

BPP Actuarial Education

Employer Update – May 2022

In this edition of the Employer Update newsletter, we focus on some training opportunities available from ActEd and BPP.

Data Science – a new set of tools for actuaries

As data science becomes more prominent in the actuarial syllabus, David Johnson, one of ActEd's tutors and resident data science experts, has recently published an article explaining why data science is crucial for actuaries:

<https://www.bpp.com/insights/data-science-new-set-of-tools-for-actuaries>

BPP can help you and your employees to meet the growing and ever-changing demand for data and technology skills in their actuarial roles. We offer a range of short courses and apprenticeships to help create teams that can use data and systems effectively and intelligently, for example:

- Level 3 Data Technician Apprenticeship
<https://www.bpp.com/courses/data-and-technology/apprenticeships/data-technician>
- Level 4 – Data Analyst Apprenticeship
<https://www.bpp.com/courses/data-and-technology/apprenticeships/data-analyst>
- Level 7 MSc Applied Data Analytics Apprenticeship
<https://www.bpp.com/courses/data-and-technology/apprenticeships/applied-data-analytics>

In addition to these existing programmes, BPP is launching the Level 6 Data Scientist in September 2022. This programme runs for 36 months, however, those who have previously achieved a level 4 apprenticeship can 'top-up' to a full degree within 28 months.

MSc Data Professional (Top-up)

Another new development is the BPP MSc 'Top-up' programme. IFoA members who have achieved Associateship or Fellowship level are eligible to gain a top-up MSc in Data Science. This is a 16-month (or 12-month fast-track) programme.

The MSc Data Professional (Top-up) has been created in collaboration with leading industry partners to ensure outcomes align with current industry demand.

This programme was designed to support the development of professionals, such as actuaries, with the necessary data analytics knowledge and skills which will enable them to meet the current and emerging market demand. It has been targeted at future leaders who will drive change and transformation. It provides flexibility through elective modules and practicality through an applied project.

It provides learners and employers with the opportunity to future-proof their skillset and enable greater understanding of key themes which are impacting the workplace such as Data Analytics, Digital Leadership, Big Data and Automation. A brochure can be found at the end of this Employer Update.

For more information on BPP's data and technology courses, please contact your School of Technology Account Manager or Simon Buckland in the BPP School of Technology (SimonBuckland@bpp.com).

BPP Financial Services

We also wanted to remind you of some of the other services that BPP can offer. BPP run professional qualifications, apprenticeships and short courses, and BPP University runs undergraduate and postgraduate programmes across a range of disciplines.

Please see [here](#) for details. As well as several Level 2–4 apprenticeships, below are our market leading Level 6 and 7 Apprenticeships in the risk, insurance and investment management space:

- Level 6 - Senior Insurance Professional
- Level 6 - Senior Compliance / Risk Specialist
- Level 6 - Financial Services Professional
- Level 7 - Senior Investment / Commercial Banking Professional

If you would like more information, please contact your Account Manager or email RichardHowse@bpp.com.

Level 4 Actuarial Technician Apprenticeship

Following the withdrawal of the CAA qualification, BPP ActEd has been working closely with the Institute for Apprenticeships and the Trailblazer group of employers (led by Aon) to redesign the Apprenticeship Standard.

The underlying knowledge elements of the programme have been retained, with the mandated CAA exams now replaced by a final BPP assessment.

The skills and behaviours elements have been updated and refreshed. The End Point Assessment (EPA) is being redesigned and modernised along the lines of the Level 7 Actuary apprenticeship to make the EPA quicker and more aligned to a typical job role.

The hope is that the new Standard will be approved in time for the October 2022 cohort of new apprentices.

The Level 4 apprenticeship offers an alternative route into actuarial roles and can play a part in widening access to the profession and employer's Equality, Diversity and Inclusion (EDI) strategies.

For more information on the Level 4 apprenticeship, please contact ActuarialApprenticeships@bpp.com.

