



Met Office

Frontier

Make a difference with a career in world-class IT
Met Office Industrial placement prospectus



1. Our world-leading organisation

If you watched, listened to or read the news this morning it is likely that the Met Office played an important part in much of the coverage, over and above today's weather forecast. The Met Office is perhaps most recognisable from national television weather bulletins and supplies other media outlets, such as national and local radio stations, with daily weather summaries.

Behind the scenes, our accuracy in forecasting, advising and warning governments, businesses and individuals what the weather has in store for the next hour to season ahead is unrivalled. No other national meteorological service in the world interprets and applies its forecasts in the same level of detail to meet individual customers' needs. Synonymous with both the weather and climate change, the Met Office can predict the future climate from one year to a century ahead and, in applying this skill, guide customers to avoid risks and exploit opportunities in a rapidly changing world.

Successfully exploiting Information Technology (IT) is crucial to the overall success of the Met Office as a business.

To achieve our vision of being recognised as the best weather and climate change service in the world, we need to attract staff with the potential to make a long-term contribution to our IT systems and are seeking to fill a range of positions in IT.

We aim to recruit ambitious and capable people to join our Industrial Placement Scheme where you will get the opportunity to work in a variety of IT support and development areas.



2. Areas of work

At the Met Office, we get reliable information on the weather and climate out to customers — fast. This information consists of automated and human intervened products and services with inbuilt quality control to ensure that accuracy and timeliness are maintained at all times.

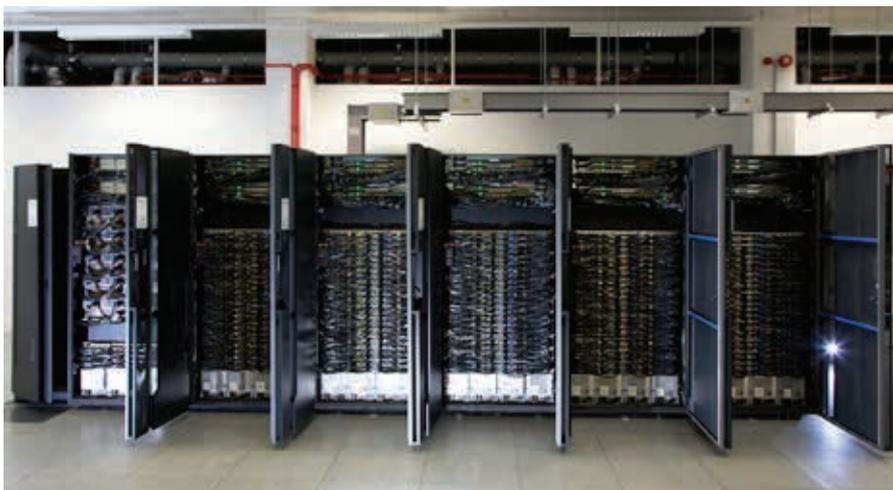
The raw data in our forecasts comes from around the world — from satellites and radar, as well as ground- and ship-based observing stations. This requires a complex networking infrastructure that is linked to other meteorological organisations. Our Unified Model, used to predict the weather, is run on a supercomputer which is as powerful as around 100,000 home computers and works 24 hours a day. In addition, Met Office scientists rely on a network of Linux computers to handle the large volumes of data required and for visualising model output and creating forecasts.

The Technology and Information Services (TIS) Programme is organised into three Sub Programmes, a Service Transition area, and an Information Assurance and Security Area.

The Sub-Programmes ensure effective end-to-end delivery, from concept, through development, to operational service delivery and finally to retirement of the systems within that sub-programme. Each sub-programme is necessary to support the needs of our business and, most importantly, those of our customers.

Service Transition co-ordinates the many service providers, suppliers, development and project staff involved with a new release of software and associated hardware and documentation. Its goal is to take a holistic view of changes to IT services to ensure that all aspects, both technical and non-technical, are considered together.

Details of the systems operated in each sub-programme and the responsibilities of the service transition team are listed over the page.



a.

Core data sub-programme

This area is responsible for IT Core Data Systems which include:

- Weather observation IT systems.
- Weather data storage systems.
- Core productions and verification systems.
- Numerical Weather Prediction post-processing systems.
- IT systems supporting scientific analysis, visualisation and data display.
- IT systems supporting corporate management information including finance, HR etc.

