

# St Cuthbert Mayne School Curriculum Map 2023 -2024



Department: Design and Technology Department Health & Social Care and Engineering

## Department Intent and overview KS5

### BTEC Pearsons Level 3 Diploma Health and Social -KS5

To prepare and equip students with the knowledge, understanding and skills to pursue a career or further education in the Health and Social Care sector. The Health and Social Care course is a vocational qualification which takes an engaging, practical and inspiring approach to learning and assessment. The course equips students with a sound, specialist and realistic understanding of how to meet the needs of individuals using services and specialist equipment, whilst challenging stereotypes and discrimination. The study of care values is at the heart of Health and Social Care which develops skills such as empathy, compassion, commitment, tolerance and empowerment. This enables our students to become educated citizens and contributes to society in a positive way. The curriculum within Health and Social Care supports the ethos within the school as the subject is broad, balanced and relevant to the needs of students and employers. The curriculum challenges students to think abstractly, work collaboratively and problem solve to develop curiosity and the desire for knowledge. Students will know and understand the following:

- To understand the biological, psychological and sociological theories associated with human lifespan development
- To identify and understand the roles and responsibilities of working in Health and Social Care
- To investigate enquiries into current research in Health and Social Care
- To understand the values and skills that are needed to meet individual care and support needs
- To identify and understand the principles of safe practice in Health and Social Care
- To understand how Public Health is promoted throughout the world, but especially focusing on the UK
- To provide specialist knowledge to ensure that individuals with additional needs are supported
- To understand the importance of nutritional health in being healthy, preventing illnesses and recovering from illness

### **BTEC Engineering Pearsons Level 3 Extended Certificate - KS5**

To develop critical thinking and practical skills and apply scientific and mathematical principles to resolve technical and design situations in order to provide students with a breadth and depth of knowledge and skills. To provide students with challenging opportunities through the process of working as part of a team to design, plan and produce an engineered product. To cover industry standard Computer Aided Design and Manufacture (CAD/CAM) which enables students to actively engage and take responsibility for their personal development in the process of engineering design to develop as effective and independent life-long learners. Students will learn to make decisions, consider sustainability and combine skills with understanding in order to design and make engineered products, exploring ways in which technical, economic and environmental factors interact to shape designing and making. Students will develop an understanding of why analysing existing products will help produce practical solutions to needs. By understanding the manufacturing process students can then design new and improved products which have an impact on technical capability, efficiency, environmental impact and safety factors. The vast nature of disciplines and knowledge which come under the umbrella of Engineering, provide endless opportunities for a wide variety of employment and higher education possibilities. This course develops pupils' real skills, inspires and motivates, and helps them to prepare for the future and to take the next step towards an engineering education and/or career adventure. Engineering is defined as "the profitable application of science, maths and technology." In other terms, engineers make products and processes work, and keep them working, in an affordable way. To prepare and equip students with the knowledge, understanding and skills to pursue a successful career or further education in the Engineering sector.

## Key Stage 5 Curriculum Summary

### BTEC Pearsons Level 3 Diploma in Health and Social Care

#### Year 12 Academic Year 2023 -2024

Topic/Unit	Unit 1: Human Lifespan Development	Unit 2: Working in Health and Social Care	Unit 5: Meeting Individual Care and Support Needs	Unit 7: Principles in Health and Safety
<b>Knowledge (Content covered)</b>	Growth, Development, Physical development, Developmental norms, Milestones, Gross & fine motor skills, Infancy, Early childhood, Adolescence, Early, Middle, Later adulthood, Intellectual development, Emotional development, Social development, Relationships, Genetic factors, Biological factors, Environmental factors, Social factors, Economic factors, Life events, Ageing, Psychological changes,	Roles and responsibilities, eg Doctors, Nurses, HCA, Midwives, Social workers, OT's, Youth workers, Care assistants and managers, Policies and procedures, Rehabilitation, Equipment, Care plans, Antidiscriminatory, Equality, Human Rights, Empowerment, Health and safety, Safeguarding, Accidents, First Aid, Data, Professional Organisations, Multi-disciplinary working, Monitoring, Whistleblowing, Public sector, NHS, Voluntary, Private sectors, Referrals, Barriers, CQC, NICE, PHE, NMC, RCN, HCPC, GMC, Physical and mental	Equality, diversity and preventing discrimination. Skills and personal attributes - people, communication, listening, observation, empathy, trust. The 6 C's and the Triangle of Care. Empathy theories. Ethical theories and approaches. Managing conflict and confidentiality. Legislation. Five step framework. Overcoming challenges. Policy frameworks. Safeguarding. Personalisation. Communication techniques, types and alternatives. Organisations in Health and Social Care.	Duty of care. Complaints procedures. Recognising and responding to concerns about abuse and neglect. Physical, psychological, financial and sexual abuse. Vulnerable groups. Professional roles and legal responsibilities. Whistleblowing. Multi agency working. Health and safety legislation and policies. CQC, DBS checks. Procedures to maintain health and safety. Food preparation and storage. Health and safety responsibilities.