Level 7 Actuary Apprenticeship

BPP ActEd's Level 7 Actuary Apprenticeship continues to grow with over 40 employers having placed learners on the programme. The programme welcomes a further cohort of new learners this month with the next cohort after September's exams (applications will close in early August).

The Level 7 apprenticeship takes students up to the IFoA Associate qualification, studying and taking their exams in the normal way while completing a PPD-style portfolio throughout their apprenticeship. On completion of their associate exams, there is a final End-Point Assessment (EPA), which consists of a case study exam and a portfolio-based interview. After the apprenticeship, students can go on to complete the full IFoA Fellowship by taking the SP and SA exams outside of the apprenticeship.

BPP ActEd provides a comprehensive package of support for the IFoA exams as well as additional support and guidance for the portfolio and EPA. Levy funding of up to £18,000 per apprentice contributes to most of the cost of the support provided by ActEd, while IFoA membership subscriptions, exemption fees and exam fees are usually met by the employer. Some exam fees can also be covered by the levy if a student starts the apprenticeship with a number of exemptions.

If your company is interested in utilising the programme then please get in touch at actuary17@bpp.com.



Additional news from ActEd

Actuarial maths induction courses

Are you interested in ActEd running an in-house actuarial maths induction course for new recruits in September / October 2022?

The aims are to give students a flying start to their studies, to embed good study habits early on and to introduce them to actuarial concepts that they are likely to come across in their work.

The course covers:

- an introduction to ActEd, the exam system and study hints
- pure maths knowledge needed for actuarial studies (eg integration, differentiation, numerical methods, series summation)
- probability and statistics needed for actuarial students (eg probability trees, random variables, expectations, variances)
- an introduction to Subject CS1 (statistics)
- an introduction to Subject CM1 (financial maths, survival models and contingencies)
- a demonstration of the programming language, 'R', and Excel-based modelling for actuarial studies
- tutor-guided revision session and a marked mock exam to give feedback and an early indication of progress to you and your students.

The course is three days in duration (or two days without the tutor-guided revision and mock) and we are happy to run it either in a face-to-face format or as a live online tutorial. Further information can be found at https://www.acted.co.uk/induction_courses.html.

If you would like to explore this further, please contact ActEdTutorials@bpp.com.

Company reports

For the summer 2022 exam session, we are planning to publish company reports on:

- Wednesday 6 July 2022
- Wednesday 3 August 2022
- Wednesday 7 September 2022
- Wednesday 28 September 2022.

The reports provide a summary of the assignment grades and tutorial attendance for your students to help you monitor their progress. The information is provided through an online portal. If you have any questions about company reports, please email us at ActEd@bpp.com.

Have we got your correct details?

If you'd like to change who this Employer Update goes to within your organisation, please let us know by emailing us at ActEd@bpp.com. If there's anything else you'd also like to see included, also please let us know.



MSC DATA PROFESSIONAL [TOP-UP].

