Durham University

MSc Energy Engineering Management

Offer holder webinar:
22 May 2024

Durham University

Welcome and overview

Who we are

Professor Grant Ingram

Joint Programme Director

Department of Engineering

Dr Yanlu Zhao

Joint Programme Director

Durham University Business School

Durham University

Outline of this session

Welcome and overview

- Durham - highlights
- Durham University
- Partners in the programme
- Living in Durham

Content and structure of the programme

- Taught modules
- Skills
- Projects, guest lectures, careers

Outline of this session continued

Detailed look into key modules:

- New Venture Creation
- Renewable Energy technologies 4

Detailed look at the:
Strategic Engineering and Business Project

Scholarships and FAQ

Question and Answer session

Durham highlights

- Historic city of Durham - safe environment
- World Top 100, Durham University is England's third oldest university.
- Triple accredited, Durham University Business School is highly ranked globally.
- Partnership programme – Engineering, Business School and the Durham Energy Institute
- Students from across the globe
- Technical, applied focus
- Strong industrial links: strategic projects, visits, talks, DEI
- Excellent employability opportunities

Department of Engineering

Business School

Durham University

Durham University

- Established in 1832
- One of a small group of traditional collegiate universities in the UK
- Part of a UNESCO world heritage site
- World Top 100 in QS World University Rankings 2024
- UK Top 5 Engineering – The Guardian University Guide 2024
- Our staff and students come from over 120 countries, creating a diverse social and academic community

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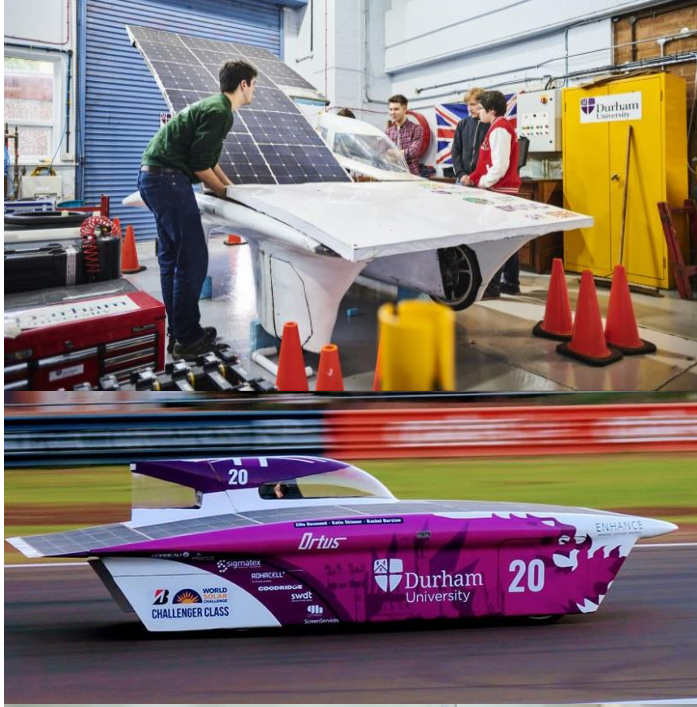
Durham University Business School

- Top 10 in the UK - Financial Times European Business Schools 2023
- Triple Accreditation - accredited by: AACSB, EQUIS, and AMBA
- Incorporates four Departments:
  - Management & Marketing
  - Finance
  - Economics
  - Accounting

Durham University

Department of Engineering

- 98% of our research rated as 'World-leading' or 'Internationally excellent' (REF 2021)
- Top Five in the UK - The Complete University Guide 2024
- 7th in The Times and Sunday Times Good University Guide 2024
- 5th in The Guardian University Guide 2024
- Engineering taught at Durham since 1838
  - the first course of its kind in England.



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Durham Energy Institute

We produce world-class research for understanding energy decarbonisation and deliver integrated solutions for the climate emergency incorporating social, policy and technical insights.

Our research is rooted in strong partnerships with industry and policy organisations at home and abroad to ensure our projects address rapidly changing energy priorities and key sector innovation challenges.

We believe that by drawing on insights from different sectors and disciplines, and by approaching energy systems in a holistic and integrated way, the most effective solutions to global energy challenges can be developed and implemented.

From anthropology to physics, from the history of coal mining to developing technologies for our future such as hydrogen transportation, Durham Energy Institute covers the spectrum of energy research.

