

# MSC DATA ANALYTICS AND OPERATIONS MANAGEMENT



**This professional postgraduate course will give you the range of skills and knowledge to prepare you for roles in operations management, learning core topics of innovation, risk and quality. Delivered 100% online, our MSc programme with data analytics will make you stand out from the crowd, giving you the edge to progress in your career with the valuable and sought-after skill to utilise data effectively to make strategic business decisions.**

## Modules are:

### Data Design

How can data be useful for a business? How do you collect data? Do you know how to approach it?

Through this module you will gain a solid understanding of how to approach data analytics by starting with these key questions about intended outcomes for your business. From this, selecting the most appropriate data collection method will help you to develop skills in designing deployment

approaches, implementing data collection approaches and revising instruments and systems to achieve valuable outcomes.

### Data Handling and Decision Making

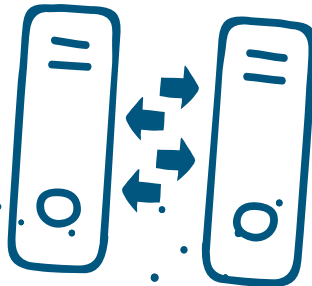
Modern businesses have access to more data than ever. People armed with the skills to handle that data - and who can use it to make informed business decisions - add real value to their workplace.

This module focuses on teaching you how to do an analysis of the data environment in an organisation, and crucially once you have that data, how you handle it and what you can do with it

- whether that is to make the business more efficient, or lead it in a fresh direction. The key is not just to interpret and understand the data, but to make knowledge driven decisions. We test this through a case study driven task that allows students to apply what they have learnt to a real business scenario.

### Data Visualisation and Interpretation

The volume of data held by organisations has grown massively in recent years and is generated at an ever-increasing rate. Data has the power to give businesses significant competitive advantage - if used effectively. This means there is a need for



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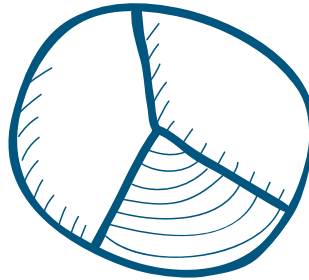


the data that is generated and analysed to be presented in a manner that is universally engaging and understood – for example across departmental boundaries or by non-specialists.

## Ops and Supply Chain Management

In an environment where customers are more demanding, resources scarce and sustainability is a key issue, operations management is becoming more important. Operations management ensures the transformation of inputs into outputs that meet established performance objectives. The importance of supply chain management and the impact that it has on

the ability to deliver operational objectives will be evaluated. A variety of case studies, interactive activities and reading will be used to deliver this module.



## Risk Management and Innovation

Risk and innovation increasingly go hand in hand in modern

management. This module will equip you with a grounding in risk management and innovation theory and how it is applied in practice within the engineering environment. You will evaluate the relationship between risk and the way you can leverage it to facilitate innovation, and the implications that this has on organisational culture and human resources. The module will use practical scenarios and a range of case studies to investigate the impact of risk and innovation on business practice.

## Quality Management

This module will encourage and support you to understand the key theories and practice of delivering a quality product.

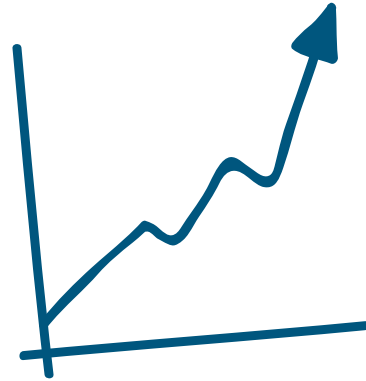
Appreciating the importance of quality in both tangible and intangible products will allow you to champion this philosophy in your current or future role. The module will introduce the core principles of quality management and show you the tools and systems you can apply to a real working situation, as well as understanding the ways to measure quality. The assignment will give you the opportunity to put it all into practice, proving you can take these ideas and apply them to specific business needs and objectives.



## Research Project

The research project is a vital part of achieving Masters level - and it is your chance to undertake research into an area of your choosing, related to the programme theme.

We'll support you through the first stage with six weeks of sessions to help you create your research proposal - and you can choose from a conventional dissertation or an academic article and presentation. You will develop your critical abilities and produce a piece of work that's relevant in practice and meets the academic standards needed at Masters level, and just as importantly, add value to your organisation and career.



## Course duration and hours of study

This varies depending on the course you're studying but you can access modules at a pace that is convenient for you. Once you have accessed a module, there is a minimum and maximum time that you will need to finish the module within.

You can find out more information on the course page, visit [www.arden.ac.uk](http://www.arden.ac.uk). Alternatively, please call our admissions team on +44 (0) 2476 515700 or 0800 268 7737 for more details.

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## Entry requirements

To be eligible for this course you must normally have:

A UK honours degree at a minimum of second class (2.2) or equivalent.

For students whose prior learning was not taught in English:

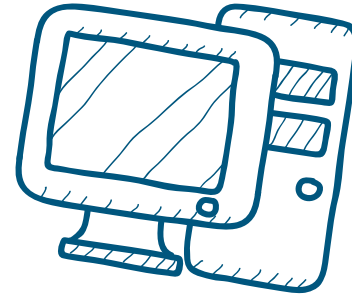
IELTS 6.5 or equivalent.

Please be aware that this course will require you to handle numbers. We recommend that you hold a minimum of GCSE

standard maths to succeed. Please speak to a member of our admissions team for more information.

## If you don't have academic qualifications

We're more than happy to consider, and positively encourage, an application from you if you have substantial management experience (typically 5 years) and can show us that you have the motivation to study the programme.



ONLINE  
POSTGRADUATE  
COURSE

How to apply

Email: [enquiries@arden.ac.uk](mailto:enquiries@arden.ac.uk)