

**A Guide for Employers**

# Chemical Science Higher and Degree Apprenticeship



# What is the Chemical Science Higher and Degree Apprenticeship?

The Chemical Science Higher and Degree Apprenticeship is an established industry-driven and government-supported approach, which will enable businesses to develop their own graduate employees in this area of skills shortages. It is an innovative work-based programme bringing degree education into the workplace.



The programme combines and embeds business improvement, scientific knowledge and technical skills that are highly valued within the workplace. It has been developed in close conjunction with industry and apprentices can ultimately graduate with a BSc (Hons) Chemical Science Degree and register for Registered Scientist (RSci) status – one of several recognised professional status levels from the Royal Society of Chemistry. The University is also professionally endorsed by the Skills Funding Agency.

Participants will develop as confident and capable science professionals in their organisation by integrating academic learning and practical on-the-job training.

## Our track record

Since 2011, Manchester Metropolitan University has run a novel and very successful FdSc Chemical Science course, which was specifically developed to accommodate the needs of employers in the UK Chemical Industry, for both technical laboratory and process operator employees. It is now possible to obtain a full honours degree with a further two years of study.

## Who should apply

The Chemical Science Higher and Degree Apprenticeship is suited to those looking to begin or develop a career in a variety of roles, including:

- Team Leader
- Technologist
- Laboratory Analyst
- Laboratory Manager
- Senior Scientist
- Senior Manager
- Process Operations Manager

We also place a strong emphasis on developing reflective practitioners - scientific professionals who can plan and manage their own future careers.

## How does the apprenticeship work?

Apprentices work full-time whilst studying towards an FdSc Chemical Science, and if continuing, a full BSc (Hons) Chemical Science qualification. Students study a tutor supported e-distance learning curriculum and attend annual residential schools, which is equivalent to 31 working days over the five-year programme.

The programme is flexible so that employers and apprentices can choose elements that are best suited to meet specific business requirements. The work-based projects, negotiated with employers, offer students the opportunity to apply their learning directly to their organisation and its business context.

## Features and benefits

- Grow your own graduates: both existing staff and new employees will develop skills and knowledge that are directly relevant to solving technical and strategic business issues.
- Attract enthusiastic and talented students/employees in this area of skills shortages.
- Flexible assessments tailored around the job role of the apprentice.
- Utilise targeted government funding and incentives to retain and prepare staff for a significant future within your organisation.
- Develop a strong long-term relationship with Manchester Metropolitan University.



## Employer engagement with the apprenticeship

- Employers enter into a knowledge partnership with the University, where a challenging but flexible curriculum will be delivered.
- Employers will extend the learning beyond the classroom by giving apprentices a work programme, which allows them the opportunity to turn theory into practice. This will enable the development of skills (relevant to the organisation), where outputs with real business value will be achieved.
- As employees, apprentices are subject to normal terms of employment. It is expected that apprentices will be offered a competitive salary in order to attract and retain good quality candidates.
- Recruitment of the apprentice (and subsequent enrolment) is best managed via a collaborative approach involving the employer and the University.
- A flexible work schedule will need to be designed, which allows time to study and attend the University for appropriate residential activities. The mode of delivery will remain consistent throughout, namely a blended approach that includes distance e-learning and annual residential stays at Manchester Metropolitan University with a heavy emphasis on work-based learning. All degree apprentices will have full access to a wide range of University facilities e.g. library and advanced laboratory instrumentation.
- All apprentices will require a workplace mentor who will oversee their work and development, coordinating projects and learning with the University programme team.

## When does the apprenticeship start?

Apprentice recruitment and applications will normally take place between January and July, with University induction in mid-September. Employer recruitment should start as early in the year as possible in order to attract the best candidates.

## Tuition fees and incentives

Businesses with a payroll below £3 million will only have to pay 10 per cent of the training fees for apprentices. Additionally, businesses with fewer than 50 employees, who choose to recruit an apprentice under 19-years-of-age, will pay no fees at all.

Businesses with a wage bill in excess of £3 million will have to pay the Apprenticeship Levy, a 0.5% contribution to spend only on apprenticeship training. Businesses can use these funds to pay for tuition fees. If an employer spends more on apprenticeship training than they have levy credit, they will only have to pay 10 per cent of the training fees.

All businesses employing an apprentice under 19-years-of-age, a care leaver up to 24-years-of-age or an adult with additional needs will qualify for an extra support payment of £1,000.

If you are unsure what funding your business will be eligible for please contact us to discuss your own situation.

## Course structure

Typical units of study may include:

### Year 1

- Chemical Concepts 1  
(Physical, Inorganic and Organic Chemistry)
- Health, Safety, Environment and Functional Skills
- Laboratory and Scientific Skills 1

### Year 2

- Business Improvement
- Chemical Concepts 2  
(Advanced Physical, Inorganic and Organic Chemistry)
- Laboratory and Scientific Skills 2

### Year 3

- Environmental Management and Sustainability  
(for the Chemical Sector)
- Negotiated Learning Contract  
Subject to demand and availability.  
*Options may include Analytical Chemistry and Introduction to Polymers and other Materials.*

After three years apprentices will be awarded the Higher Apprenticeship and the FdSc Chemical Science. With agreement of their employer, apprentices can continue for two further years to complete the full BSc (Hons) Chemical Science qualification.

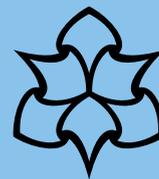
### Year 4

- Advanced Chemical Concepts A  
(Further Inorganic and Organic Chemistry)\*
- Work-based Project and Professional Development

### Year 5

- Advanced Chemical Concepts B  
(Further Inorganic and Physical Chemistry)\*
- Advanced Topics (in Applied Chemical Science)

\*There will be a requirement to attend some scheduled laboratory classes at the Manchester Campus during the Autumn term.



## Frequently asked questions

### Who is eligible to apply?

Direct entry from school or college will normally require three A levels (with one being Chemistry, Maths or Physics) or equivalent, equating to a minimum of 88 UCAS tariff points. For those in relevant work, suitability is assessed on an individual basis.

Applicants must also be able to demonstrate the following:

- Current full-time employment in a chemical process-related business in the UK.
- A workplace structure that can support secure verification of submitted work, in accordance with the guidelines laid down in the Institutional Code of Practice for Work-Based and Placement Learning.

### Can existing employees apply?

Yes. As long as they meet the entry requirements or have suitable work experience, they can apply for the programme. There is no age limit.

### How many apprentices will Manchester Metropolitan University accept from each organisation?

There is no minimum or upper limit for the number of apprentices that can enrol from each company.

### Do apprentices have to work within the local area?

No. Manchester Metropolitan University provides a flexible programme of study, making the programme accessible to degree apprentices across the UK.

### Do apprentices work when the University is in recess?

Yes. Apprentices are full-time employees and perform duties in accordance with the employers' needs as with all apprenticeships.

For more information, please visit:

**[www.mmu.ac.uk/apprenticeships](http://www.mmu.ac.uk/apprenticeships)**



## Contact

### Apprenticeships Team

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