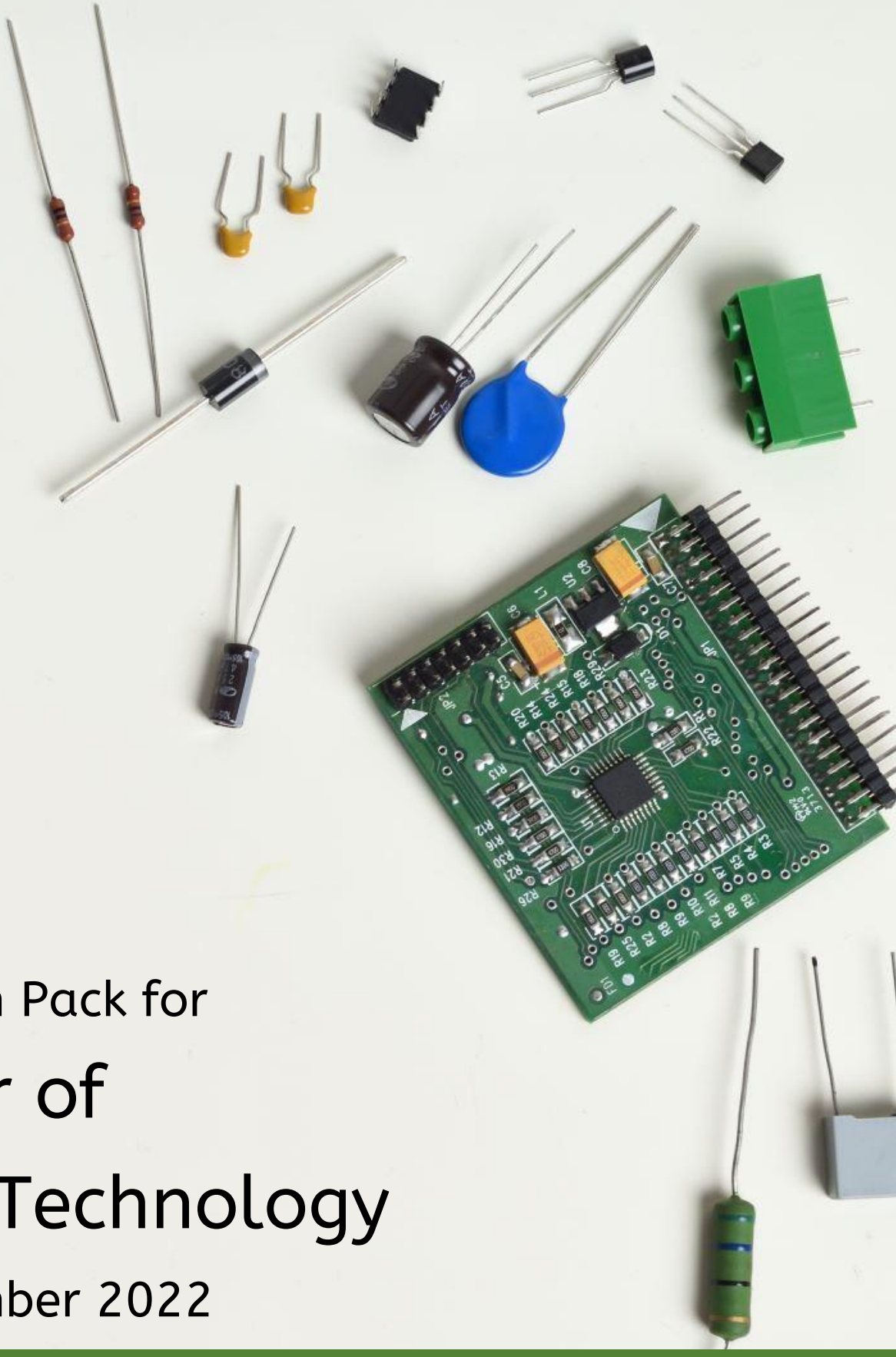
www.fernup.dorset.sch.uk #ferndownfamily



Application Pack for

Teacher of Digital Technology

For September 2022

Deadline: 9th November 2021

Interviews: 16th November 2021

Ferndown Upper School

Dear Colleague |

I am delighted you are expressing an interest in becoming part of the **#ferndownfamily**. Choosing the right school in which to teach is a big decision and the aim of this application pack is to provide you with information to **support you** in that process and to give you a better understanding of what we are about and why I think Ferndown Upper School is a very **special place to work**.