<p>b.</p> <p>Applications sub-programme</p>	<p>c.</p> <p>The infrastructure sub programme</p>	<p>d.</p> <p>Service transition</p>	<p>e.</p> <p>Information assurance and security</p>
<p><i>This area is responsible for developing and supporting Met Office applications and Application systems which include:</i></p> <ul style="list-style-type: none"> • Production IT systems such as forecasting visualisation tools. • Web systems such as web based commercial applications. • Customer specific IT systems for customers such as the Environment Agency and Ministry of Defence. 	<p><i>This area is at the core of providing Information and communication technology (ICT) for the Met Office, with responsibility for implementing and operating all underpinning ICT platforms.</i></p> <p><i>The scope of work of the Infrastructure sub-programme includes:</i></p> <ul style="list-style-type: none"> • Providing the Met Office High Performance Computing environment, key for the running of operational forecasting models as well as underpinning scientific research into both weather and climate forecasting; • Delivering Windows and Linux based server estate providing the systems that underpin our daily operational workloads; • Enterprise storage for both the server estate and desktop systems including a MASS system for archiving research and operational data; • Networks including our Local Area Network (LAN), Wide Area Network (WAN), connection to the internet and other external networks; • User focussed services including a Windows and Linux based desktop, user remote access, fixed and mobile telephony; and a strategic development group investigating how emerging technologies can be brought to bear to support future Met Office requirements. 	<p><i>Service Transition responsibilities include:</i></p> <ul style="list-style-type: none"> • Planning and overseeing the successful handover of services to our 24/7 Production environment. • Testing (including load testing) the full diversity of our product set from the scientific development to the deployment of applications to the latest technology sets including mobile and web applications. • Taking corporate responsibility for knowledge management and the integrity of software through configuration management. • Managing customer and user expectations of releases and roll-outs. 	<p><i>This area is responsible for:</i></p> <ul style="list-style-type: none"> • Maintaining an appropriate level of accreditation for all Met Office information systems which is compliant with government security policy and aligned to business need. • Providing policy and technical guidance for all information and IT related security matters. • Assisting all business change activity with the assessment and mitigation of information and IT security risks. • Managing and investigating any IT security incidents. • Monitoring technology developments which have the potential to reduce information security risk and/or enhance business flexibility and capability.

We are currently looking to assign entrants to our industrial placement scheme which will last for 12 months.

These opportunities will be in the areas listed below, depending on our operational needs.

Infrastructure Sub Programme

Distributed Information Systems (DIS)

The DIS team is responsible for providing desktop and server environments within the Met Office, providing a mixture of Windows and Linux based systems.

The desktop estate consists of some 1,200 Windows desktops with an additional 500 laptops and over 600 Linux desktop systems used by our scientists. The desktop service also provides email facilities, file servers and authentication services both at Exeter and our remote sites.

The server estate underpins the operational delivery of services to customers from the Met Office and includes significant use of hardware virtualisation technologies in addition to traditional physical servers. Working in this area will also involve significant overlap with other teams within the Infrastructure Sub Programme.

This placement offers our trainees the opportunity to experience a wide variety of work covering multiple technologies. It will provide you with a good knowledge of the IT that underpins the day to day running of the Met Office.

Networks and Telephony

The Networks and Telephony team is responsible for providing our LAN and WAN, remote access solutions for staff and links to the external world either via the internet or direct connections. The team also provides the telephony services for the Met Office covering both fixed line and mobile solutions.

The network is the backbone of the Met Office IT infrastructure and as such the team is involved in a wide variety of activities from service delivery and operational running of the IT through to providing expertise on development projects. One of our key tasks currently is providing a corporate Wi-Fi solution at the Met Office HQ in Exeter.

This placement enables our trainees to have a good understanding of the topology of the Met Office IT systems. It will introduce trainees to the challenges of providing such facilities in a corporate environment such as the Met Office.

Applications Sub Programme

Web Presentation team

This group is responsible for projects that deliver new systems and services for commercial customers that generate additional revenue or save operating costs. With the majority of applications for the commercial area based on the internet, web development is a key area for the team.

As well as experiencing some of the pressures associated with working in a commercial environment, a placement with this group presents opportunities to learn new skills associated with leading technologies.

Web Applications team

The Met Office external website and mobile applications attracts up to 40 million visits per month. It provides a free public weather service, pay-per-view and value added services, climate data and research material as well as corporate, business and reference information. Services are delivered on both pull and push http and ftp technology.