A data skills programme ensuring
professionals are ready for the future



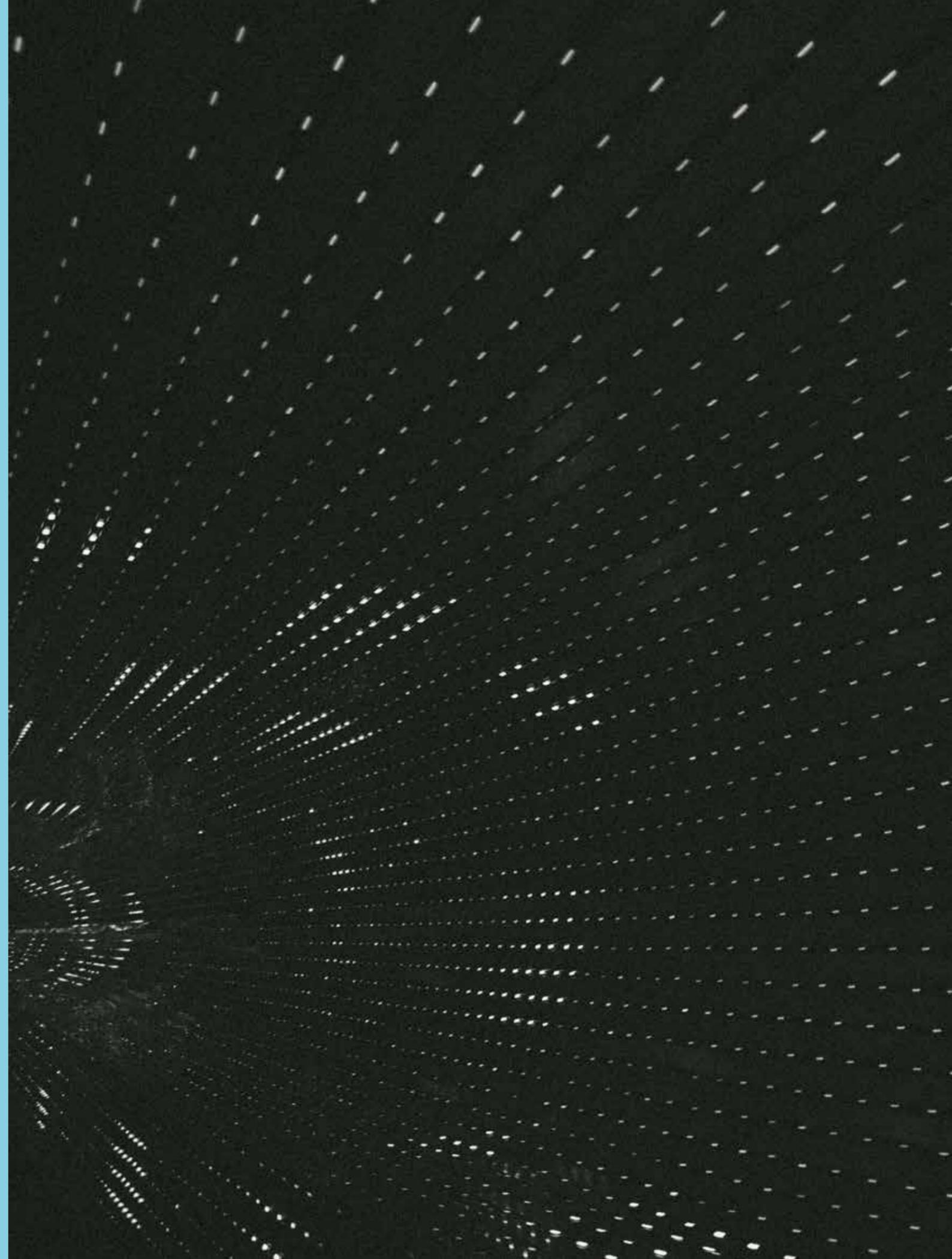
Work in the new digital landscape

Data-based decision making is regarded as one of the most prominent game-changers in today's modern business. So much of what we know about work is shifting due to powerful forces like robotics, AI, IOT, big data and the sharing economy. In addition, the wave of digitisation undertaken by many organisations has been dramatically accelerated by the COVID-19 pandemic.

Embracing data analytics is a key to advancing as a professional and successfully transitioning our organisations into the future. Integrating a new analytics approach will make our key strategic decision making more powerful.

The MSc Data Professional [Top-up] has been created in collaboration with leading industry partners to ensure outcomes align with current industry demand.

This programme was designed to support the development of professionals with the necessary data analytics knowledge and skills which will enable them to meet the current and emerging market demand. It has been targeted at future leaders who will drive change and transformation. It provides flexibility through elective modules and practicality through an applied project.



How does the MSc Data Professional [Top-up] benefit your business?

The MSc Data Professional [Top-up] supports people in developing future-focused skills in core areas associated with data analytics.