The first thing that strikes you as you walk around the school is how colourful and vibrant our walls are; as **we love to celebrate** our students' successes and we therefore have their art displayed everywhere. You will also pass our 'Student of the Term' board as you start your tour of the school, and this again **demonstrates our pride** in our students' achievements. As you walk around the school, I think that you will be impressed with how **calm and purposeful** our student body are and as you go from classroom to classroom, you will see students who are engaged, **enjoying their learning** and making progress.

The result of this is Ferndown is a school whose students consistently achieve amongst the **highest outcomes in Dorset**. We are consistently in the top five for the key accountability measures, have been rated **outstanding** by ALPs and we have been placed in the top percentile of the country for our L3 provision. More importantly however, is the fact that our students leave with the qualifications that they need to open the doors of the next phase of their journey. We are not a school that is overly concerned with league tables, **relationships are the cornerstone** of our success, and our three main priorities are, enjoyment and engagement in lessons, the safety and wellbeing of our students and their academic achievement.

We are also a school that firmly believes that staff should have the time to do their job properly and that advancement in pedagogy is the **key to student success**. Therefore, we focus as a school on ensuring the **best work life balance possible** and because of this we have removed written reports, written marking (moving to 'flash' marking and verbal feedback) and we constantly consult with staff over how 'their school' should be run. We also promote the Ferndown Way, which is a set of guiding principles for staff and students to follow. We believe that **teachers should be learners** and therefore there are a wide range of CPD development opportunities available to staff that can range from training courses, to INSET, to research projects on pedagogy, to secondment prospects.

Successful applicants will join our Digital Technology Department at an exciting point in its journey to become the leading provider of computing education in the Southwest. Led by our National Teacher Award Winner 2021 for Digital Innovation, Mr. Toby Osborne, the department will have undergone £1.5 million of investment over four years making it the best resourced department of its kind in the region. As the first department in Dorset to be delivering T Levels, our computing staff are pioneers, and we hope you can join them in achieving the department's mission of "*Engineering Future Innovators".*

I would strongly encourage you to take the opportunity to come to visit our school prior to submitting an application. All visits would consist of a tour of our school site, meeting our students and the opportunity to ask any questions that you may have in support of your decision making. If you would like to arrange a visit, please contact Andrea Baxter (Personnel Officer) by email **andreabaxter@fernup.dorset.sch.uk** or telephone **01202 871243 ext 203** to make an appointment.

Philip Jones - Headteacher

Full Job Information pack found on our website: https://fernup.dorset.sch.uk/information/job-vacancies/

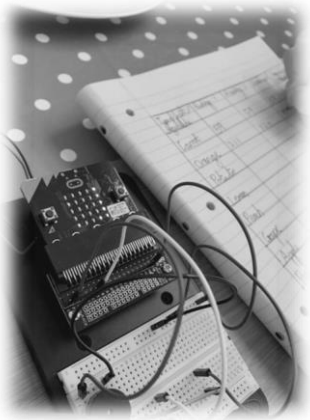
Teacher of Digital Technology |

Required for September 2022, up to two teachers of Computer Science & ICT for our expanding Digital Technology Department. We are looking for practitioners **who are enthusiastic** about preparing our students for the digital age.

Ferndown is a successful 13-19 Upper School that is a **centre of excellence for STEM**. We have a strong reputation for supporting and inducting ECTs and experienced teachers. Digital Technology is currently composed of three teachers and two support staff, with plans to expand with an additional three teachers and two more support staff over the next few years.

