Curriculum Policy

North East Futures UTC has been established to change the education, skills and UTC employment paradigm in our IT and Healthcare Science sectors in the North East. It provides the opportunity for young people from all the communities in this region to benefit from its specialist provision.

North East Futures

Local Governors and all the North East Futures staff are committed to a policy of equality and aim to ensure that all students, employees, job applicants, other member of the school community and visitors are treated fairly and with respect.

We aim to give equal access to the high quality educational opportunities we provide and to ensure that everyone feels that they are a valued member of the school community. We seek to create a safe and happy environment where all our students can flourish and where social and cultural diversity are celebrated.

Reviewed by:	LGB and Trustees
Frequency of policy review:	Triennially
Lead Sub Committee for discussion:	LGB
Last Reviewed:	Feb 2021
By Dan Sydes	MMM/
Ratified by Local Board of Governors on:	Feb 2021 (sub committee)
By Michael Whitaker	Masel .
Next Review Date:	Feb 2024

Introduction

The Curriculum Policy of North East Futures UTC (UTC) relates directly to the UTC's ethos and goals. North East Futures UTC is committed to the implementation of the National Curriculum but at the same time recognises the need to pursue its own curriculum initiatives.

The UTC is committed to ensuring that partnerships with industry ensure the curriculum and wider provision is relevant to developing the needs of the individuals to ensure they are equipped with the skills needed for the next stage in their careers.

Intent

The intent of the Curriculum at North East Futures UTC is to ensure all students leave ready for the world of work

The curriculum (at both KS4 and Post-16) will provide an appropriately balanced blend of both academic and technical learning. Furthermore, that curriculum will build those employability skills, personal values and professional behaviours required for rapid progression into the Healthcare Science and Digital Technology sectors.

Pupils' learning in all UTCs will be enriched and stretched by regular exposure to both the industry and employees of target sector companies and the partner university (the University of Sunderland). In order to accommodate such curriculum intent and the application of study to meaningful technical projects, pupils at UTCs experience a slightly longer working day.

The distinctive curriculum at North East Futures UTC has a unique character and educational contribution. Its purpose is to invest in children's early interests and aptitudes in science, mathematics and technology in accelerating and enriching both their learning and ambition on the journey to a career in a related field.

Programmes of study at the UTC demonstrate high academic/vocational/technical ambition for all pupils, and the UTC will not offer disadvantaged pupils or pupils with SEND a reduced curriculum. A secure mastery in mathematics and English language will be central to curriculum intent.

The curriculum is constructed to equip pupils with the knowledge and cultural capital they need to succeed in life¹. Implicit in the definition of *cultural capital* in the UTC is familiarity with the most significant **applications** of the 'best that has been thought' in the fields of science and technology. Furthermore, that definition of cultural capital should imply awareness of the significant global challenges that will frame the lives of educated citizens.

The curriculum intent is to secure at the earliest stage possible, those levels of literacy and numerical fluency essential to access and excel in each student's destination.

The curriculum intent is to

- build pupils' research and problem-solving abilities by applying their growing knowledge base to contemporary problems in science and technology. This will be achieved either through routine integration into the programme of study or discrete projects.
- Accelerate the development of technical knowledge and skills through regular access to specialist technical equipment as appropriate.
- Expose pupils to the production, research and development underway within partner companies and university on a routine and frequent basis.
- Raise pupil awareness of critical global challenges, and building understanding of the potential solutions and threats that accompany technological change.

¹ Ibid. para 178

• Provide regular access to extra-curricular STEM-based activities and clubs, and frequent opportunities to participate in national competitions and challenges.

The distinctive UTC curriculum will develop in all pupils those skills and attributes required for independent and collaborative learning and future progression into a STEM- based career. In particular:

- · Curiosity and imagination
- · Enquiry and analysis
- · Problem-solving and resilience
- Self-management and organization
- · Teamwork and collaboration
- Creativity and ingenuity

Work Ready skills are not always as easy to measure as things like mathematical ability or literacy level however the UTC employs tools such as Unifrog in order to record and measure the impact of project-based learning to ensure students have a good record of the 'UTCness' work they have done and also to analyse and report on student progress in key areas. In the future we would like to report students progress in these areas along with progress grades in academic subjects.