Meanwhile, the Met Office intranet — known as 'MetNet' — is increasingly relied on as a key internal communication tool.

The team is organised into two sections:

1. Provides support for internet and intranet services; and
2. Designs web pages that meet html and accessibility standards. This involves taking content supplied by other parts of the Met Office and turning it into compliant web pages.

Software Solutions

Software Solutions is responsible for delivering all defence based applications and data based products that feed applications including the National Severe Weather Warnings System and Space Weather. The team is currently working on a set of projects that are aiming to deliver the Met Office Product Strategy, which is one of the major strategic activities that the Met Office will be conducting over the next few years.

The team use a wide range of technologies from Oracle databases, HTML and javascript and Java. We have project opportunities that can make use of a wide range of development skill levels, both helping to grow the individual's development skills, and be used by the Met Office in a production environment.

Core Data Sub Programme

Analysis Visualisation and Data (AVD) team

The AVD team develops, maintains and supports the key visualisation and analysis software used throughout the Met Office, primarily in research but also on several operational platforms. The team is currently refreshing the tools and libraries currently available to Met Office scientists and is leading the way in providing open source software to the external research community.

It also provides best practice advice and governance in data processing and programming methods for visualisation and analysis.

Data Service team

With ever increasing volumes of data and the demand for improved services to derive benefit from those data, the Data Services team is critical to many customer-facing projects in developing tools and data solutions to store, manipulate, process and deliver data and derived data services.

Operational NWP Suite team

This team is responsible for running the Numerical Weather Prediction (NWP) forecast models on our supercomputer. These models must be robust and run 24x7x365, as they produce the forecasts for all Met Office products and services.

Much of the work is in a Linux environment for controlling the model runs, troubleshooting and model upgrades. A placement in this team would give a good understanding of the supercomputer environment and knowledge of how weather forecast models work.

Service Support team(s)

These teams support many of our key operational services:

- Message switching systems exchange meteorological data and products with weather services around the world.
- Processing and presentation rainfall satellite and radar data.
- Production of our location specific forecasts.

They maintain the availability of these services, fix problems and make improvements. They have a thorough understanding of how observations and model forecasts are used to create products and deliver them to customers. These teams provide valuable experience of the production environment and change management.

Geographical Information Systems team

The two main aspects to this small team are:

- Managing digital maps within in the Met Office providing a central source of up to date digital maps and geographical information that are used throughout the Met Office by IT systems and direct users.
- Providing and supporting ArcGIS toolsets used to process map data to generate products and services and to conduct tailored analyses for business.



Information Assurance

Information Assurance and Security team

Access to reliable, available information is crucial to the Met Office business. The Information Assurance and Security team is responsible for the evaluation and establishment of a wide range of technical and other means by which we control, secure and protect our information. This involves not only the technical aspects of day to day operations but also the risk assessment and providing security guidance to development projects, providing security advice to the general business and the demonstration of compliance with government legislation, regulation and best practice.

Service Transition

Testing team

This team is responsible for the testing phase of software development at the Met Office. It is involved in several stages of the development lifecycle with the goal of ensuring the delivery of high quality services into the live environment by detecting defects as soon as possible in the lifecycle, thus avoiding incidents that may impact the customer.

The team uses a variety of methodologies to ensure that our software is as robust as possible, ranging from traditional testing methodologies to cutting edge techniques such as cloud testing and crowd testing. Your experience here will give you an insight into the whole software development process and help to contribute to ensuring the quality of the services we provide to our customers.

Configuration Management team

A crucial part of the software development process is the aggregation and control of the source code. This team works with the developer community to ensure that the source code is secure and then builds that code into larger applications for delivery into the testing or production environments.