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University life

Durham City

- Based in the beautiful, historic city of Durham
- UNESCO World Heritage Site at its heart

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Living in Durham

- Safe, small city
- Centuries of history and heritage
- Castle and Cathedral - UNESCO World Heritage Site
- Walk to and from most locations in under 30 minutes
- Close to Newcastle (10 mins by train)
- 3 hours by train to London
- Access to a wide range of attractions and events:

  Botanic Garden | Oriental Museum | Cathedral

  Lumiere Light Festival | Other Festivals throughout the year

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Welcome to Durham

City, Region and Local Attractions

Much more than academic success

A transformative wider student experience which also helps our students develop as individuals:

- 17 distinctive college communities
- Leadership and personal development opportunities
- Opportunities to take part in theatre, music, sport and volunteering

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Over 200
student societies to join.

Sports University of the Year 2023
The Times and Sunday Times Good University Guide

85%
of students involved in sport, music, theatre or volunteering

86
different music societies for you to try

Over 700
college sports teams across 18 different sports

Residential college system

Collingwood College

Grey College

Hatfield College

John Snow College

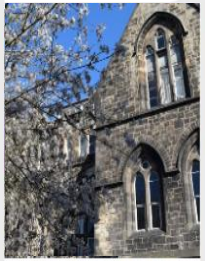
Josephine Butler College

South College

St Aidan's College

St Chad's College

St Cuthbert's Society



College of St Hild and St Bede

St John's College

St Mary's College

Stephenson College

Trevelyan College

University College (Castle)

Van Mildert College

Ustinov College

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Student support

We provide access to a wide range of support services to help you **feel well**, **comfortable** and **get the most** from your experience including:

- Immigration
- Healthcare and GP services
- Finance
- Student wellbeing programme
- Counselling
- Chaplaincy and faith
- Equality, Diversion and Inclusion (EDI)

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Content and structure of the programme

Programme objectives

- To position graduates to exploit the economic transformation as the world moves to zero carbon operation
- To immerse students in both business management and the underpinning technologies of energy conversion
- To develop advanced and systematic understanding of energy management
- To enable students to critically review and apply relevant business management and energy conversion knowledge to practical situations
- To develop a critical awareness of current issues in energy management which is informed by leading edge research and practice in the field

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Programme structure at a glance

Core Modules (60 Credits)

Elective Modules (30 Credits)

Business and Engineering Systems (20 Credits)

Strategic Engineering and Business Project (60 Credits)

Career & Professional Development (10 Credits)

180 Credits in total.

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Core and Elective Module Titles

Core Modules

You will study the following:

- New Venture Creation
- Future Vehicles
- Business and Engineering Systems
- Decarbonisation of Heating and Cooling
- Environmental and Climate Economics
- Strategic Business and Engineering Project

Elective Modules

You will choose 30 credits of optional (elective) modules from a range which typically includes:

- Society, Energy, Environment & Resilience
- Context and Challenges in Energy and Society
- Artificial Intelligence and Deep Learning
- Renewable Energy Technologies
- Optimisation
- Environmental Engineering

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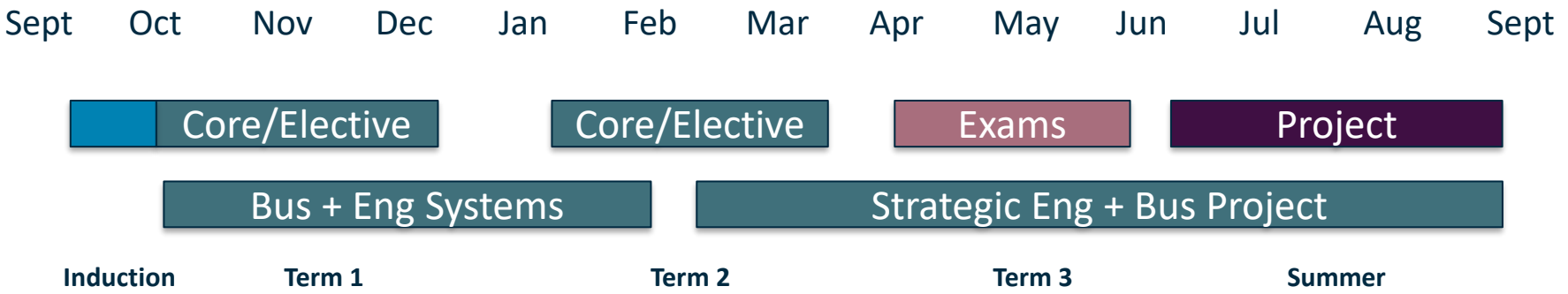
Programme timetable