Year 10 and 11 Curriculum

Subject	Qualification	Contact Time	Intent
English Literature and Language	2 x GCSEs	5 50 minute teaching periods per week	Inspire and motivate students in an everchanging world Encourage students to understand the methods writers use for different purposes. Encourage students to be creative and write in different forms including those used by Digital Technology and Healthcare Science professionals Inspire students to develop a love of literacy, literature and reading and develop the relevant transferable skills for success in their future careers.
Mathematics	GCSE	5 50 minute teaching periods per week	Inspire and motivate students to become fluent in the fundamentals of Mathematics and develop

North East Futures UTC – Curriculum Policy the relevant transferable skills to be successful in their future careers. Ensure students appreciate the application of Maths in their career, including in the areas of Digital Technology and Healthcare Science Encourage students to use Mathematics to solve problems and widen their technical Mathematics vocabulary GCSE To develop student's **Biology** 3 50 minute teaching conceptual understanding periods per week and scientific knowledge in Biology To ensure that students to explore scientific ideas and learn through experimentation Ensure students appreciate the application of Biology in their career, including in the areas of Healthcare Science Encourage students to widen their technical Biology vocabulary Chemistry GCSE 3 50 minute teaching To develop student's conceptual understanding periods per week and scientific knowledge in Chemistry To ensure that students to explore scientific ideas and learn through experimentation

Ensure students appreciate

Chemistry in their career,

the application of

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			including in the areas of Healthcare Science
			Encourage students to widen their technical Chemistry vocabulary
Physics	GCSE	3 50 minute teaching periods per week	To develop student's conceptual understanding and scientific knowledge in Physics
			To ensure that students to explore scientific ideas and learn through experimentation
			Ensure students appreciate the application of Physics in their career, including in the areas of Healthcare Science and Digital Technology
			Encourage students to widen their technical Physics vocabulary
Computer Science (or Technical IT)	GCSE (or GCSE equivalent)	3 50 minute teaching periods per week	To ensure students have excellent digital literacy and confidence using professional IT tools.
			To ensure students have a grasp of computing fundamentals including increasing their confidence in coding.
			To ensure students consider and are well prepared for a career in Computing.
			Encourage students to widen their technical Computing vocabulary

Option Choice – Geography, History, Art, Enterprise & Marketing	GCSE (or GCSE equivalent)	3 50 minute teaching periods per week	To broaden student's curriculum and to enrich the curriculum outside the
			direct connection to the specialisms
			To make connections between other curriculum areas and Digital Technology and Healthcare Science
Health and Fitness	Core (non-GCSE)	1 afternoon per week	The intent for the Health and Fitness programme is to engage students in physical activity in a fun and meaningful way and to ensure students are equipped with the understanding of the importance of healthy lifestyles.
Personal Development	Core (non-GCSE)	1 50 minute teaching period per week and reinforced in 20 minute tutor time and	The intent for the taught Personal Development programme is to equip students with knowledge and skills to be successful in modern Britain. This includes developing students understanding of citizenship, Sex and Relationships education, religious education, personal, social and health education. The wider Personal Development programme is
			much broader and includes aspects of the UTC Curriculum such as Enrichment, UTCness and cultural and social capital opportunities

Technical Studies in Healthcare Science or Digital Technology	Core (non-GCSE)	3 x taught periods per week	The intent for the taught Technical Studies programme is to develop students skillset in cutting edge technologies around eth UTC's specialist areas of Healthcare Science and
			The intent is to improve student's confidence and employability by ensuring they have the right skills to succeed in industry and to give students the opportunity to connect their academic learning to realworld technical learning and careers.
			The taught technical lessons are an element of a wider ethos of Technical learning at the UTC including work experience placements and 'drop down' days and half days with students completing real-life projects from industry partners.

- Religious Education and Citizenship is delivered as part of the Personal Development and the Tutor programme with the intent of ensuring students are well prepared for life in modern Britain
- Sex and Relationship Education (SRE) forms part of the curriculum and is delivered through Personal Development, Tutor Time and Science with the intent of developing students
- English, Mathematics and Science subjects are taught in 'set' ability groups with the intent of stretching and challenging student's to the correct level and effectively targeting additional support where needed,
- Health and Fitness lessons are delivered through dedicated sessions and the enrichment programme and
 opportunities to take part in a variety of sporting and fitness activities are encouraged. The intent is to ensure
 students pick up good habits for life and find physical activities that they will continue to engage in beyond their
 time at the UTC.
- Students are expected to develop as Independent Learners throughout Key Stage 4 so they are able to cope with the demands of a Post 16 education, apprenticeship and the workplace. To facilitate this, students will have periods every week where they will be in supervised independent learning time and encouraged to use the time effectively to meet the targets set by their teachers.
- All students have access to a wide enrichment programme with the intent of development student's interests, hobbies and passions in line with cultural and social capital and supporting student's career development.

Post 16 Curriculum

Students in Post 16 have 3 pathways to choose for their core curriculum: A Levels, Technical L3 and L2. Students can 'mix and match' their curriculum from the A Level and Technical L3 pathways to build a career pathway that best meets their needs. Most students make 3 or 4 choices from the A Level and Technical pathways.