		health, Learning disability, Physical and sensory disabilities, Early years, Adulthood, Working practices,		
<b>Skills</b>	Research, Discussion, Recording, Questioning, Testing, Revising, Applying,	Research, Discussion, Recording, Questioning, Testing, Revising, Applying,	Research, Discussion, Recording, Questioning, Testing, Revising, Applying,	Research, Discussion, Recording, Questioning, Testing, Revising, Applying,
<b>Assessment</b>	90 minute External exam in May 2024	90 minute External exam in May 2024	90 GLH internal assessment	90 GLH internal assessment
<b>Gatsby 4 (Linking curriculum learning to careers)</b> <a href="#">GATSBY BENCHMARK 4</a>	Nursing, Midwifery, Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health Care Assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator, Sports development officer, Youth worker, Counsellor, Ward	Nursing, Midwifery, Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health Care Assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator,	Nursing, Midwifery, Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health Care Assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator, Sports development officer, Youth	Nursing, Midwifery, Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health Care Assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator, Sports development officer, Youth

	clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Any jobs and careers related to working with babies, children, teenagers, adults, elderly, people with disabilities, mental health.	Sports development officer, Youth worker, Counsellor, Ward clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Jobs/careers related to working with babies, children, teenagers, adults, elderly, disabilities, mental health.	worker, Counsellor, Ward clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Any jobs and careers related to working with babies, children, teenagers, adults, elderly, people with disabilities, mental health.	worker, Counsellor, Ward clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Any jobs and careers related to working with babies, children, teenagers, adults, elderly, people with disabilities, mental health.
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<b>BTEC Pearsons Level 3 Engineering</b>	<b>Year 12</b>
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<b>Topic/Unit</b>	<b>Unit 1: Engineering Principles</b>	<b>Unit 2: Delivery of Engineering Processes safely as a team</b>
<b>Knowledge (Content covered)</b>	<ul style="list-style-type: none"> <li>● To recall basic engineering principles and mathematical methods and formulae</li> <li>● To perform mathematical procedures to solve engineering problems</li> <li>● To demonstrate an understanding of electrical, electronic and mechanical principles to solve engineering problems</li> </ul>	<ul style="list-style-type: none"> <li>● Examine common engineering processes to create products or deliver services safely and effectively as a team</li> <li>● Develop two-dimensional computer-aided drawings that can be used in engineering processes</li> </ul>

	<ul style="list-style-type: none"> <li>Analyse information and systems to solve engineering problems</li> <li>To integrate and apply electrical, electronic and mechanical principles to develop an engineering problem.</li> <li>Algebrae, Trigonometry, Static engineering systems, Loaded components, Dynamic engineering systems, Fluid and thermo dynamic engineering systems, Static and direct current electricity and circuits, Magnetism and electromagnetic induction, Single phase alternating current</li> </ul>	<ul style="list-style-type: none"> <li>Carry out engineering processes safely to manufacture a product or to deliver a service effectively as a team</li> <li>Health and safety, risk assessments, PPE, COSHH regulations, manual handling, RIDDOR</li> <li>Human factors - quality, safety, ethics</li> <li>Orthographic projections, dimensions, tolerances, lettering</li> <li>2dD, CAD/CAM</li> <li>Manufacturing including batch manufacturing and delivery</li> </ul>
<b>Skills</b>	Numeracy, Algebrae, Trigonometry, Mathematical principles, Research, Discussion, Communication, Recording, Questioning, Testing, Revising, Applying,	CAD/CAM skills, Filing, cutting, Drilling, Soldering, Research, Discussion, Communication, Planning, Assessing risks, Team work, cooperation, Critical reflection, Feedback to others, Recording, Questioning, Testing, Revising, Applying, Evaluating
<b>Assessment</b>	120 GLH External exam in May 2024	60 GLH internal assessment
<b>Gatsby 4 (Linking curriculum learning to careers)</b>	Architect, CAD technician, CAD engineer,	Architect, CAD technician, CAD engineer,