The department is a **friendly, collegiate team**, who work hard together to achieve high standards and have achieved excellent results. It is a strong faculty with high levels of recruitment and success at A Level, with many going on to take these subjects at University. With its expansion to delivering Digital T Levels and the creation of a new Digital Education building for September 2022 we are seeking to increase the number of digital practitioners in our department to help take us to the nex**T Level**!

As a lead STEM school, we have a sophisticated range of **STEM enrichment** in place, including the EPQ, engineering competitions and extra-curricular clubs.



We welcome applications from both trainees/ECTs and more experienced teachers of computing. Please see further department information, the person specification and job description for the role further in this pack. If you would like further information, please contact Toby Osborne, Head of Digital Technology on tobyosborne@fernup.dorset.sch.uk.

An Application Form and Job information Pack are available on our website https://fernup.dorset.sch.uk/information/job-vacancies/ , apply either via the 'Apply' button on Dorset For You or on our website .

Completed Application Forms should be uploaded via Dorset For You or sent to andreabaxter@fernup.dorset.sch.uk .

Ferndown Upper School is a great place to work, and we look forward to receiving your application.

Closing date: Tuesday 9th November 2021 at Midnight Via Dorset For You

Or delivered direct to the School Office or email to andreabaxter@fernup.dorset.sch.uk by 9.00 a.m. on Wednesday 10th November 2021

Interviews: Tuesday 16th November 2021

This school is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment. The successful candidate will be required to have an Enhanced Disclosure & Barring Service check (formerly CRB) in line with the Governments safer recruitment guidelines.

Ferndown Upper School values the diversity of our workforce and welcome applications from all sections of the community. This role is UK based and your Right to Work will need to be established as part of the appointment process.

Leading Digital Education |

Founded in 2018, the current Digital Technology department is the fastest changing and growing area of the school. In just three years it has won regional and national awards for its extra-curricular activities and last year a National Teaching Award in Digital Innovation for its Head of Department.

Our department vision is to *Engineer Future Innovators* and we aim to do this on every level, to ensure we not only provide the best digital education for our own students but support local schools in their provision and strengthen computing education in Dorset. See www.ferntech.org for our department's website.

DELIVER A SPECIALIST CURRICULUM |

To provide a specialist computing curriculum to increase subject specific knowledge and skills in our students and develop digital innovators

Our teachers all have NCCE certification and aim to improve knowledge of computing use, systems, and software as well as their applications in real world contexts.

We follow the framework for computing curriculum as set out by the NCCE with the 10 big ideas of computing.

CREATE EFFECTIVE DIGITAL CITIZENS |

To ensure all students and staff are provided with the knowledge and tools to be effective digital citizens in wider society and their daily lives

We use Project EVOLVE to support our Digital Citizenship curriculum from Y9 up to Y13.

GROW FUTURE INNOVATORS |

To develop skills and knowledge using teaching and learning that provides a broad experience in screen-based, physical computing and engineering activities with the best resources and facilities available

Over 4 years we have secured over £1,400,000 in funding to provide the best facilities for our students, including £100,000 from the Wolfson Foundation

We have invested in a large amount of equipment to ensure students get hands on with a variety of technologies.

SUPPORT & DEVELOP STAFF |

Ensure we support our staff in their daily work and professional development to create a team of specialists who can support our students, the wider school, and the regional community of computing teachers

We are a CAS Community, acting as a hub for sharing computing best practice amongst local primary and secondary schools to improve computing teaching for everyone.

When possible, we support the training of computing teachers in our local SCITT programme

INSPIRE THE NEXT GENERATION |

Engage and inspire students in our own school and other local schools via our main curriculum and an extensive extra-curricular provision in coding, engineering and robotics whilst helping our local community via student-led outreach.

Our extra-curricular programme has won national and regional awards.

We are a FIRST TECH CHALLENGE Champion Hub, our mission is to engage more local schools in the international competitions by FIRST

A Digital Curriculum For All |

As a comprehensive school we cater for a full range of academic ability. We understand how important it is to ensure our students become responsible digital citizens and are equipped with a range of computing skills and the ability to make informed decisions. We offer a range of courses to support this need which allow our students to specialise in a number of areas.

