****** **STFC Graduate Vacancies 2017**

**All STFC Graduate Vacancies are live now and accepting applications.**

**CV and covering lettering MUST be submitted before the closing date: Wednesday 16November 2016*.***

**ALL our vacancies can be found** [**here**](http://www.topcareer.jobs/home/STFCGraduates.aspx)**, the UK Shared Business Service (**[**UKSBS**](http://www.uksbs.co.uk/Pages/default.aspx)**) handle all vacancy applications made to STFC.**

**If you have any problems applying please ring: 01793 867003 (8.30am – 5.00pm Monday to Friday), quoting the appropriate IRC reference number.**

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| **Vacancy** | [IRC230974 Graduate Trainee - Graduate Electrical/Electronic Engineer](http://www.topcareer.jobs/Vacancy/irc230974_6676.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) |
| **About the roles** | **Three posts are available within our ISIS and RAL Space departments. Applicants will be considered for each post available and if selected may be contacted by more than one Hiring Manager to undertake a telephone interview, the first stage of the selection process** |
| [**ISIS**](http://www.stfc.ac.uk/research/our-science-facilities/isis/)The ISIS Neutron and Muon Source delivers high intensity proton beams to two target stations to generate neutrons for condensed matter research. Machine operation requires a comprehensive knowledge of beam dynamics which are measured using a suite of beam diagnostic systems. The Diagnostics Section within ISIS are responsible for the design, installation, maintenance and operation of all beam diagnostic devices and their associated electrical, electronic and computer systems. In addition, the Diagnostics Section has an active programme for the development of novel diagnostic systems which often require unique electronic and electrical solutions. The successful candidate will design and upgrade analogue and digital electronic systems and associated electrical systems as required by the Diagnostic Operations and Obsolescence programmes. Assist with the installation and maintenance of all diagnostics systems within the synchrotron environment. This will require the candidate to become a classified radiation worker.[**RAL Space**](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/ral-space/)RAL Space has a long-standing heritage of excellence in space-flight going stretching back over 50 years and with significant involvement in over 200 space missions.  The Imaging Systems Division builds camera and electronic systems for space-flight and hence quality and reliability are the hall marks of our work which is to ISO9001:2008 standard.  An opportunity exists with this group, whereby you will be involved with; the conception, design and layout of analogue and digital circuits, functional testing and analysis of electronic circuit boards and electronic systems. Producing engineering drawings required for manufacture and writing of specifications, test plans, test reports, other documentation as required |
| **Vacancy** | [IRC230975 Graduate Trainee - Graduate Electrical/Electronic/Control Engineer](http://www.topcareer.jobs/Vacancy/irc230975_6677.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) |
| **About the roles** | **Five posts are available within our ISIS department but in different groups. Applicants will be considered for each post available and if selected may be contacted by more than one Hiring Manager to undertake a telephone interview, the first stage of the selection process** |
| The [ISIS neutron and muon source](http://www.stfc.ac.uk/research/our-science-facilities/isis/) is a world-leading centre for research in the physical and life sciences. At the heart of the facility is an 800MeV accelerator (synchrotron) which fires protons into a spallation target to produce the neutrons and muons which are in turn used as probes to investigate a very wide range of materials. The ISIS Electrical Engineering teams provide professional engineering support across the complete ISIS Neutron Science facility from the accelerator, targets, neutron beam-lines and specialist user equipment.  The diverse nature of the facility is mirrored in its variety of electrical systems: megawatt power supplies and distribution networks, personnel protection systems, PLC and relay based control system, magnet power supplies, motion control and vacuum systems. All of these encompass novel uses of both established and emerging technologies.Key duties will include working on projects from concept through to commissioning. Producing designs and concepts through the use of CAD systems. Provide technical support to assist with operations, maintenance and repair where necessary. Work with a wide range of colleagues across multiple disciplines, including technical, scientific and administration.The SCADA section sits within the Electrical Engineering Group of the ISIS Accelerator Division. The section is responsible for the monitoring and protection of all magnets, power supplies, water plant and vacuum systems, as well as motion control of neutron choppers. Programmable logic controllers (PLC), LabVIEW based systems and custom electronics are used extensively.An opportunity exists to join this group where you will be designing from specification of PLC, PXI systems and Beam Line Chopper Drive systems, manufacture control system hardware, such as PLC panel and junction box wiring, PCB assembly and cable termination. You will also program PLCs, HMIs & motor control systems |