Careers and Professional Skills module is embedded throughout programme

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Mode of delivery

Taught by experts in their field, your programme will be delivered and assessed via a mixture of:

- Lectures
- Small group activity
  - Design group meetings
  - Seminars
  - Project Meetings
- Assessment mixture of:
  - Coursework
  - Examinations

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Working with industry

- Guest speakers
- Business projects
- Site visits
- Career services

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New Venture Creation (in detail)

- To develop students' understanding of entrepreneurship through the lenses of opportunity examination, new venture creation, and small business management, including contextual issues therein.
- To develop students' understanding of the requirements necessary to create new business ventures, and the challenges and approaches to sustainable growth.

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New Venture Creation (in detail) continued

- To understand differences among small business owners, managers, and their entrepreneurial teams.
- To look beyond upper echelon logic to think about entrepreneurship across the firm and not just by the small business or new venture owner.
- To address how best to manage customer and supplier relationships, finances, and operational issues in an ethical and responsible manner.

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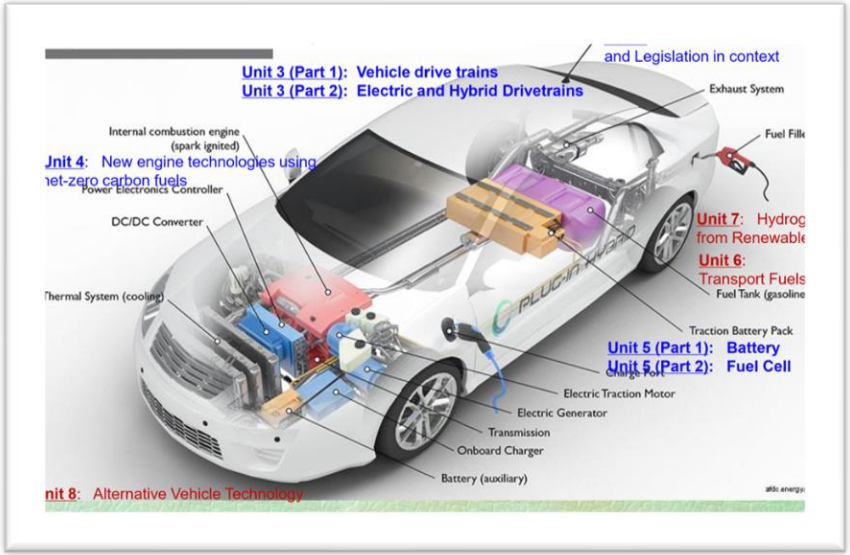
Future Vehicles (in detail)

To provide an overview and describe the characteristics of current/future transport vehicles.

To explain the basic working principles of the main systems for current/future transport vehicles.

To explain the technical, economical, and environmental constraints and solutions for future vehicles.

To introduce some analytical methods for system design and analysis of vehicles.



The Strategic Engineering and Business Project (in detail)

Research Methods Training

- Data collections
- Ethics
- Analysis
- Presentation and good writing

Literature Review

Topic – individual topic

Summative Assessment

Component: Business Project		Component Weighting: 100%	
Element	**Length / duration**	**Element Weighting**	**Resit Opportunity**
SBEP Part 1: Research methods digital portfolio		20%	
SBEP Part 2: Journal format report	10 pages (7500 words)	80%	

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Funding

DU Scholarships and other funding

- MEEM Scholarships
  www.durham.ac.uk/business/meem
  - worth £7,562 towards tuition fee for September 2024 entry

- Durham University Alumni scholarships
  10% tuition fee discount
  www.durham.ac.uk/study/scholarships/alumni/

- University Scholarships and other sources of funding
  www.durham.ac.uk/study/scholarships/

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Frequently Asked Questions

Frequently asked questions

- Are there reading lists/lists of resources I can access before starting the programme?
- How many contact hours per week are there?

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Frequently asked questions

- How much independent work is there?
- Are there opportunities for groupwork?
- What employment opportunities are there after finishing the programme?

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Questions and Answers

Over to you

- Please ask your questions and we will be happy to answer you

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Further information

Contact details

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Future information sessions

3 July 2024 – Masters Online information Session

Book your place at: durham.ac.uk/business/events

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MSc
Energy
Engineering
Management

Thank you for listening!