This programme is designed for those who are, or aspire to be, data champions within their organisation and profession. Such roles are increasingly critical and in-demand to bridge the gap between professional data scientists and the core business.

The programme delivers an introduction to the advanced skills in data analytics, with electives such as:

- > Programming in Python
- > Data Modelling
- > AI and Machine Learning
- > Programming
- > Modelling and Visualisations
- > Robotic Process Automation
- > Digital Leadership

Following this a practical project allows all participants to apply everything learnt on programme and immediately benefit the business. The MSc Data Professional [Top-up] has been designed in collaboration with industry partners to ensure that those that complete this practical programme can immediately benefit from these skills and add value to the workplace.

What does the MSc Data Professional [Top-up] offer to your employees?

Employees on the programme develop key data analytics skills that would benefit them either in their workplace or working with clients as a specialist, consultant, or professional. Employees can furthermore leverage their knowledge to benefit them in their role by extracting value from data and providing insight to the business. These data skills will only become more relevant in the future as the use of data increases. The data skills support all participants within their business, the sector, and the wider working environment.

Relevant roles for this programme include:

- > Managers
- > Accountants
- > Tax Specialists
- > Consultants
- > Financial Specialists
- > Auditors
- > Actuaries
- > HR Leaders

What will your employees learn?

Employees on this programme will acquire the key data skills which are relevant to the modern workplace and which will further enhance their skills and knowledge.

Knowledge topics

- > Develop programming scripts which automate time-consuming activities such as reporting
- > Evaluate the use and relevance of Robotic Process Automation (RPA) in data analytics and more widely in a business context
- > Understand key leadership practices in the digital age
- > Evaluate big data solutions in a corporate environment
- > Develop a wider understanding of the impact of data on business and review its impact in a given context

Skills and Behaviours developed

- > Develop key programming skills for data analytics within the workplace leveraging modern programming practices
- > Create accurate models and associated visualisations to support businesses in improving efficiency
- > Review processes for opportunities to apply Robotic Process Automation
- > Leverage advanced analytical toolkits in business spreadsheets or data sets
- > Develop a practical project which will lead to an impact in a business setting

Data champions

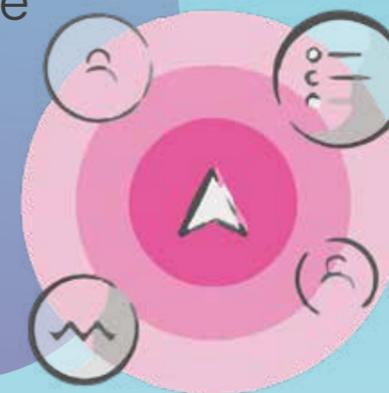
Data champions are very rare, very valuable individuals who sit at the intersection of business and data.

They are the business people – super-smart employees who have insightful perspectives on the business problems for which they strive to apply data solutions.