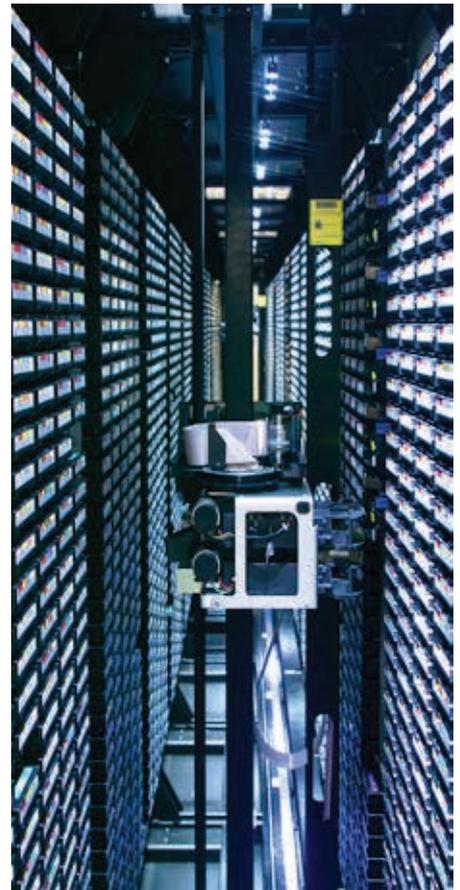
The team uses a combination of specialist tools to streamline the activity and to ensure that the right applications are built and delivered to the right place at the right time. Working with this team will provide an opportunity to gain a sound understanding of this vital part of the service delivery process.

Operations Programme

Operational Service Desk

The Operations Centre is at the heart of the Met Office's around-the-clock service capability, performing key roles in terms of business continuity, production and specialist weather forecasting.

The Weather Desk team, which consists of the Delivery Support, Service Desk and the Customer Centre, is the first point of contact for Met Office customers, providing frontline support and assistance while ensuring all contact is handled efficiently and professionally. It is also the first port of call for any IT issues that Met Office staff may have.



3. Selection process

This is a competitive selection process and we expect a large number of high quality applications from candidates who show the right skills, a clear potential to develop further, and the right attitude in line with our corporate values.

The first stage in this process involves you in the completion of an online application form. It's essential that you use the application form to provide all the relevant information which may help us accurately assess your suitability.

You'll find guidance on how to complete your application form with examples on our careers website at:

<http://careers.metoffice.gov.uk/current-vacancies>

You should provide details of the work you have been involved in, or areas of IT that you have a keen interest in and knowledge of. We also want to know why you want to work at the Met Office and what you can offer us in terms of skills and commitment.

To ensure that you stand out from the competition, on your application form you may want to indicate the areas of work where you feel you have particular expertise and how this might benefit our business.

4. Entry requirements and selection criteria

The IT Industrial Placement is open to students studying for a degree which incorporates a placement year (usually between year two and three of your degree).

We will assess the suitability of every applicant against the same set of criteria. These are set out below. Essential criteria represent the skills, knowledge and overall attributes you must have to be considered for the next stage. You need to ensure that you structure your application so that you address each of these essential criteria.

Essential criteria

1. Studying for a degree (which incorporates a placement year) with a significant numeracy, science and/or IT element.
2. Knowledge of at least one programming language.
3. A keen interest and actively keeps up to date with current and future IT developments.
4. Effective analytical and problem solving skills.
5. Ability to plan and organise work using your own initiative.
6. Evidence of good oral and written communication skills.

Desirable criteria

1. An appreciation of customer needs and the importance of good customer service.
2. Proven ability to work well as a member of a team.
3. Practical knowledge or experience of IT.
4. Current participant of the British Computer Society's Professional Development Scheme.

5. How to apply

By clicking apply on the vacancy page, you will be taken to the Met Office TalentLink where you will need to create a log in, develop your profile with your personal details, and then answer the application form questions. You will then submit your application online.

If you meet the sift criteria but have been interviewed two or more times for the same or a similar job within the past two years, it will be up to the recruiting manager's discretion whether to offer you an interview.

If you have any questions about the application form or recruitment process please contact HR on hrenquiries@metoffice.gov.uk or call **01392 885000**.

If you have any technical issues with TalentLink please contact the Weather Desk on customercentre@metoffice.gov.uk or call **01392 885680**.

6. Assessment day

If you are successful in your application you will be notified and invited to an interview at our headquarters in Exeter at the beginning of May. The interview will give you an opportunity to learn more about us and what we do and what it would be like to work at the Met Office. It will give us the opportunity to assess your suitability for one of our industrial placement opportunities.

7. Rewards, benefits and facilities

We aim to ensure that our employees are appropriately rewarded and recognised for their achievements and contribution to the success of the Met Office, and are motivated to use their skills and expertise for the benefit of our customers. Our comprehensive and competitive reward package comprises:

Basic pay

You will be paid £14,700 per annum plus Civil Service pension and benefits (see opposite).