Subject	Qualification	Entry Reuqirements	Contact Time	Intent
Physics	A Level	5 GCSEs at grade 4 or higher including English and Maths Grade 6 or higher in Physics or Science GCSEs	6 x 50 minute periods per week	The intent of the Physics A Level is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers. The intent is to encourage student's scientific expertise and practical abilities to the level where they are becoming ready to be professional scientists for their career. The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science
Biology	A Level	5 GCSEs at grade 4 or higher including English and Maths Grade 6 or higher in Biology or Science GCSEs	6 x 50 minute periods per week	The intent of the Biology A Level is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers.

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			The intent is to encourage student's scientific expertise and practical abilities to the level where they are becoming ready to be professional scientists for their career.
			The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field

Chemistry	A Level	5 GCSEs at grade 4	6 x 50 minute periods	The intent of the
		or higher including	per week	Chemistry A Level is
		English and Maths		to deepen student's
				knowledge, skills and
		Grade 6 or higher		understanding of the
		in Chemistry or		subject and develop
		Science GCSEs		expertise to prepare
				them for the next
				step towards their
				careers.
				The intent is to
				encourage student's
				scientific expertise
				and practical abilities
				to the level where
				they are becoming
				ready to be
				professional
				scientists for their
				career.
				The intended
				destinations of this
				course are University
				or Higher
				Apprenticeship in a
				related Digital
				Technology or
				Healthcare Science
				field

Computing	A Level	5 GCSEs at grade 4	6 x 50 minute periods	The intent of the
Computing	A Level	or higher including English and Maths Grade 6 or higher in Computer Science or Mathematics GCSE	per week	Computing A Level is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers.
				The intent is to encourage students coding abilities and knowledge of computational theory to the level where they are becoming ready to be professionals in the field.
				The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field
Mathematics	A Level	5 GCSEs at grade 4 or higher including English Grade 6 or higher in Mathematics GCSE	6 x 50 minute periods per week	The intent of the Mathematics A Level is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers.
		line part of Tupo Coact		The intent of this A Level is to ensure students have the mathematical and problem solving ability ready to access degree level Mathematics, Computing or

Healthcare fields. This is often a requirement for Higher Apprenticeships or university degree admissions. The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field

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Further Mathematics	A Level (must be taken	5 GCSEs at grade 4	4 x 50 minute periods	The intent of the
	with A Level	or higher including	per week	Further Mathematics
	Mathematics)	English		A Level is to further
				deepen student's
		Grade 7 or higher		knowledge, skills and
		in Mathematics		understanding of the
		GCSE		subject and develop
				expertise to prepare
				them for the next
				step towards their
				careers.
				The intent of this A
				Level is to ensure
				students have the
				advanced
				mathematical and
				problem solving
				ability ready to
				access degree level
				Mathematics,
				Computing or
				Healthcare fields.
				This is particularly
				important for
				students considering
				Russell Group
				University courses or
				Degree Level
				Apprenticeships
				The intended
				destinations of this
				course are University
				or Higher
				Apprenticeship in a
				related Digital
				Technology or
				Healthcare Science
				field
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Psychology	A Level	5 GCSEs at grade 4 or higher including English Grade 5 or higher in English or Humanities GCSEs	6 x 50 minute periods per week	The intent of the Further Psychology A Level is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers.
				The intent for this A Level is to provide ample opportunities for developing humanities skills such as working from sources and creating scientific written reports.
				The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field particularly in the field of Psychology
Art	A Level	5 GCSEs at grade 4 or higher including English and Mathematics Grade 6 or higher preferred in Art GCSE	6 x 50 minute periods per week	The intent of the Art A Level is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers. The intent of A Level
				Art is to provide

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			students an choice that is focused primarily on creativity and innovation.
			The intent is to ensure learning and work in Art includes themes and topics related to the specialisms of Digital Technology and Healthcare Science wherever possible.
			Secondary intent includes the wellbeing of students so that they can have a different style of learning for their third option along with 2 analytical and data-driven subjects.

English	A Level	5 GCSEs at grade 4 or higher including Mathematics Grade 6 or higher in English GCSE	6 x 50 minute periods per week	The intent of the English A Level is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers. The intent of A Level English is to provide students an option choice that is focused further developing student literacy and writing ability. The intent is to ensure learning and work in English includes themes and topics related to the specialisms of Digital
				Technology and Healthcare Science wherever possible.
				Secondary intent includes the wellbeing of students so that they can have a different style of learning for their third A Level option along with 2 analytical and datadriven subjects. The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field

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Medical Science	Technical – broadly equivalent of one A Level	5 GCSEs at grade 4 or higher including Mathematics	6 x 50 minute periods per week	The intent of the Medical Science course is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next step towards their careers.
				The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field
IT	Technical – broadly equivalent of one A Level	5 GCSEs at grade 4 or higher including Mathematics	6 x 50 minute periods per week	The intent of the Technical IT course is to deepen student's knowledge, skills and understanding of the subject and develop expertise to prepare them for the next
				step towards their careers.
				The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field