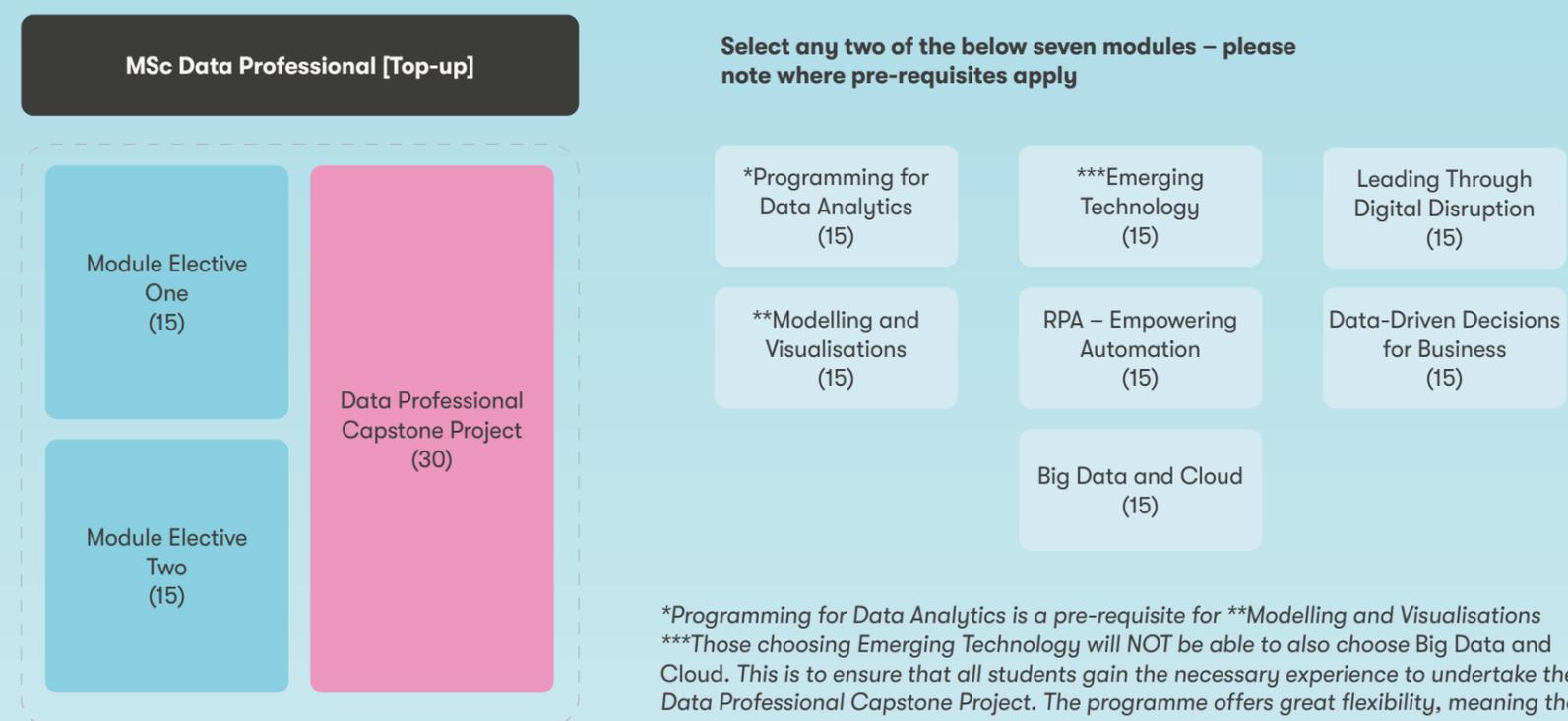
They are not necessarily operating in dedicated data analytics roles, but they understand the competitive requirements of the business in addition to the ability to expertly use the tools to explore data, unlock its value and make data-driven decisions.

Empowering people to become more capable with data will enable them to think about their business in new ways; these are the people that will deliver the greatest value to the business over the next decade.

We will begin this next decade with **25 times as much digital data** on this planet as we had in the year 2010.



How is the programme structured?



The modules on this programme have been designed in conjunction with industry-leading employers to meet the demands of the modern workplace. They expertly complement your professional training, ensuring that you are well versed in relevant aspects of technology to develop your career. The programme is extremely flexible, meaning that you can choose the modules most relevant to your job and aspirations.