We primarily teach students Python as the main language throughout our key stages. However Digital T Level: Software Developer students will also be taught Java Script and C#.

As a STEM school we highly value digital courses as these provide the skill sets for the careers of the future.

Key Stage 3 (Y9)

Combination of Computing and ICT Skills (As part of the National Curriculum), one lesson per week per class. Students cover the ten key computer science principles including algorithmic thinking, data & information and computer systems.

This is done via a range of methods including unplugged, online and physical computing activities to provide an engaging experience for our students.

Key Stage 4 (Y10/Y11)

Digital Technology Options (five lessons per fortnight) are: Computer Science GCSE (AQA) & Digital Information Technology Level 2 BTEC (Pearson).

All lessons in digital technology are delivered using a range of software to support learning. This is primarily delivered using Microsoft OneNote and Teams.

The Computer Science GCSE is delivered in part by NCCE learning materials, building up skills and knowledge in order of difficulty rather than that dictated by the exam board. This ensures students regularly revisit concepts embedding their learning.

Key Stage 5: (Y12/Y13)

Post-16 Options: Computer Science A Level (AQA), Digital T Levels in Software Development or Digital Support and our Pre-T Level L2 course.

Our 6th Form courses are popular, we deliver them to develop independent study skills to ensure students are prepared for whatever they choose to do afterwards. We emphasise engagement with industry and have a number of links with local businesses to provide students relevant work experience.

Unsurpassed Facilities |

It is no understatement that our Digital Technology Department is among the best equipped faculties in the South Region, and for 2022 this is being taken to a whole new level! With a brand-new digital education building to further expand our Dorset Computing and Robotics Centre. In total from September 2022, we will have 7 specialist digital learning spaces equipped with up-to-date hardware and software, providing unrivalled possibilities for teaching and learning:

Galileo Lab | Graphical Engineering Lab

- 32 High-Spec Student PCs
- Full complement of graphical engineering software including full creative cloud Adobe Suite
- HD Screens for all

Voyager Lab | Raspberry Pi Lab

Created in 2019, the Voyager Lab is a purpose built specialist lab packed full of up to date tech including:

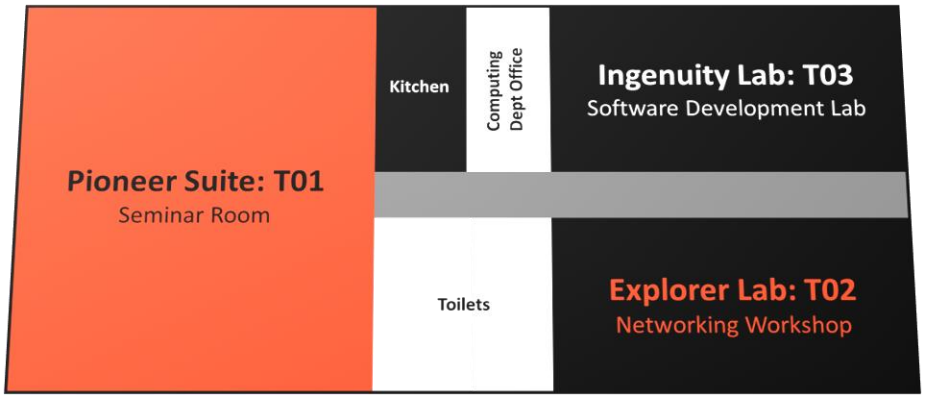
- Class sets of Raspberry Pi Computers with touchscreens and wall-mounted screens
- Our own private Pi-Net Network allowing students to work collaboratively
- 3D printing facilities
- A full class set of LEGO® Mindstorm EV3 Robot Kits
- Full electrical engineering equipment and breakout boards, including a wide range of sensors, inputs and other components

Curiosity and Cassini Labs | Physical Computing Labs

Created in 2020, thanks to a £100,000 grant from The Wolfson Foundation

- Two identical 32 PC suite labs with adaptable benching to allow for a range of uses including robotics and use of our physical computing kits.