Extended Project	Technical – broadly equivalent of half A Level	5 GCSEs at grade 4 or higher including Mathematics	3 x 50 minute periods per week	The intent of the Extended Project is to prepare students for the world of work in a variety of fields where project management skills and ability will be important.
				The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or Healthcare Science field
Core Mathematicss	Technical – broadly equivalent of half A Level	5 GCSEs at grade 4 or higher including Mathematics	3 x 50 minute periods per week	The intent of Core Mathematics is to deepen student's knowledge, skills and understanding of Mathematics and develop expertise to prepare them for the next step towards their careers.
				The intended destinations of this course are University or Higher Apprenticeship in a related Digital Technology or
				Healthcare Science field

Combined Science, English Literature, English Language, Mathematics IT	6 GCSEs Level 2 – this option is a full time pathway on its own	An interest in healthcare science or digital technology	22 x 50 minute periods per week	The intent of the L2 pathway is to prepare students to take their next steps towards their career in a timeframe that is right for them.
				This pathway is designed to reinforce core educational concepts, knowledge and understanding.
				The intended destinations of this course are the Level 3 Technical Pathway or Apprenticeships.

All students include a 'UTCness' package of meaningful work experience, industry mentoring, career guidance and project based learning.

Students are also be encouraged to participate in additional Enrichment and Health and Fitness activity.

All Post 16 students are expected to complete a minimum of two weeks work experience.

All students will be expected to take develop their employability and keep a good record of the UTC work they do.

When planning and delivering teaching and learning in Year 12 and 13, we have the following key aims:

- To support students achieve the best possible outcomes.
- To encourage students to become effective independent learners.
- To encourage students develop work-ready skills such as communication, team work, leadership and problemsolving skills

There is available Careers and Higher Education guidance, drawing on the careers service wherever such support is available. The intent is to have 100% of Year 13 graduates go on to positive destinations.

Students are expected to develop as Independent Learners throughout Key Stage 5. To facilitate this, students will have periods every week where they will be in independent learning time and encouraged to use the time effectively to meet the targets set by their teachers.

All students have access to a wide enrichment programme with the intent of development student's interests, hobbies and passions and supporting their career development.

Implementation

Our Curriculum intent is implemented through taught 50 minute lessons

Key Stage 4

- 5 weekly English and Mathematics lessons
- 9 weekly Science lessons
- 3 weekly Computer Science lessons
- 3 weekly Technical lessons
- 3 weekly option lessons
- 1 weekly Personal Development lesson
- 1 weekly afternoon of Health and Fitness
- · Weekly Independent Learning Time
- Weekly Enrichment

Students are almost always expected to achieve 8 x GCSEs and progress onto a 6th form place at the UTC or another positive education destination.

To implement our 'UTCness' intent every academic year we offer

- · Termly project half and full days
- · Half Termly Mentoring sessions
- 1 week meaningful work experience
- Monthly career talks plus further guest lectures

Key Stage 5

- Usually 18 A Level or Technical lessons per week
- Independent Learning Time
- Optional Enrichment and Health & Fitness

Students are almost always expected to achieve 3 x A Levels or equivalent Technical qualifications and progress onto a positive destination such as University or a Higher Apprenticeship. The UTC does not value either destination as 'better' than the other.

Students on the Level 2 programme are expected to achieve at least 4+ Level 2 qualifications and a positive destination – usually a L3 pathway

To implement our 'UTCness' intent every academic year we offer

- Termly project half and full days
- Half Termly Mentoring sessions
- 1 week meaningful work experience
- Monthly career talks plus further guest lectures

Impact

To ensure the best impact of our Curriculum we implement Quality Assurance of the quality of education our students receive. Some of the measures used at the UTC are:

- Teaching over Time measuring of the Quality of Teaching where teachers use evidence such as progress data, lesson observations, learning walks, climate checks and book scrutinises to evidence good quality consistent teaching in the classroom delivering the curriculum intent
- Outcomes data evidence that students make good progress overall and in core areas such as English and Maths.
 This can be evidenced through robust baseline testing at entry, prior attainment and using data sets to demonstrate progress for all groups of students.
- Destinations Data the UTC records the destination data of all students leaving the UTC at the end of their
 programmes of study positive destinations for students going to University and Apprenticeships evidence the
 success of our curriculum intent

Monitoring and Evaluation

In order to monitor such curriculum intent and facilitate its implementation, the Local Governing Boards of UTCs are required, through the Baker Dearing licence, to have a majority of members nominated by the sponsor employers and university. NE Futures UTC currently has 7 out of 11 governors who are nominated by sponsor employers including Sage, Ubisoft, Accenture, the NHS and the University of Sunderland.

The Local Board of Governors and Principal will monitor the operation and effectiveness of UTC's Curriculum Policy.