| **Vacancy** | [IRC230976 Graduate Trainee - Graduate Mechanical Engineer](http://www.topcareer.jobs/Vacancy/irc230976_6678.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) |
| **About the roles** | **Five posts are available within our ISIS, RAL Space and Technology departments. Applicants will be considered for each post available and if selected may be contacted by more than one Hiring Manager to undertake a telephone interview, the first stage of the selection process.** |
| [**ISIS**](http://www.stfc.ac.uk/research/our-science-facilities/isis/)The ISIS neutron and muon source require professional engineers to maintain and enhance the facility to ensure it remains a world leading facility. Graduate Mechanical Design and Project Engineers play a key role, providing a unique opportunity for a wide variety of design, analysis and project engineering experiences across exotic materials, cutting edge joining techniques, high precision moving equipment and powerful magnets. The ISIS Design Division provides professional engineering support across the complete ISIS Neutron Science facility from the accelerator, targets, neutron beam-lines and specialist user equipment.  The diverse nature of the facility is mirrored in its variety of mechanical systems: state-of-the-art precision mechanisms and motion systems, high power magnets, cryogenic and vacuum systems, very high pressure and extreme temperature sample environment systems.   All of these can encompass novel uses of both established and emerging engineering materials and manufacturing techniques. Key duties of this role will be to deliver engineering solutions for scientific requirement and to be involved in each aspect of the delivery process from engineering concept, design, procurement, installation/commissioning, testing to final reporting[**RAL Space**](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/ral-space/)RAL Space has a long-standing heritage of excellence in space-flight stretching back over 50 years and with significant involvement in over 200 space missions.  Mechanical Engineering Group within RAL Space requires a graduate mechanical engineer to join the team of engineers working on a number of different projects which will involve: designing of space and ground-based hardware plus associated test equipment from concept through to production, testing and delivery. Supervision of the mechanical aspects of assembly, integration and testing, taking a hands-on approach where appropriate. Contribution to the creation of proposals for new projects with conceptual CAD models, analyses, cost, mass and schedule estimates.The Thermal Engineering Group within RAL Space requires Space Systems Thermal Engineers to join them designing, developing and testing spacecraft scientific payloads, ground-based space instruments and calibration equipment. The main duty of this role will be to use sound mechanical engineering principles to develop thermal control systems; from initial concept designs through in-depth design and specification, to hardware assembly. A key part of this work will be to perform computer based analysis (using the ‘ESATAN-TMS’ software) and hand calculations to predict and verify the thermal performance of the instruments and as tools to optimise their thermal control systems.[**Technology**](http://www.stfc.ac.uk/research/engineering-and-enabling-technologies/technology/)The Technology department provides advanced technology and engineering in support in high profile international projects and scientific research facilities.  Their expertise lies in the design, manufacture and operation of advanced detectors and instrumentation. Opportunities exist within the Project Engineering Group which undertakes projects within the experimental facilities which STFC operates and hosts; ISIS, Diamond Light Source, CERN plus many more. This position will require you to work with and understand the requirements of projects set by the customers.  You will be required to produce FEA analyses/calculations to validate designs, work with Scientists to develop novel technological solutions and oversee the installation and commissioning of novel scientific equipment. |
| **Vacancy** | [IRC230977 Graduate Trainee - Graduate Optical Engineer](http://www.topcareer.jobs/Vacancy/irc230977_6679.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) & [UK Astronomy Technology Centre](http://www.stfc.ac.uk/about-us/where-we-work/royal-observatory-edinburgh/uk-astronomy-technology-centre/how-to-get-to-uk-astronomy-technology-centre/)  |
