electives is made in consultation with the Waste Management major coordinator. A list of subjects with special requirements within this specialisation can be found here:</p> <p>http://environment.unimelb.edu.au/courses/streams/waste_management (http://environment.unimelb.edu.au/courses/streams/waste_management)</p>
Subject Options:	Core Subjects

Students must complete the following core subjects:

Subject	Study Period Commencement:	Credit Points:
MULT90004 Sustainability Governance and Leadership	March, July	12.50
MULT90005 Interdisciplinarity and the Environment	Semester 2	12.50

Compulsory Specialisation

Students must complete at least three of the following compulsory specialisation subjects:

Subject	Study Period Commencement:	Credit Points:
ENEN90005 Environmental Management ISO 14000	Semester 2	12.50
ENEN90006 Solid Wastes to Sustainable Resources	Semester 1	12.50
ENEN90029 Water and Waste Water Management	Semester 1	12.50
ENEN90031 Quantitative Environmental Modelling	Semester 1	12.50
ENEN90032 Environmental Analysis Tools	Semester 2	12.50

Compulsory Capstone Experience

Students must complete at least 12.5 points from the following compulsory capstone subjects - please note that if you select either a 25 or 50 point subject that spreads across two semesters you must enrol into the subject in both semesters (your student centre will be able to assist with this). Students completing the 100 point pathway will normally be exempt from this requirement.

Subject	Study Period Commencement:	Credit Points:
ENST90006 Environmental Research Review (12.5)	Semester 1, Semester 2	12.50
ENST90007 Environmental Research Project (25)	Semester 1, Semester 2	25
ENST90024 Environmental Research Project - 25 Long	Semester 1, Semester 2	12.50
ENST90016 Environmental Research Project (50)	Semester 1, Semester 2	50
ENST70001 Environmental Research Proj (50 Long)	Semester 1, Semester 2	25
ENST90025 Environmental Industry Research (25)	Semester 1, Semester 2	25
ENST90026 Environmental Industry Research: 25 Long	Semester 1, Semester 2	12.50
ENST90020 Environmental Industry Research (50)	Semester 1, Semester 2	50
ENST70002 Environmental Industry Research: 50 Long	Semester 1, Semester 2	25
NRMT90003 Social Research Methods	Semester 1	12.50
DEVT90002 Internship in Development	January, Semester 1, Semester 2	12.5
DEVT90008 International Internship in Development	January, Semester 1, Semester 2	25
GEOG90022 International Internship in Environment	Summer Term, Semester 1, Semester 2	25
AGRI90076 Industry Internship	Summer Term, Semester 1, Semester 2	12.5

Elective Subjects

Students should make up the balance of the award with electives. Subjects in the list below are recommended. Other subjects may be taken with the approval of stream coordinator.

Subject	Study Period Commencement:	Credit Points:
CHEM90007 Environmental Chemistry	Semester 1	12.50
ECON90016 Environmental Economics and Strategy	Semester 1	12.50
ENEN90028 Monitoring Environmental Impacts	Semester 2	12.50
ENST90002 Social Impact Assessment and Evaluation	Semester 2	12.50
ENST90017 Environmental Policy Instruments	Semester 2	12.50
EVSC90014 Environmental Risk Assessment	November	12.50
EVSC90015 Environmental Impact Assessment	Semester 1	12.50
FRST90034 Ecological Restoration	September	12.50
GEOG90005 Hydrogeology/Environmental Geochemistry	Semester 1	12.50
LAWS70068 Environmental Law	September	12.50
MAST90007 Statistics for Research Workers	July	12.50
POPH90014 Epidemiology 1	Semester 1	12.50
EVSC90025 Water Sensitive Urban Design	February	12.5
GEOG90020 Risk Management and Public Participation	Semester 1	12.5
ABPL90009 Participation and Negotiation	July, November	12.5
MGMT90031 Project Management	Semester 1, Semester 2	12.5
POPH90230 Environmental Challenges & Global Health	July	12.5
ENST90032 Sustainability and Behavioural Change	Semester 1	12.5
ENEN90005 Environmental Management ISO 14000	Semester 2	12.5
ENEN90006 Solid Wastes to Sustainable Resources	Semester 1	12.5
ENEN90029 Water and Waste Water Management	Semester 1	12.5
ENEN90031 Quantitative Environmental Modelling	Semester 1	12.5
ENEN90032 Environmental Analysis Tools	Semester 2	12.5
ENST70001 Environmental Research Proj (50 Long)	Semester 1, Semester 2	25
ENST70002 Environmental Industry Research: 50 Long	Semester 1, Semester 2	25
ENST90006 Environmental Research Review (12.5)	Semester 1, Semester 2	12.5
ENST90007 Environmental Research Project (25)	Semester 1, Semester 2	25
ENST90016 Environmental Research Project (50)	Semester 1, Semester 2	50
ENST90020 Environmental Industry Research (50)	Semester 1, Semester 2	50
ENST90024 Environmental Research Project - 25 Long	Semester 1, Semester 2	12.5
ENST90025 Environmental Industry Research (25)	Semester 1, Semester 2	25

	ENST90026 Environmental Industry Research: 25 Long	Semester 1, Semester 2	12.5
	NRMT90003 Social Research Methods	Semester 1	12.5
	DEVT90002 Internship in Development	January, Semester 1, Semester 2	12.5
	DEVT90008 International Internship in Development	January, Semester 1, Semester 2	25
	GEOG90022 International Internship in Environment	Summer Term, Semester 1, Semester 2	25
	AGRI90076 Industry Internship	Summer Term, Semester 1, Semester 2	12.5
	LING90002 Presenting Academic Discourse	Semester 1, Semester 2	12.5
	SCIE90017 Science and Technology Internship	Summer Term, Semester 1, Semester 2	12.5
Related Course(s):	Master of Environment Master of Environment		