<a href="#">GATSBY BENCHMARK 4</a>	Design engineer, Illustrator, App developer, Games designer, Software engineer, Digital media designer, Electronics engineer, Civil engineer, Electrician, Website designer,	Design engineer, Illustrator, App developer, Games designer, Software engineer, Digital media designer, Electronics engineer, Civil engineer, Electrician, Website designer,
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Year 13 Academic Year 2023 - 2024				
Topic/Unit	Unit 12: Supporting Individuals with Additional Needs	Unit 19: Nutritional Health	Unit 4: Enquiries into Current Research in Health and Social Care	Unit 8: Promoting Public Health
<b>Knowledge (Content covered)</b>	Diagnosing or determining additional needs, diagnostic procedures, standards of practice, specialists, Prognosis, Impairment,	Healthy eating, Eatwell guide, Malnutrition, Food processing, Food preparation, Nutrition, Macronutrients,	Research in Health and Social Care. Provision and Issues in H&SC. Health conditions, lifestyle factors. Social care and	Origins and aims of public health policy. Strategies for developing PH policies. Monitoring the health status of the population.

	Cognitive and learning needs, Dyspraxia, Dyslexia, ADHD, ASD, Inherited conditions, Down's syndrome, HD, Dementia, Older people's needs, Physical and health needs, Mental illness, Sensory disabilities, Accidents, Infectious diseases, Social and emotional needs, Elderly, Learning environment, Disability, Environmental and social challenges, Barriers, Personal challenges, Attitudes, Current practice and professionals, Support and equipment, Therapies, Financial support, Statutory provision, EHC's, Person centred care,	Micronutrients, Functions, Food sources, BMI, DRV, RNI, Dietary deficiencies, Children, Young people, Adults, Older people, Pregnant, Breast feeding, Dietary habits, Lifestyle factors, Socio-economic factors, Cultural factors, Education, Food labelling, Legislation, Diabetes, CHD, IBS, Crohn's disease, Allergies and intolerances, Coeliac, Lactose intolerance, NGT, PEG, IVI, TPN, Activity levels,	welfare needs. Research methodologies. Qualitative and quantitative data. Analysis of data. Conducting effective literature searches. Identifying, analysing and evaluating source material. Planning research. Modifying and monitoring research. Ethical issues. Confidentiality. Data protection. Human rights and research. Research skills. Numerical data. Reading techniques. Reviewing and evaluating research.	Groups that influence PH policy. Factors affecting health - environmental, genetic, lifestyle. Socio-economic impact of improving health. The role of health promoters. Protecting PH and well being. Environmental controls. Disease prevention and control methods. Features of health promotion campaigns. Barriers to participating and challenging indifference. Behaviour change.
<b>Skills</b>	Researching, Explaining, Describing, Assessing, Analysing, Justifying, Evaluating,	Researching, Explaining, Producing, Comparing, Assessing, Analysing, Justifying, Evaluating,	Researching, Explaining, Producing, Comparing, Assessing, Analysing, Justifying, Evaluating,	Researching, Explaining, Producing, Comparing, Assessing, Analysing, Justifying, Evaluating,
<b>Assessment</b>	60 GLH Internal assessment	60 GLH Internal assessment	120 GLH External assessment - 3 hour exam in May 2024	90 GLH Internal assessment
<b>Gatsby 4 (Linking</b>	Nursing, Midwifery,	Nursing, Midwifery,	Nursing, Midwifery,	Nursing, Midwifery,



<p>curriculum learning to careers)  <a href="#">GATSBY</a>  <a href="#">BENCHMARK 4</a></p>	<p>Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health care assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator, Sports development officer, Youth worker, Counsellor, Ward clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Any jobs and careers related to working with babies, children, teenagers, adults, elderly, people with disabilities, mental health.</p>	<p>Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health care assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator, Sports development officer, Youth worker, Counsellor, Ward clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Jobs related to working with babies, children, teenagers, adults, elderly, disabilities, mental health.</p>	<p>Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health Care Assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator, Sports development officer, Youth worker, Counsellor, Ward clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Any jobs and careers related to working with babies, children, teenagers, adults, elderly, people with disabilities, mental health.</p>	<p>Paramedics, Dental nurse, Medical receptionist, Medical Secretary, Pharmacy technician, School nurse, Speech and language therapist, Hospital staff, Health Care Assistant, Care assistant, Care manager, Sports physiotherapist, Social work, Physiotherapy, Occupational Therapist, Community Health administrator, Environmental Health Practitioner, Health Records administrator, Sports development officer, Youth worker, Counsellor, Ward clerk, Laboratory technician, ICU technician, Health and fitness instructor, Support workers. Any jobs and careers related to working with babies, children, teenagers, adults, elderly, people with disabilities, mental health.</p>
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