Type of appointment and hours of work

All appointments are permanent. Normal working hours are 37 per week, Monday to Friday.

Annual leave and time off

Working at the Met Office you will receive 27.5 days plus eight public holidays. After five years service, the basic 27.5 days annual leave rises to 32.5 days.

Pension

On appointment you will automatically qualify to join the Principal Civil Service Pension Scheme that includes a programme for new entrants called “Nuvos”. This benefits scheme also includes death and injury benefits and more details can be found at www.civilservice-pensions.gov.uk

Learning and career development

The Met Office is committed to the training and development of all its employees and holds Investors in People status.

Your Line Manager will compile a personal Training and Development Plan shortly after you take up your appointment and this will be informed by our Skills Framework.

Technical staff have the opportunity to attend conferences and seminars and take part in a variety of projects and investigative work. We also offer mentoring schemes and pay for professional subscriptions, honours and awards for excellence.

Wellbeing

For your wellbeing we offer free eye tests for visual display unit users and free access to our occupational welfare programme “Right Corecare” should you need to use it.

Sports and social

Our headquarters in Exeter has a fully-equipped gymnasium and fitness suite. In addition, you will be able to join the Met Office Sports and Social Association that provides a range of subsidised recreational activities.

Trade Union membership

The recognised Trade Union for Met Office employees is Prospect. Currently membership is in excess of 70% of employees.

Working environment

Our headquarters in Exeter is easily accessible and is just one minute from junction 29 of the M5 (A30 Honiton junction). We have free parking and a restaurant, coffee bar, seating/relaxation areas, cash point and a well-equipped shop — all on site.

8. Guaranteed interview scheme for disabled applicants

To widen the pool of candidates from which to draw, we guarantee an interview to any disabled applicant who meets the published minimum criteria for the post / entry level.

To qualify for a guaranteed interview, you do not have to be registered as a disabled person but you must have a disability or long-term health condition that puts you at a substantial disadvantage in either obtaining or keeping employment. The disability must be likely to last for at least 12 months.

To apply for a guaranteed interview, please complete the appropriate section of the application form. If appropriate, you should provide details of any particular arrangements you will require for the interview, e.g. car parking, speech facilitator. Any false declaration of disability to obtain an interview may invalidate any resultant contract of employment.

9. Nationality

In common with all United Kingdom (UK) Civil Service departments and Executive Agencies, applicants for employment by the Met Office are required to satisfy certain nationality requirements. For full guidance please go to <http://www.bia.homeoffice.gov.uk/visas-immigration/working/>

Again, in common with the UK Civil Service, some posts at the Met Office are reserved for UK nationals only. Applicants who are not UK nationals should be aware that further career prospects might be affected.

10. Diversity and equality

The Met Office is an Equal Opportunities employer and maintains a culture that values ability, difference, openness, fairness and transparency. We do not discriminate on the grounds of race, colour, gender, nationality, ethnic or national origin, religion, gender reassignment, pregnancy, age, sexual orientation, family status, physical or mental disability, trade union membership or any other irrelevant factor.

The Met Office is committed to working towards an even more diverse organisation and to valuing and utilising the visible and non-visible individual differences that people bring.

This includes working to ensure there are no barriers implicit in our policies and procedures which prevent individuals from performing to the best of their ability, along with creating a positive and open environment in which to work.

11. Civil service recruitment code

The Met Office's recruitment processes are underpinned by the principle of selection for appointment on merit on the basis of fair and open competition as outlined in the Civil Service Commissioners' Code which can be found at:

<http://civilservicecommission.independent.gov.uk/>

If you feel your application has not been treated in accordance with the Code and you wish to make a complaint, you should contact the hrenquiries@metoffice.gov.uk mailbox or telephone 01392 885000 in the first instance. If you are not satisfied with the response you receive from the Met Office, you can contact the Office of the Civil Service Commissioners.



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Photographer: Matt Clark, Instrumentation Scientist

For more information visit
www.metoffice.gov.uk or call our 24-hour
Customer Centre on 0870 900 0100.

Met Office
FitzRoy Road, Exeter
Devon, EX1 3PB
United Kingdom

Tel: 0870 900 0100
Fax: 0870 900 5050
enquiries@metoffice.gov.uk
www.metoffice.gov.uk

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