



DARTFORD GRAMMAR
SCHOOL 

A LEARNING COMMUNITY DEVELOPING INTERNATIONAL CITIZENS

Science Technician

APPLICATION INFORMATION PACK





Welcome to Dartford Grammar School

Dartford Grammar School was founded in 1576 and is one of the oldest schools in England. For nearly 450 years, Dartford Grammar School has enabled young people from Dartford and its surrounding area to achieve great things. It is proud of the confident, thoughtful, energetic global citizens that leave the school, fully prepared to contribute to the community, and to rise to the challenges of an increasingly complex future in the wider world.

Dartford Grammar School's students are extremely successful. They enjoy doing remarkably well – both at their academic work and in the team work associated with the widest range of co-curricular activities. They value the talents, ideas and successes of others.

Judged outstanding in every OfStEd inspection, Dartford Grammar School provides a broad, balanced international education, following the principles of The International Baccalaureate both in the Middle Years and the Sixth Form. Every student studies either Mandarin Chinese or Japanese from Year 7 and an additional European language from Year 8.

It is rare to be a school within the British education system that offers the IB curriculum exclusively, and we are proud to say that we now offer the opportunity to study the IB Diploma in the Sixth Form to more students than ever. The School received The Sunday Times IB School of the Year award in both 2017 and 2020, and then became the Sunday Times IB School of the Decade in 2020 too, paying testimony to the ongoing excellent results arising through the focus and energy of students and staff in maximising the opportunities the Diploma supports. We believe that the learning benefits and the prospects for university admission are palpable and justify this unrelenting drive to secure a modern international curriculum. Parents do appreciate the opportunities offered to their children through the co-curriculum and the personalisation offered by an almost unlimited choice of subject in the Sixth Form.

As one leading and reputable educational commentator concluded recently: ***'This is no bastion of educational privilege, but one that has achieved its notable success through hard work, inspired teaching and free-thinking. It is one of the country's truly exceptional schools – and one to be treasured.'***

The school's mission statement, **'A learning community developing international citizens'** reflects the purpose of an IB World School; **'to develop young people who help to create a more peaceful world through intercultural understanding and respect'** and **'to encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right'**.

Julian Metcalf

Head

ABOUT US

A learning community developing international citizens

Dartford Grammar School is a selective secondary academy for boys, which admits girls to its sixth form. There are six forms of entry to Year 7, and all of the students joining the school are from the top 25% of the ability range. The students come from Dartford, neighbouring towns and villages, and nearby London boroughs. The current roll is 1,516, including 598 in the sixth form.

Curriculum

Dartford Grammar School offers a unique seven year innovative curriculum based on the educational philosophy of the [International Baccalaureate](#) (IB). This begins with the [Middle Years Programme](#) (MYP) in the lower school and then concludes with the [Diploma Programme](#) (DP) in the Sixth Form. The International Baccalaureate (IB) is offered around the world in 146 countries and we are proud that we are a leading IB World School, offering a truly international education. The IB courses are crucial to our ethos encouraging students to be independent, creative and highly successful lifelong learners. We were the first British state school authorised to offer the IB Middle Years Programme to pupils in Year 7 to 9. However, no prior experience of the International Baccalaureate is needed, and the successful applicant will have the opportunity to undertake appropriate CPD as required.

In Years 7 – 9, students develop their knowledge and understanding of their subjects through the skills based Middle Years Programme which is underpinned by the philosophy of the [Learner Profile](#). In Years 10 and 11, students follow a broad range of academic GCSE subjects, including English Language, English Literature, Mathematics, either double or triple Science, two Humanities from History, Geography and Religious Studies and a further option from Art, Drama, Music, Design Technology, Computer Science and Physical Education. We are the only school nationally where all students sit GCSE examinations in two Modern Foreign Languages, one from Mandarin Chinese or Japanese then either French, German, Latin or Spanish. Our innovative Creativity Week programme allows all students to enjoy a cross-discipline approach to their learning and develops independence and autonomy.

In the Sixth Form we offer the IB Diploma to approximately 600 students each year, a programme that equips them with the key skills and a broad but deep subject knowledge to succeed in higher education or employment. The IB Diploma is recognised around the world and so allows students to access universities both in the United Kingdom and internationally. Through the IB Diploma, all students study English, Mathematics, a Language, a Science, a Humanity and either an Arts subject or a second choice from Languages, Science or Humanities. Students choose their six subjects from two levels of entry; three at higher level and three at standard level. Additionally students complete a 4000 word [Extended Essay](#), as well as a study of [Theory of Knowledge](#) and an exciting Creativity, Activity and Service project (CAS). It is anticipated that the successful applicant will have a considerable sixth form teaching timetable.

