



Curtin University



POSTGRADUATE

# MASTER OF SCIENCE SUSTAINABILITY MANAGEMENT

SCIENCE AND ENGINEERING

COURSE CODE: MJRP-SSTMG

Make tomorrow better.

[seg.curtin.edu.au](http://seg.curtin.edu.au)



**Sustainability management is more than the task of managing an organisation's economic, environmental and social impacts.**

It's about tackling larger global environmental issues and encouraging more sustainable management practices.

The Master of Science (Sustainability Management) gives you the knowledge you need to make a measurable contribution to sustainable development, environmental protection and social advancement.

You'll learn how to apply sustainability management strategies, programs and techniques across a wide variety of modern contexts including climate change, water and energy conservation, resource efficiency, corporate stewardship and sustainability metrics.

## Industry-aligned learning

Curtin have partnerships with government, businesses and organisations across all industries that require sustainability advice.

The University maintains many sponsorships, partnerships, agreements and relationships with government, businesses and organisations, across all industries. We also work closely with industry bodies and associations specific to sustainability management.

## A global perspective

This course considers sustainability issues and practices from a global perspective. As a graduate, you will be able to apply cutting edge tools & methodologies to assess the sustainability of organisations/product/processes & policy and recognise the role of technology and governance in achieving sustainability outcomes. The degree is open to both Australian and international students.

## Practical and multidisciplinary

In this course you'll use sustainability theory and assessment tools to assess real case studies, and describe, implement and evaluate solutions. You will have the opportunity to apply your skills and knowledge to real-world issues and your own workplace. The course is also designed to develop your awareness of, and respect for, the social and environmental dimensions of sustainability practices and issues.

The course recognises the multidisciplinary nature of many current areas of science and technology, and the importance of having a broad skill-set when addressing major sustainability challenges like the impact of climate change, provision of renewable energy & sustainable water supplies, resource efficiency, environmental degradation and sustainability accounting, reporting and leadership.

"The reason I enrolled in the sustainability course was to enrich my ability to address agronomic challenges from a sustainability stand point.

While studying at SEG, I had the opportunity to share experiences with people who have witnessed challenges in the field and are studying to address them. The SEG degree has also offered me more job opportunities. Presently, three consultancy groups in Cameroon have asked me to work with them as a consultant.

The training has stimulated my desire to learn more about sustainability. As a result, I am presently making arrangements to further my educational career in sustainability."

Tamufor Tawum  
Master of Science (Sustainability Management)



## ABOUT THE COURSE

**Course name:** Master of Science (Sustainability Management)

**Cricos Code:** 061489J

**Campus:** Bentley

**Intake:** February or July

**Duration:** 2 years full-time or part-time equivalent

**Availability:** On-campus or partially online

### Prerequisites

To gain entry to this course, you need to have completed a bachelor degree in an appropriate field of study, such as business, environmental science, engineering, health or arts. Relevant work experience is also desirable.

### Credit for recognised learning

If you have studied at Curtin or another recognised tertiary institution before, you may be granted credit for recognised learning (CRL). Applications for CRL are assessed on an individual basis.

### Description

Students in the Master of Science (Sustainability Management), will receive a significant grounding in the skills and methodologies you need to analyse & assess sustainability issues and to plan, evaluate and manage an organisation's environmental, social and economic performance. You'll undertake four core units, eight specialisation units of your choice and two dissertation units.

The teaching focus in the discipline of industrial ecology provides a holistic perspective on sustainability management and the development of a sustainable future. You'll understand sustainability issues from a global perspective, and find out how sustainability practices are essential to intergenerational equity. The course is focussed on the use of efficient and environmentally acceptable resource outcomes that enable a sustainable future.

You'll graduate from this course with a broad range of adaptable skills, including:

- lifecycle management
- environmental accounting
- eco-efficiency
- corporate stewardship
- sustainability policy assessment
- earth systems engineering and ethics



Core units (100 credits)	Credit
Eco-Efficiency Strategies	25
Environmental Systems	25
Global Sustainability Studies	25
Industrial Ecology	25
Specialisation units (200 credits)	
Compulsory (150 credits)	
Accountability and Reporting for Sustainability	25
Corporate Stewardship	25
Organisational Strategies for Sustainability	25
Science Research Methodologies	25
Life Cycle Management	25
Sustainable Energy	25
Optional (50 credits)	
Environmental Impact Assessment	25
Participatory Sustainability	25
Climate Change, Modelling & Adaption	25
Terrestrial Ecology	25
Leadership in Sustainability	25
Urban Design for Sustainability	25
Leadership in Sustainability	25
Dissertation units (100 credits)	
Sustainability Management Dissertation 1	50
Sustainability Management Dissertation 2	50



### APPLY NOW

To find out more or apply for the Master of Science (Sustainability Management), visit [courses.curtin.edu.au](https://courses.curtin.edu.au)

## SUSTAINABLE ENGINEERING GROUP

The Master of Science (Sustainability Management) Course is run by the Sustainable Engineering Group (SEG). Established in 1999 at Curtin University.

Sustainable engineering considers a wider variety of management, science and technical based issues that consider Industrial Ecology based sustainable production and consumption outcomes including renewable energy, scarce materials, resource efficiency, environmental degradation and waste recovery. These issues are considered from a design, management, production and education and training perspective.

The group conducts research across a wide variety of industrial ecology topics including:

### Lifecycle assessment

Lifecycle assessment (LCA) assesses the environmental performance of a product, process or activity, from cradle to grave. LCA can result in more sustainability-focused product design, enhanced resource use, waste minimisation, improved supply chain management, and ecological footprint calculation.

### Industrial symbiosis

The community, environment, industry and economy benefit from our development of research programs to support local industry through regional synergy programs. Industrial symbiosis is when under utilised by-products, wastewater and waste heat are exchanged between local industries.

## Waste management

Our research includes alternative waste treatment technologies, re-using industrial by-products, and developing cleaner production and eco-efficiency practices based on 6R principles. Our research reduces waste to landfill and improves material recycling and re-use strategies, which are essential in reducing the environmental impacts and increasing the efficiency of industry resource re-use.

## Sustainability metrics

This research includes measuring business performance across many sustainability parameters including resource efficiency, water management, greenhouse gas production, and waste and by-product utilisation. It enables the development of much needed sustainability decision support frameworks including metrics and indicators to aid sustainability reporting and the development of sustainability priorities.

## Eco-innovation and sustainable manufacturing

Our applied and fundamental research into reducing air emissions, waste heat recovery, industrial by-product reuse, innovative construction materials, and more energy efficient and environmentally friendly mining production processes, all assist in helping to develop more sustainable process technologies for the future.

For more information on research at SEG, please visit [seg.curtin.edu.au/research/](http://seg.curtin.edu.au/research/)

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