Data Analytics



Programming for Data Analytics

- Configuring, Writing and Structuring Code
- Designing and Testing Code
- Object-Oriented Programming
- Data Analysis Using Code Libraries
- Loading and Treating Datasets from Different Sources
- Visualising Results
- Data Analysis with Python
- Alternative Languages, Libraries, and Programming Tools



Modelling and Visualisation

- Extending Perception
- Exploration and Inference
- Regression Analysis
- Classification Using Naïve Bayes
- Evaluating Machine Learning Algorithms
- Visualisation and Learning
- Classification Algorithms
- Extending Perception
- Codifying Analytic Modelling and Visualisation

Digital Transformation



Emerging Technology

- Emerging Technology and Horizon Scanning
- Data Privacy
- Cyber Security
- Importance of General IT Controls
- IOT and Drones, Use Cases for the Workplace
- Block Chain and the Distributed Ledger Revolution
- Leveraging Audit Analytics
- The New Realities of Tomorrow



RPA – Empowering Automation

- Fundamentals of RPA
- Tooling Available for RPA
- Intelligent Automation
- Business Process Automation
- Extracting and Moving Data with Bots
- Low-Code RPA Experiences
- Automated Conversations
- Implementing RPA into Business



Big Data and Cloud

- Big Data Properties
- Evaluating Cloud Platforms
- Sources of Big Data
- Computational Resources for Big Data
- Architectures for Big Data
- Implementing and Evaluating an Architecture
- Big Data Analytics
- Directions of Big Data

Leadership



Leading Through Digital Disruption

- Leading in digital disruption
- Sensing the change
- Making informed decisions
- Leading change and transformation
- Creating digital ready cultures
- Leading high performing teams and building networks
- Creating your ethical leadership style
- Leadership and personal development



Data-Driven Decisions for Business

- Introduction to data driven decision making
- Data users and sources
- Statistics and data techniques
- Data ethics and regulation
- Identifying and meeting stakeholder needs – managing bias
- Data visualisation and reporting
- Advanced analytics and machine learning fundamentals
- Continuous development in data analysis

Data Analytics Project

Identify a business issue related to data analytics

Solve a business problem by applying a data science solution

Conduct a research project that is both creative and original

Work with extensive data sets from different sources, of different types and of different quality

Demonstrate the planning and implementation of a data project

How is this programme delivered to your employees?

- > All BPP data programmes are delivered online live, providing ultimate flexibility and efficiency for your business
- > There are three modules in total, with two modules as elective content and one based on a project which will positively impact your business
- > Employees are required to attend two x 2-hour live and interactive lectures each week using premium virtual classroom software product
- > Five formal lectures followed by one-to-one project supervision meetings
- > Via engaging e-learning content that includes video lectures, digital reading and case studies delivered on the BPP learning platform and available 24/7
- > Learners are required to demonstrate the ongoing application of skills to their job role throughout assessment and their final project

How we support your employees

We place great emphasis on the importance of programme support and the value it can bring to your employees' experience.

- > Guidance from expert tutors – our tutors are highly qualified professionals who have been recruited from industry. This allows them to bring real-life examples and case studies to their lessons
- > Additional learning content – to enhance knowledge beyond the apprenticeship curriculum, your employees will be provided with access to Pluralsight and LinkedIn Learning. These feature short video courses, technical assessments and discussion boards which cover a range of specialised topics that are highly desired within the sector. New courses and new topics are added daily

How is the programme structured?

The programme is structured with modules available for learners to join in each term. This is completed in 16 months or can be fast-tracked over 12 months. The programme is structured to support learners who may already be employed in extending themselves and therefore does take account of the working hours and commitments.

The MSc Data Professional [Top-up] has been developed to support the development of data skills required by modern professionals. It provides learners and employers with the opportunity to future-proof their skillset and enable greater understanding of key themes which are impacting the workplace such as Data Analytics, Digital Leadership, Big Data and Automation.