Our entire curriculum, in line with the IB Learner Profile, encourages students to be internationally minded and aware of the importance of cultural diversity while embracing British values. Our curriculum offers academic rigor with the balance of a vibrant co-curriculum where all students actively participate in the wider life of the school. All of this is underpinned by our commitment to pastoral care and student and staff wellbeing.

Students at Dartford Grammar School enjoy very high academic success. In 2022, with a return to external examinations at both GCSE and IB Diploma level, students gained 81% of all GCSE entries at grade L7-9, and 70% of all IB Diploma entries at grade L6/7, respectively. The school's examination results continue to be exceptional. A GCSE P8 score of 0.92 places Dartford Grammar School as the highest performing boys' school in Kent in 2022. Our sixth formers gained an average UCAS point score of 224 and an average IB point score of 37.7 in 2022. The L3VA will present the school as one of the highest performing sixth forms in the country for progress. Almost all Year 13 students proceed to university with 92% of students successful at their first or second choice, 71% successful at Russell Group universities, 58% taking up STEM related courses and 2% progressing into higher level apprenticeship qualifications.

The L3VA will present the school as one of the highest performing sixth forms in the country for value added. Almost all of Year 13 students proceed to university with 100% of students successful at their first or second

choice and 77% successful at Russell Group universities. In 2021, our students received outstanding grades that were precisely in line with teacher predictions.

Ofsted Inspections

The school has been identified five times by Her Majesty's Chief Inspector as one of England's most successful schools, reflecting a sustained period of outstanding achievement. In 2020, the school became the Sunday Times IB School of the Decade.

Buildings and Facilities

The school, founded in 1576, has occupied its present site since 1866. Additional buildings have been constructed since then, the major works in last 10 years being listed below:

2008	extension of sixth form centre adding five teaching rooms;
2009	the remodelling of the Mick Jagger Centre, to provide additional teaching rooms and new laboratories and a Food Technology suite;
2011	new sixth form study suite;
2012/13	extended sixth form centre;
2013/14	new science department;
2013/14	new Key Stage 3 transition area;
2014/15	new Performing Arts Centre and rejuvenation of part of the Hardy building;
2015/16	new dining hall and additional laboratories;
2017/18	new sixth form centre;
2017/18	extension and improvements to the Arthur Jones pavilion;
2018/19	new school shop and print room facility;
2021/22	new fitness suite and learning support department;
2022/23	15-year site masterplan developed
2023/24	new recording studio

Pastoral Support

The school has a strong pastoral system operating from Year 7 to Year 13. The school is divided into Key Stage units, and each year group has a Head of Year who oversees all aspects of the students' development. The school provides 3 Higher Education Advisers and a specialist Careers Adviser.

Extra-Curricular Programme

The school is exceptionally rich in extra-curricular activities. It offers 16 sports and competes with others in at least eight of them each year. Teams regularly gain county, regional and national success, and many students gain representative honours at one or more of these levels. The school achieves high standards in music, and has an orchestra, wind band, choir, chamber choir and many other ensembles. Drama productions are frequent.

The Performing Arts Faculty benefits from the facilities of the Mick Jagger Performing Arts Centre. There are many other clubs and societies, with debating always a popular activity. The school's impressive programme of community service is regarded as a particular strength. The school benefits from many close links with Europe, China and Japan. There are regular overseas cultural and sports trips, and other international visits.

The Duke of Edinburgh's Award is a notable strength: nearly all students in Year 10 complete the Bronze Award, with a majority going on to Silver. Gold Award expeditions take place in both the UK and overseas, while the school has also offered international trips via Operation Wallacea.

External Links

The school has a very active Parents' Association, which provides valuable assistance and support. The school has strong links with local industry and with Higher Education. It has extensive links with many other institutions, and is also part of the world-wide International Baccalaureate Organisation network.

Becket Sports Centre and The Mick Jagger Centre for the Performing Arts

Out of school hours the facilities of both centres are shared with the local community. They are managed by school staff, reporting through independent management structures.

The Becket Sports Centre comprises a sports hall and a recently refurbished, fully equipped fitness studio, with a separate aerobics/training room, which has a sprung floor, allowing dance sessions to be held. The Mick Jagger Centre includes two auditoria (seating 200 and 350 respectively, both with retractable seating), 8 music practice rooms, dance studio, exhibition space, two music rooms and a Drama Studio. It is a base for 20 community organisations and runs a small commercial programme attracting a range of talents and performers.