| **About the roles** | **Two posts are available within our RAL Space and Technology departments. One post will be located at the Rutherford Appleton Laboratory in Oxfordshire and the other at the UK Astronomy Technology Centre up in Edinburgh.** **All applicants will be considered for each post available, unless stated otherwise within the covering letter. If selected may be contacted by more than one Hiring Manager to undertake a telephone interview, the first stage of the selection process.** |
| [**RAL Space**](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/ral-space/)RAL Space has a long-standing heritage of excellence in space-flight stretching back over 50 years and with significant involvement in over 200 space missions.  The Optical Systems Group within RAL Space is responsible for the conception, design, development and testing of optical systems for space instrumentation and ground-based astronomical projects. Optical systems form the core of many of our instruments and you will work at the heart of multi-disciplinary teams, on projects at the frontiers of science and technology. The role will be varied and you may find that you work on several projects within your first few years. The group’s recent work ranges from an Earth-observing camera system for the International Space Station – looking at the Earth in unprecedented detail – to the design of the spectrograph optics for the WEAVE instrument on the William Herschel Telescope, which will provide a facility that will help to answer fundamental questions about the formation of our galaxy.[**Technology - UKATC**](http://www.stfc.ac.uk/about-us/where-we-work/royal-observatory-edinburgh/uk-astronomy-technology-centre/)The Technology department provides advanced technology and engineering in support in high profile international projects and scientific research facilities. The UK Astronomy Technology Centre is the national centre for astronomical technology. We design and build instruments for many of the world's major telescopes. We also project-manage UK and international collaborations. An opportunity exists to join the Applied Optics Group of the UK Astronomy Technology Centre as a graduate Engineer. Our main interests lie in the design and implementation of instruments and systems for astronomical observatories. We also work on similar non-astronomy projects. The successful candidate will optics developed adheres to UKATC standards and that all development and build work follows UKATC quality procedures |
| **Vacancy** | [IRC230978 Graduate Trainee - Graduate Software/Computing Engineers](http://www.topcareer.jobs/Vacancy/irc230978_6680.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) & [UK Astronomy Technology Centre](http://www.stfc.ac.uk/about-us/where-we-work/royal-observatory-edinburgh/uk-astronomy-technology-centre/how-to-get-to-uk-astronomy-technology-centre/)  |
| **About the roles** | **Ten posts are available within ISIS, Technology and Scientific computing departments. Nine posts are located at the Rutherford Appleton Laboratory in Oxfordshire and one post being situated at the UK Astronomy Technology Centre up in Edinburgh.** **All applicants will be considered for each post available, unless stated otherwise within the covering letter. If selected may be contacted by more than one Hiring Manager to undertake a telephone interview, the first stage of the selection process.** |
| [**Technology - UKATC**](http://www.stfc.ac.uk/about-us/where-we-work/royal-observatory-edinburgh/uk-astronomy-technology-centre/)The UK Astronomy Technology Centre is the national centre of excellence for the development of scientific instrumentation and facilities for ground and space-based astronomy; designing and building instruments for many of the world's major telescopes.  An opportunity exists to join the Software Group of the UK Astronomy Technology Centre as a graduate Software Engineer. You will contribute to UKATC software projects as directed, ensure that software developed adheres to UKATC software standards and software quality procedures.[**Scientific Computing Department**](http://www.stfc.ac.uk/about-us/where-we-work/daresbury-laboratory/scientific-computing-department/)The Scientific Computing Department (SCD) research, develop and support leading edge scientific software and high-performance computational and data storage infrastructures, to perform and support world class science.  SCD deliver projects and services to Diamond Light Source, the JASMIN Superdatacluster, the CERN LHC and many more.Opportunities exist within SCD where you get to work within a range of teams and projects over the whole software development lifecycle from project inception to running high quality production services, using best practice tools, techniques and working practices. [**ISIS**](http://www.stfc.ac.uk/research/our-science-facilities/isis/)The ISIS neutron and muon source is a world-leading centre for research in the physical and life sciences. Our suite of neutron and muon instruments gives unique insights into the properties of materials on the atomic scale. Software lies at the heart of many of our activities.  ISIS has opportunities for graduates to support them in the development of new software and systems for; data treatment and analysis, data cataloguing and management, managing user and experiment programmes, experiment controls and data acquisition.