Assessment

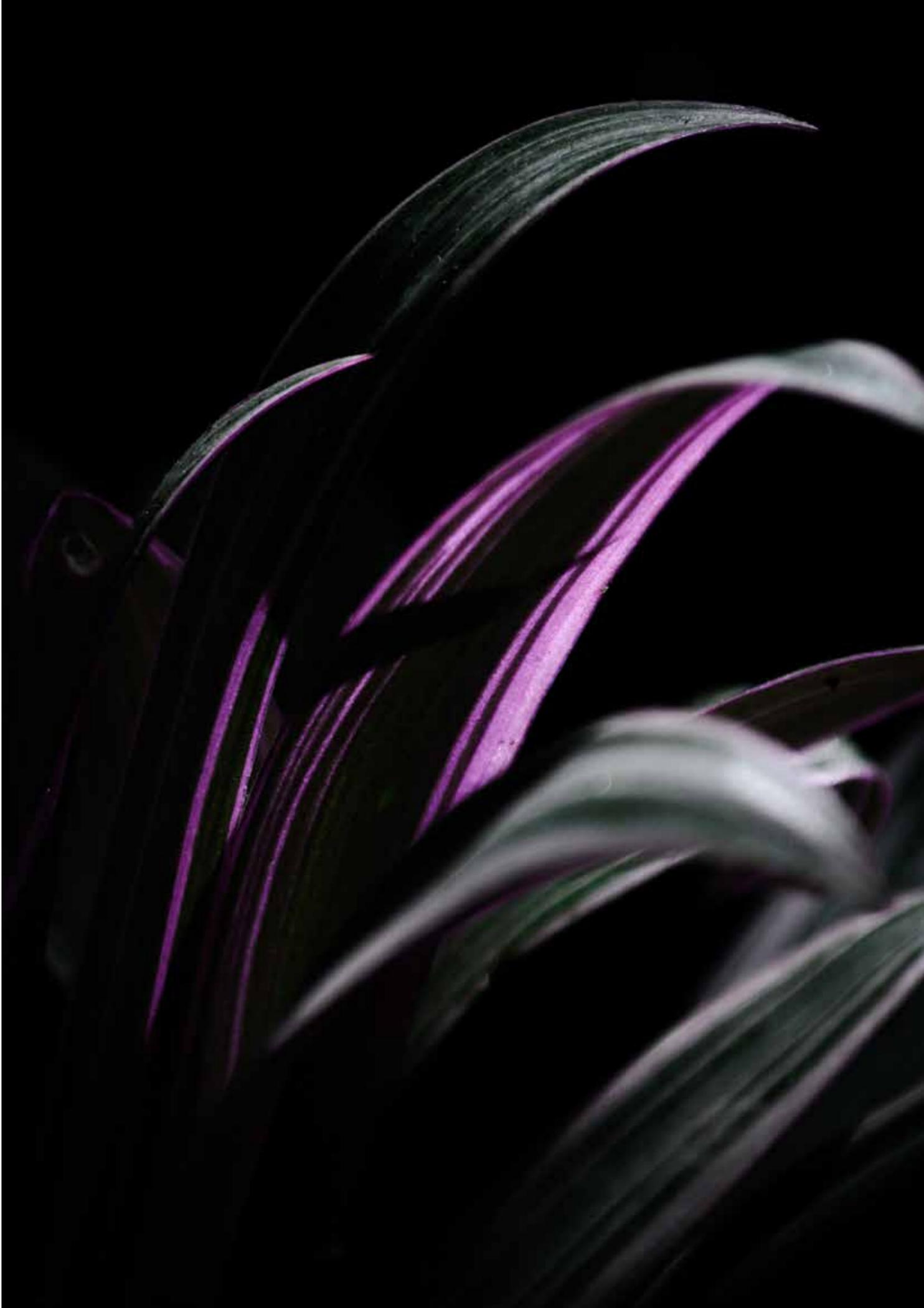
Each module is assessed through detailed assessment which ensures that they are constantly developing and practising their skills.

Entry requirements

As this programme is a top-up it requires that students already have an existing professional qualification and membership from a recognised institute or they need to have completed a relevant level 7 (non-degree) apprenticeship.

Cost

£3,600





For more information please contact:

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Disclaimer: This information is accurate as at the date of publication, February 2022. It is subject to change. This document is for guidance only and does not form part of any contract.

For more, visit www.bpp.com.

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