Coming Sept 2022: The T Block | Post-16 Digital Education Building



Will include:

- **Pioneer Suite | A 80 student seminar space with digital device support**
- **Ingenuity Lab | An industry grade software development lab**
- **Explorer Lab | An industry standard networking laboratory**
- **And a new department office….**

T Levels (Delivery commencing 2022) |

We are proud to be Dorset's first T Level Provider from 2022. We are currently aiming to launch 2-3 **Digital T Level** routes specialising in Software Development, Network Engineering and IT Support. We also will be one of only a few centres offering the **Transition T Level** route for our T Levels.

We are currently in the process of beginning the building of a new £1.2million facility, the 'T Block', which will cater for these courses and provide the area with world-class facilities in supporting young people into the digital industry.

To prepare for this launch and ensure we offer students a professional experience where they gain up-to-date skills, department CPD will be provided to successful applicants who wish to be part of T Levels in its launch year. All this CPD is provided with our partnership with the **Education and Training Foundation**.

Check out the www.ferntech.org website for details of the T Level courses.

We have been very proactive in linking up with local business where we aim to shape our new T Level curriculums to support industry need and for them to provide us placements.

INSPIRING THE NEXT GENERATION |

Established in September 2018, fernDOWNLOAD is a STEM programme with a difference. It has won regional and national awards in student competitions and most recently has been acknowledged in the Pearson National Teaching Awards.

Run completely by staff volunteers, fernDOWNLOAD provides opportunities for young people to get involved in a range of activities that gets them engaged with mechanical and digital engineering. Using the passion and engagement of our students we offer extensive outreach to local middle and infant schools to enthuse more engineers of the future, known as fernOUTREACH.

As of September 2020 the programme has three distinct extra-curricular activities detailed below.

fernDOWNLOAD ROBOTICS | Y9-11 Girls

Students take part in the International FIRST Tech Challenge robotics competition, which annually gives them a challenge to design, build and use a robot in regional, national and if successful world level competitions. We are currently designated a FIRST Tech Challenge UK Champion School, a regional hub to help local schools engage with the programme. In our Rookie Season 2019/20, students exceeded expectations by not only winning "The Connect Award" for our South West Region but also with one of our two teams being part of the Winning Alliance, coming first place in the regional finals held in Bristol in January 2020.

Our club fully embraces the FIRST ethos of #morethanrobots. We take the opportunity to not only enhance our students' leadership, team-working and engineering skills but to also benefit the wider community in a range of student driven projects.

This club is made up of female participants, who are underrepresented in the engineering field country and world wide. We aim to inspire, educate, and develop our young people into pursuing careers in engineering as part of our core mission of "Engineering Future Innovators". From September 2021 around 30 girls were participating. We rely on external funding for our equipment, facilities and events.

fernDOWNLOAD CHALLENGERS | Y9-10 Boys

Another fantastic STEM programme from FIRST Global is the FIRST LEGO LEAGUE.In September 2020 we began our Rookie Season in the FIRST LEGO LEAGUE - CHALLENGE.

Using LEGO Robotics equipment, students must collaborate, innovate and solve problems to overcome a series of challenges based on an annual theme.

Our students have to also take part in an Innovation Project to design a solution to solve a world problem that helps people based on the annual theme. Once again fully embracing the #morethanrobots ethos and showing our wider community how technology and its understanding can help us make the world a better place.

These groups of students will also aid out FTC teams in the fernOUTREACH events.

fernDOWNLOAD Coders | Y12

Inspired by our successful entry in the 2018/2019 Season, from Sept 2021 all our Sixth Form Computer Science students will be competing in the annual PA Raspberry Pi National Competition.

In small groups they will work on a project based on a brief, to design and create an invention using a Raspberry Pi and £100. The project is managed, implemented, and led by the students as an addition to their normal curriculum. Students will use our Raspberry Pi engineering suite and facilities to aid this.

If successful, our teams have a chance to proceed to the National Finals, The PA Pi Awards, to present their invention to Top Tech and Business CEOs and Representatives and a chance to win the competition.