[**Technology**](http://www.stfc.ac.uk/research/engineering-and-enabling-technologies/technology/)The Technology department provides advanced technology and engineering in support of high profile international projects and scientific research facilities.  Their expertise lies in the design, manufacture and operation of advanced detectors and instrumentation. An opportunity exists to join Technology where you will work on real projects from day one, looking at the development of high performance control and data acquisition systems, interfacing to our advanced imaging sensors, detectors and complex digital electronics systems, in which real-time and embedded software plays an essential role. |
| **Vacancy** | [IRC230962 Graduate Trainee - Graduate Project Manager](http://www.topcareer.jobs/Vacancy/irc230962_6682.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) |
| **About the roles** | **One posts is available within our RAL Space department located at the Rutherford Appleton Laboratory in Oxfordshire.**  |
| [RAL Space](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/ral-space/) Department at the Rutherford Appleton Laboratory develops space instruments and ground-based astronomy instruments for agencies including ESA, NASA and ESO, and other commercial customers.  The Project Management Group within the Space Engineering and Technology Division requires a graduate project manager to join the team of engineers working on a number of different projects. The successful candidate will work under the direct supervision of one of our senior project managers, supporting them in managing a number of our many projects for spacecraft instruments. Duties will include but not be limited to: Scheduling of tasks and activities on a project, identifying resource and schedule conflicts, and proposing solutions as appropriate. Monitoring the finances of projects, Writing reports for senior management and customers. Organising meetings and reviews as required and liaising with all members of the project team. Writing of project proposals and bids for new work and will be vigilant in terms of health and safety as well as help with outreach activities and tours of the Division. |
| **Vacancy** | [IRC230951 Graduate Trainee - Graduate Accelerator Physicist](http://www.topcareer.jobs/Vacancy/irc230951_6675.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) |
| **About the roles** | **One posts is available within our ISIS department located at the Rutherford Appleton Laboratory in Oxfordshire.** |
| STFC is home to the [ISIS Neutron and Muon Source](http://www.stfc.ac.uk/research/our-science-facilities/isis/) - a powerful proton accelerator. The accelerator operates 24 hours a day and is a machine comprised of 25000 components that must work reliably together. The Low Energy Beams Group is responsible for the front end of this machine, which starts with the ion source. The ion source has a thriving and exciting R&D program to understand and improve its performance for ISIS operations and future accelerator projects. This group has a graduate vacancy for an ‘Accelerator Physicist’ who will become a world expert in particle accelerators. This role will design, purchase, build, operate and experiment on a wide variety of accelerator systems. Their duties will include computational design and simulations, laboratory experiments and communicating results internationally. They will also be expected to help the team operate and maintain the ion source. |
| **Vacancy** | [IRC231950 Graduate Trainee - Graduate Mechatronic Engineer](http://www.topcareer.jobs/Vacancy/irc231950_6722.aspx) |
| **Location** | [Rutherford Appleton Laboratory](http://www.stfc.ac.uk/about-us/where-we-work/rutherford-appleton-laboratory/) |
| **About the roles** | **One posts is available within our ISIS department located at the Rutherford Appleton Laboratory in Oxfordshire.** |
| Graduate Mechatronic Engineers play a key role in the design and support of the increasing range of motion controlled equipment used across [ISIS](http://www.stfc.ac.uk/research/our-science-facilities/isis/).  The ISIS Design Division provides professional engineering across the complete ISIS Neutron Science facility from the accelerator, targets, neutron beam-lines and specialist user equipment.  The diverse nature of the facility is mirrored in its variety of electromechanical systems: state-of-the-art precision mechanisms and motion systems, high power magnets, cryogenic and vacuum systems, very high pressure and extreme temperature sample environment systems.   All of these can encompass novel uses of both established and emerging motor control techniques. The components used range from large industrial motors to miniature actuators and sensors. The tasks given to a Mechatronics Graduate engineer will often be a mix of component designs that are required for specific projects, development projects and commissioning of components against their specification. Most projects at the STFC ISIS facility are one-off special designs. |