Website

Further details of the school, including breakdown of performance figures, can be accessed through:
www.dartfordgrammarschool.org.uk

Applicants are warmly invited to visit the school before applying.



STAFF REWARDS AND BENEFITS

Here at Dartford Grammar School, we want to share with you a snapshot of the generous benefits package offered to all staff, from their very first day of employment. We are always looking at new ways and fresh ideas that can best support our body of staff to reach their full potential, both professionally and personally.

What we offer:

- A commitment to invest in staff development via training, CPD, mentoring, and in-house support groups
- Free car parking on site
- Electric charging points
- Cycle to Work scheme
- On-site dining with superb food
- Free annual flu vaccination
- 24/7 free access to our Employee Assistance Programme for confidential advice and guidance
- Free gym access to onsite facilities
- Annual leave of 23 days, plus bank holidays, which increases to reflect length of service
- State of the art school facilities with on site Performing Arts centre
- Regular staff wellbeing events
- Highly attractive pension schemes for both Teaching and Support staff
- Social events

JOB DESCRIPTION

POST:	Science Technician
GRADE:	DGS3 (£23,337fte)
START DATE:	ASAP
RESPONSIBLE TO:	Senior Science Technician

THE SCIENCE DEPARTMENT

The Science Department at Dartford Grammar School has operated with science specialism status since 2009 and continues to be a centre of excellence for science education. It is based in a self-contained suite of very well equipped rooms, in the Stephenson Building. It contains 14 laboratories and a lecture theatre, 2 preparation rooms, stores and science staff offices. All laboratories are fully equipped with practical apparatus, dedicated ICT facilities with projectors, white boards and visualizers.

Staffing

The Department's staff includes the equivalent of 16 full-time teachers, all graduate specialists. They are supported by four five full-time technicians. The current management structure comprises of a Head of Department, an Assistant Head of Department, Science College Manager, KS3 Science Manager and KS5 subject leaders.

The Department is involved in initial teacher training through the Kent Training Group SCITT. Staff from the Department deliver some of the theoretical aspects of the training as well as the day-to-day practical mentoring of the trainees. Additionally, the Department is highly experienced in training science teachers through salaried and non-salaried routes.

Courses

Dartford Grammar School has a timetable that consists of 30 periods per week and each period is 50 minutes in duration. In Key Stage 3, Year 7 classes have 6 periods of science, Year 8 classes have 4 periods of science and Year 9 have 6 periods of science; two in each of the three science disciplines. The Key Stage 3 course is delivered over 3 years and it provides a solid foundation for GCSE sciences. There is a heavy emphasis on practical work and discovery as well as developing investigative skills. In Key Stage 4 students study AQA Biology, AQA Chemistry and AQA Physics courses. The overwhelming majority of students are examined on the AQA Separate Sciences with a minority studying an AQA Combined Science course. In Year 10 and Year 11 students have 6 periods per week; two in each of the three science disciplines with subject specialist teachers for each.

Sciences are an extremely popular choice in the Sixth Form, which has 550 students following the International Baccalaureate Diploma Programme. All students study at least one Group 4 subject as part of the diploma, higher level subjects have 5 lessons and standard level subjects have 3 lessons per week. The Science Department offers HL Biology, SL Biology, HL Chemistry, HL Physics, SL Physics, SL SEHS, HL SEHS and SL ESS.

Many students choose to continue their study of science at university, with the medical sciences being a popular choice. Students benefit tremendously from the departments successful Biomedical and Ethical Society.

Extracurricular activities

The Department has a tradition of enriching courses with many additional activities. Key Stage 3 students can attend a very popular Science Club and/or Electronics Club, KS4 students can enjoy a successful Engineering Club and KS5 students can participate in KS5 Science Clubs and the Biomedical and Ethical Society. Students also have a number of visits during the year and a wide range of gifted and talented opportunities are on offer through the departments Science College.

In the Sixth Form, students attend university lectures and visits to University College, Kings College, Imperial College, Surrey University and Greenwich University. We have a programme of high profile visiting speakers. Annually, we have public lectures that focus on new advances in scientific research. Students have many opportunities to attend study visits. Our physics students go to CERN, Geneva. We have biology and ecology fieldwork visits to the Alps and Slapton Ley in Devon. A science exchange with a school in Hanau runs annually, and work-shadowing associated with the pharmaceutical industry in Switzerland is available. We also have science links with schools in Japan and China.