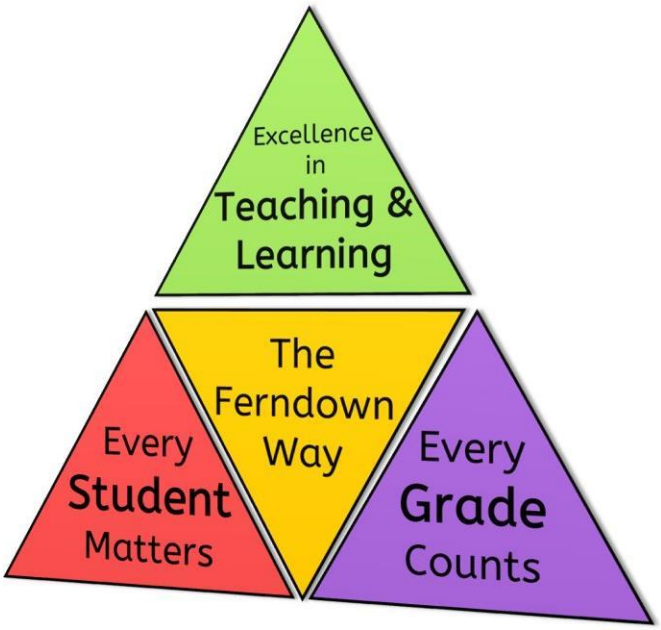
fernOUTREACH |

At fernDOWNLOAD we are passionate about getting more young people involved in engineering, the environment and robotics. Our economy needs nearly 200,000 engineers every year until 2024 to meet demand. The range of careers and sectors engineers are needed in is growing all the time.

Our student members with expert staff have put together high-quality outreach events and activities for children for Key Stage 2 up to Key Stage 3. fernOUTREACH is completely free to any school within a 10 mile radius, if you are interested in any of the talks or events please fill out the contact form below and we will get back to you.

We aim post-COVID to be going into local middle and infant skills (or for them to come here) to engage them in our range of robotics and STEM activities.

The Ferndown Way |



A highly achieving, supportive school, where students are engaged, enjoy their learning and are enabled to reach their full potential

We want a school where:

- Students feel safe
- Where students are engaged
- Where every success is celebrated
- Where students become independent and resilient leaners
- Where students have high aspirations and Where every student achieves.

We want our students to have:

- Challenge
- Collaboration
- Curiosity
- Reflection
- Resilience
- Responsibility

What Ferndown Can Offer You |

- As a local authority-maintained school you will have the freedom and autonomy to implement the solutions and policies that you feel are appropriate. It also allows our decisions to be based upon local considerations.
- Engaged students who behave impeccably and who allow you to teach.
- The opportunity to work with outstanding and friendly colleagues.
- Highly visible and supportive senior leaders who have your back.
- And who support tight, robust behaviour systems.
- Centralised detentions, including homework, that you do not need to organise or chase, helping to underpin our students' behaviour and leaving you free to teach.
- We do not have onerous or impossible marking policies but instead operate a feedback policy focused on whole class reflection and improvement. So you do not need to mark exercise books and may instead focus on finding the students' 'gaps' and then delivering feedback lessons to cater for these.
- No formal graded lesson observations, just ongoing, 'no-stakes' feedback, helping you to continuously develop. We believe that trusting our staff with autonomy helps to develop a strong staff culture.
- Centralised, shared units of work and resources.
- Excellent ongoing CPD, career development and promotion opportunities.
- Really well-kept site in a very pleasant location in beautiful Dorset.

CPD |

- An internal CPD programme that is a balance between training and in faculty development time.
- Support to complete further academic study.

