University of South Australia

UCL

Master of Science in

SUSTAINABLE ENERGY SYSTEMS

NEW IN 2018
UNISA & UCL
JOINT
PROGRAM

Understand energy systems and learn how to meet growing demand in a sustainable way

Graduate with a joint degree from the University of South Australia (UniSA) and University College London (UCL)

Connect with industry through real-world projects and gain valuable experience while studying

Benefit from academic and industry expertise at UniSA, one of the Top Ten Universities in Australia^

^ 2017 THE World University Rankings

90% of UCL's research activity is rated either 'World Leading' or 'Internationally Excellent'*

*Research Excellence Framework 2014

Study in London and Adelaide

UNIVERSITY OF SOUTH AUSTRALIA (UNISA) AND UNIVERSITY COLLEGE LONDON (UCL) JOINT DEGREE

Offered in a dual-hemisphere mode, this unique program gives you the opportunity to study in both the UK and in Australia, whilst providing different perspectives on the global energy sector.

This 18 month program is designed to provide you with a rigorous and comprehensive understanding of contemporary theory and practice, in the sustainable management of the global energy industry.

By taking an industry focused, multidisciplinary, systems approach, we prepare you for pivotal roles to shape the future of the energy sector.

WHY STUDY ENERGY SYSTEMS?

According to the International Energy Agency (IEA), world electricity demand will increase by 70% by 2040 – driven mainly by the emerging economies of India, China, Africa, the Middle East and South-East Asia.

With demand for energy on the rise, new disruptive technologies, potential resource supply issues and the need to move to a low carbon future, it is critically important to re-evaluate our current energy systems and move to more efficient and sustainable models.

In order to do this, it is important to take a systems view of energy and view these systems from many different perspectives. As part of this qualification, you'll build on your knowledge of the energy sector and come to understand energy systems from several perspectives including – social, economic, political, legal, technical and scientific.

You will go onto explore the full lifecycle of energy from resource development, energy generation, transmission, distribution and retail, as well as the regulatory and market constraints that shape their development.

Degree content is refreshed annually and informed by current global challenges that face the generations of today and the future. With the latest industry knowledge embedded in the degree, you'll work towards solutions to provide affordable, reliable and sustainable energy.

PROGRAM SNAPSHOT

Campus.....London & Mawson Lakes
Duration.....2 years
Study mode.....full-time, face-to-face
Fees.....AUD49,500

ENTRY

Program Code.....LMSSJ

Apply direct to UniSA at unisa.edu.au/applyonline

Applicants are required to have a minimum of a second class (upper division) United Kingdom Bachelor's Honours degree or one of the below Australian qualifications:

4 year Bachelor with any of the following marks/classifications:

Second Class (Lower Division)

Division B

Division 2

Grade B

5/7

60%

OR

3 year Bachelor with any of the following marks/classifications:

First Class

High Distinction

80%

OR

A non-UK / non-Australian qualification of an equivalent standard.

The degree held should be in an appropriate discipline (e.g. engineering, information technology, economics, science, computer science, law or business)

The Australian 3-year Bachelor degree (as above) is permitted only with distinctions in each of the final year units

OR

At least five years of work experience in a relevant industry or government sector (e.g. energy or resource company, policy organisation or regulatory body).

PROGRAM STRUCTURE

FIRST YEAR
COURSES DELIVERED BY UCL IN LONDON
Term 1
Renewable Energy
Law for Energy and Resources
Research Methods - Qualitative

Term 2
Resource Development and Sustainable Management
International Policy and Geopolitics of Energy and Resources
Research Methods - Quantitative

COURSES DELIVERED BY UNISA IN ADELAIDE
SECOND YEAR
Study Period 3
Social License to Operate

Study Period 4
Energy Management and Conservation
Project Management and Financing Resource Projects
Economics of Energy

Study Period 6
Research Project 1

Study Period 1
Research Project 2

PROGRAM OVERVIEW

The program pairs current best practice teaching methods in a traditional setting with practical field trips, and industry focused research opportunities. All these components enrich your experience - providing insight and an operational context.

This journey starts in UCL London with courses on Geopolitics, Law, Renewable Energy and Resource development, providing an overarching background to the global energy sector.

You will then transfer to UniSA in Adelaide to study Energy Management and Conservation, Energy Economics, Energy Projects and Social License to operate, before undertaking a 6 month, research project supervised by sector experienced academics.

You'll graduate with a broad understanding of energy systems, and how they can be developed to meet growing global demand in a long term sustainable way. This will put you in a position to create systems that deliver reliable, sustainable energy.

CAREER OPPORTUNITIES

According to website sajobstodaysa.gov.au, South Australia is seizing new opportunities to pursue more efficient ways of living and working.

The State Government's $550 million energy plan will create new energy jobs and ensure that the State's power is sourced, generated and controlled in South Australia.

After graduation, you may seek a career in the energy sector covering:

- Management
- Consultancy
- Economic Analysis & Forecast Modelling
- Research

These roles may be found within government agencies or at any number of corporations involved in the energy chain cycle.

For more information contact

Dr Ady James

ady.james@unisa.edu.au

Future Student Enquiries:

+61 (08) 8302 2376

unisa.edu.au/enquiry