An annual Science College Careers Fair is attended by students in Years 11 and 12. During this day, students have the chance to speak with an extensive range of ambassadors relating to science-related careers.

The Science Department's Science College also offers a successful STEM week and Science Summer School for aspiring medics.

ROLE PROFILE

Science Technician
<p>Part time: Term time + Insets Line Manager: Senior Science Technician</p>
<p>Main purpose of the role: To assist the Science Department in delivery of the Science curriculum</p>
<p>The Science Department at Dartford Grammar School The department consists of 14 laboratories and a lecture theatre. There are 2 separate preparation areas where the technicians do much of their work. The department is committed to courses which require a large amount of practical work in the separate disciplines of biology, chemistry, physics, ESS and Sports Science.</p>
<p>The Role of the Technician</p> <ul style="list-style-type: none"> • To be responsible to the senior technician for the day to day running of the laboratories. To give support to the senior technician as and when required. • To assist in the work of all sciences as circumstances require. • To be responsible for maintaining the general safety and security of laboratories, preparation areas, science stores and lecture theatre. • To keep up-to-date with current health and safety recommendations provided by Cleapss • To work efficiently to ensure practical requests are met in good time, are operational and feedback is given to teachers when necessary. • To prepare lesson materials including assembling equipment, preparation of solutions and the making of simple apparatus. • To clear lesson materials after use and maintain the laboratories in a clean and tidy condition, including restocking of solutions, equipment and chemicals. • To clean glassware and keep laboratories stocked with basic equipment. • To make simple repairs to fittings and equipment. • To provide equipment and materials for Science Clubs. • To assist in the preparation of all the equipment and materials needed for practical assessments, coursework and extended essays. • To assist with the ordering of chemicals and equipment and to assist in the regular stock-taking • To co-operate and communicate as a member of the technician team. • To attend and contribute to technician meetings as agreed with the Senior Science Technician. • to attend staff INSET as required • To update skills and subject knowledge as appropriate.

NOTES

- 1 The responsibilities are subject to the general duties and responsibilities contained in the statement of Conditions of Employment.
- 2 This job description allocates duties and responsibilities but does not direct the particular amount of time to be spent carrying them out, and no part of it may be so construed.
- 3 This job description is not necessarily a comprehensive definition of the post. It will be reviewed at least once each year, and it may be subject to modification or amendment at any time after consultation with the holder of the post.

APPLICATION PROCESS

Applications will only be accepted from candidates completing the school's application form. All sections of the application form must be completed as accurately and as full as possible.

Please note that CV's will not be considered and must be attached to an application form as a supplementary form.

All completed application forms must be submitted to Mrs Michelle Bexley, HR Manager, electronically to mbexley@dartfordgrammarschool.org.uk or by post to the following address:

HR Manager
Dartford Grammar School
West Hill
Dartford
Kent
DA1 2HW

Closing date for applications: 2 December 2024, at 9am

Interview date: week commencing 2 December 2024

The school may interview early in the case of an exceptional candidate.

SAFER RECRUITMENT

Dartford Grammar School is committed to safeguarding and promoting the welfare of our pupils and expects all staff and volunteers to share this commitment. To that end careful checks will be made on all applicants for posts within our School in accordance with the Safer Recruitment guidance set out in the prevailing Keeping Children Safe in Education document.

After the shortlisting process has taken place, candidates will then be invited to interview and references then contacted. All candidates who have been invited for interview will be required to bring the following documentation:

- Right to Work in the UK evidence (typically a passport or driving licence)
- Criminal Record Self Declaration (will be sent ahead of the interview)

Applicants who have resided abroad will be subject to further checks with authorities in those countries where they have resided.

All applicants should note that the position available involves contact with children and is exempt from the Rehabilitation of the Offenders Act 1974 and all subsequent amendments (England and Wales). The amendments to the Exceptions Order 1975 (2013) provide that certain spent convictions and cautions are 'protected' and are not subject to disclosure to employers, and cannot be taken into account. Guidance and criteria on the filtering of these cautions and convictions can be found at the Disclosure and Barring Service website. A previous unspent conviction will not necessarily bar someone from being appointed; the specific nature and date of the conviction will be taken into account.

Safeguarding underpins the work we do within the School and as such we will provide appropriate induction support to all appointed staff and promote vigilance at all times.