Person Specification |

	Essential	Desirable	Method of Assessment
Experience			
Evidence of good teaching of the subject area (Computing)	✓		Application, Interview
Evidence of good teaching of the subject area (Computing) at Level 3 as appropriate, or GCSE.		✓	Application, Interview
Evidence or understanding of delivering the subject to a range of abilities.	✓		Application, Reference
Evidence of high levels of student satisfaction as appropriate		✓	Application, Interview
Skills and Knowledge			
Excellent standards of literacy and numeracy	✓		Application, Interview
Ability to code (to post-16 level) in at least one language	✓		Application, Interview
Ability to code using Python 3.0, C#, Java Script		✓	Application, Interview
Experience of using physical computing resources, e.g. Raspberry Pis, Robots etc		✓	Application, Interview
Competent at preparing equipment for the effective delivery of practical sessions		✓	Application, Interview
Ability to work with and motivate students	✓		Interview
Ability to work with other staff as a team	✓		Interview
Excellent organisational and administrative skills	✓		Interview
Excellent communication and listening skills	✓		Interview
A clear understanding of developments in GCSE and post-16 education	✓		Application, Interview
Ability to meet deadlines	✓		Interview
Evidence of commitment to Continuous Professional Development	✓		Application, Interview
Up to date knowledge of the computing curriculum.	✓		Application, Interview
Competent user of Microsoft Office (e.g. Word, PowerPoint, Excel, Access, Edge etc)	✓		Application, Interview
Qualifications			
A relevant degree level qualification or equivalent in an appropriate subject	✓		Application, Interview
Qualified Teacher or pending QTS	✓		Application, Interview
Attitude and Impact			
Positive and Enthusiastic	✓		Interview
Willingness to take and follow advice from line managers, with regard to teaching and learning strategies, use of resources and classroom management	✓		Interview
Willingness to support departmental trips and extra-curricular activities	✓		Interview
A positive attitude to IT and a willingness to learn to use digital resources effectively	✓		Interview
Smart in appearance and manner	✓		Interview
Eagerness to improve diversity of students who choose computing at GCSE and beyond	✓		Application, Interview
Personal			
Enhanced DBS Clearance #	✓		Pre-employment check
Evidence of right to work in UK where appropriate	✓		Application
FUS is committed to safeguarding and promoting the welfare of young people and vulnerable adults and expects all staff and volunteers to share this commitment.			

Job Description |

Post Title:	**TEACHER OF DIGITAL TECHNOLOGY**
Purpose:	• To implement and deliver an appropriately broad, balanced, relevant and differentiated curriculum for students and to support a designated curriculum area as appropriate. • To monitor and support the overall progress and development of students as a teacher/Form Tutor • To facilitate and encourage a learning experience which provides students with the opportunity to achieve their individual potential. • To contribute to raising standards of student attainment. • To share and support the school's responsibility to provide and monitor opportunities for personal and academic growth.
Reporting to:	Head of Digital Technology
Responsible for:	The provision of a full learning experience and support for students.
Liaising with:	SLT, teaching/support staff, LEA representatives, external agencies and parents.
Working Time:	195 days per year. Full-time
Salary/Grade:	Main professional scale / Upper Pay Scale
Disclosure level	Enhanced

MAIN (CORE) DUTIES	
Operational/ Strategic Planning	• To assist in the development of appropriate syllabuses, resources, schemes of work, marking policies and teaching strategies in the Curriculum Area and/or Department. • To contribute to the Curriculum Area and/or department's development plan and its implementation. • To plan and prepare courses, effective lessons and extra-curricular activities. • To contribute to the whole school's planning activities.
Curriculum Provision:	To assist the Head of Department, the link senior manager, to ensure that the curriculum area provides a range of teaching which complements the school's strategic objectives.
Curriculum Development:	To assist in the process of curriculum development and change so as to ensure the continued relevance to the needs of students, examining and awarding bodies and the school's Vision and Mission statements and SIP.
<u>Staffing</u> **Staff Development:** **Recruitment/Deployment of Staff**	• To take part in the school's staff development programme by participating in arrangements for further training and professional development. • To continue personal development in the relevant areas including subject knowledge and teaching methods. • To engage actively in the Performance Management Review process. • To ensure the effective/efficient deployment of classroom support • To work as a member of a designated team and to contribute positively to effective working relations within the school.

Quality Assurance:	• To help to implement school quality procedures and to adhere to those. • As part of a team, contribute to the process of monitoring and evaluation of the curriculum area/department in line with agreed school procedures, including evaluation against quality standards and performance criteria. • To seek/implement modification and improvement where required. • To review from time-to-time methods of teaching and programmes of work. • To take part, as may be required, in the review, development and management of activities relating to the curriculum, organisation and pastoral functions of the school.
Management Information:	• To maintain appropriate records and to provide relevant accurate and up-to-date information for SIMS.net, registers, etc. • To complete the relevant documentation to assist in the tracking of students. • To track student progress and use information to inform teaching and learning.
Communications:	• To communicate effectively with the parents of students as appropriate. • Where appropriate, to communicate and co-operate with persons or bodies outside the school. • To follow agreed policies for communications in the school.
Marketing and Liaison:	• To take part in marketing and liaison activities such as Open Evenings Parents Evenings, Review days and liaison events with partner schools. • To contribute to the development of effective subject links with external agencies.
Management of resources:	• To contribute to the process of the ordering and allocation of equipment and materials (with support staff). • To assist the Head of Faculty/Department to identify resource needs and to contribute to the efficient and effective use of physical resources. • To co-operate with other staff to ensure a sharing and effective usage of resources to the benefit of the School, department and the students.

Pastoral System:	• To be a Form Tutor to an assigned group of students. • To promote the general progress and well-being of individual students and of the Form Tutor Group as a whole initially by knowing about their individual achievements and valuing these • To liaise with a Pastoral Leader to ensure the implementation of the school's Pastoral System. • To register students, accompany them to assemblies, encourage their full attendance at all lessons and their participation in other aspects of school life. • To evaluate and monitor the progress of students and keep up-to-date student records as may be required. • To contribute to the preparation of Action Plans and progress files and other reports. • To alert the appropriate staff to problems experienced by students and to make recommendations as to how these may be resolved. • To communicate as appropriate, with the parents of students and with persons or bodies outside the school concerned with the welfare of individual students, after consultation with the appropriate staff • To contribute to PSD and citizenship and enterprise according to school policy • To apply the whole school agreed Behaviour management system so that effective learning can take place.

Teaching:	• To teach, students according to their educational needs, including the setting and marking of work to be carried out by the student in school and elsewhere. • To assess, record and report on the attendance, progress, development and attainment of students and to keep such records as are required. • To provide, or contribute to, oral and written assessments, reports and references relating to individual students and groups of students. • To ensure that literacy, numeracy, and careers education are reflected in the teaching/ learning experience of students • To undertake a designated programme of teaching. • To ensure a high-quality learning experience for students which meets internal and external quality standards. • To prepare and update subject materials. • To use a variety of delivery methods which will stimulate learning appropriate to student needs and demands of the syllabus. • To maintain discipline in accordance with the school's procedures, and to encourage good practice with regard to punctuality, behaviour, standards of work and homework. • To undertake assessment of students as requested by external examination bodies, departmental and school procedures. • To mark, grade and give written/verbal and diagnostic feedback as required.

Other Specific Duties:

- To play a full part in the life of the school community, to support its distinctive mission and ethos and to encourage staff and students to follow this example.
- To support the school in meeting its legal requirements for worship.
- To promote actively the school's corporate policies.
- To continue personal development as agreed.
- To comply with the school's Health and safety policy and undertake risk assessments as appropriate.
- To undertake any other duty as specified by STPCB not mentioned in the above.
- Whilst every effort has been made to explain the main duties and responsibilities of the post, each individual task undertaken may not be identified.

- Employees will be expected to comply with any reasonable request from a manager to undertake work of a similar level that is not specified in this job description.
- Employees are expected to be courteous to colleagues and provide a welcoming environment to visitors and telephone callers.
- The school will endeavour to make any necessary reasonable adjustments to the job and the working environment to enable access to employment opportunities for disabled job applicants or continued employment for any employee who develops a disabling condition.

This job description is current at the date shown, but following consultation with you, may be changed by Management to reflect or anticipate changes in the job which are commensurate with the salary and job title.

Date: 19th October 2021