TECHNOLOGIES

BUSINESS EDUCATION

BUSINESS/BUSINESS MANAGEMENT

Faculty Contact: Ms E Taylor, PT Technologies

Levels Available

National 3, 4, 5, Higher and Advanced Higher

Purpose, Aims and Benefits of the Course

National 3 and 4 - Business

What was the last product you bought? What made you buy it? How was it made? National 3 and 4 Business gives you the opportunity to find out about the different activities that businesses carry out. From why entrepreneurs such as Bill Gates and Steve Jobs decided to set up their own business, to what influences the decisions they make. You will also research a business of your choice and suggest improvements you think they should make. The course develops employability skills and supports students in becoming more confident in the world of work.

National 5 – Business Management

Why do adverts go viral? How are my favourite products made? Where do businesses get all their money from? Every one of us will end up working for some sort of business or organisation. National 5 Business allows students to develop essential employability skills whilst developing an understanding how businesses are set up and how they operate. Students have the opportunity to explore different aspects of marketing, operations, human resources and finance.

Higher – Business Management

Ever wondered why business act in the way that they do? Higher Business Management is your opportunity to explore different business decisions in detail. Through the assignment you are able to delve into a business of your choice, whilst developing your analytical and interpretation skills. Build on your knowledge of the functional areas, enhance your problem solving skills and work as part of team to understand key business concepts. This course is an ideal starting point for anybody considering a business related career.

Progression Routes

- National 4, 5, Higher and Advanced Higher.
- HNC/D e.g. Business Administration.
- Degree courses e.g. BA Business Management, BA Commerce, BA Accounting.
- A range of employment or training opportunities e.g. administrative posts in human resources or marketing.

TECHNOLOGIES

BUSINESS EDUCATION

ADMIN & IT

Faculty Contact: Ms E Taylor, PT Technologies

Levels Available

National 4, 5 and Higher

Purpose, Aims and Benefits of the Course

National 4

Employers are increasingly telling us that students leaving school do not have the correct IT Skills – this your opportunity to develop these skills and stand out against your peers!

The course will allow you to develop your skills in the Microsoft packages, giving you a range of IT skills that will appeal to employers, colleges and universities. You will explore three units in the course, not only enhancing your IT skills through practical open book assignments, but it will also help develop your literacy skills through learning about administration in the workplace. Learners will begin to appreciate key legislation affecting employees, key features of good customer care and the skills, qualities and attributes required of administrators – all essential skills for preparing learners for any job role!

National 5

Technology within the workplace is growing at a fast pace and the need for digital skills is becoming essential - there is never a better time to develop your IT skills with this course!

The course is broken into three units which will develop learners' skills in IT, problem solving, organising and managing information. Learners select IT applications to create and edit business documents, gather and share information and develop skills to communicate information – all essential for the dynamic working environment.

Higher

The purpose of the course is to develop practical skills and knowledge and understanding in Information Technology, Communications, Problem Solving and Decision Making. The course not only equips students with the level of competence required for using a range of software packages in a work, home or educational setting but will enable them to research, evaluate and summarise information in an effective way.

Progression Routes

- N5, H, HNC/D e.g. Business Administration.
- Degree courses e.g. BA Business Management, BA Commerce, BA Accounting.
- A range of employment or training opportunities e.g. administrative posts in human resources or marketing.

TECHNOLOGIES

BUSINESS EDUCATION

NPA BUSINESS & IT

Faculty Contact: Ms E Taylor, PT Technologies

Levels Available

Level 5

Purpose, Aims and Benefits of the Course

- Would you like to leave school ready to take on the business world that surrounds us?
- Would you like to be work ready with the essential employability skills the employers of the future are looking for?
- Would you like to develop your IT skills in the Microsoft Software that is used by almost every employer on the planet?

If the answer to all of the above is YES – this course is for you.

Every one of us will end up working for a business or some sort of organisation. This course will allow you to develop essential employability skills whilst gaining an understanding of how businesses are set up and how they operate. You will explore different aspects of marketing, operations and information technology.

The course is assessed through continuous open book assessment, there is no final exam to be stressed about.

Whilst this course will benefit everyone, if you have a particular interest in following a career in Business and/or IT you may be glad to know that in the next 10 years it is predicted that in Edinburgh, Midlothian and East Lothian, there will be 32, 900 job openings in the Business, IT and Finance sector.

Progression Routes

- Higher Business Management
- HNC/D e.g. Business Administration.
- Degree courses e.g. BA Business Management, BA Commerce, BA Marketing.
- A range of employment or training opportunities e.g. Business posts in marketing, operations or IT.

TE

TECHNOLOGIES
BUSINESS EDUCATION
TRAVEL & TOURISM
Faculty Contact: Ms E Taylor, PT Technologies

Levels Available
National 5

Purpose, Aims and Benefits of the Course

Are you considering a career related to travel or tourism? Or are you keen to find out more about some of the most popular tourist destinations in Scotland, the UK and Worldwide? This is your opportunity to do so. Discover more about destinations such as Dubai, Sydney and Tokyo, and even those closer to home. 'Staycations' are expected to take off this year in the UK which means Travel & Tourism will play a big part in the UK recovering from the pandemic.

The Travel and Tourism course provides an introduction to this industry. You will develop skills which will enable you to become effective job-seekers and employees, skills to deal effectively with all aspects of customer care and customer service in travel and tourism, knowledge and skills to deal effectively with customer enquiries in relation to travel and tourism in Scotland, the rest of the UK and worldwide.

You will have the opportunity to further your understanding of the course content by accessing the wide range of tourist and visitor attractions on our door step, and further afield.

The course is assessed through a range of methods including role play, written assessments and observations. There is no final exam for this course.

Progression Routes

- Level 6 Travel and Tourism Units
- HNC/D at college in Travel and Tourism
- Employment in a range of local organisations specialising in travel and tourism

TECHNOLOGIES
COMPUTING
COMPUTING SCIENCE
Faculty Contact: Ms E Taylor, PT Technologies

Levels Available (Entry based on prior attainment)

National 3, 4, 5, Higher and Advanced Higher

Purpose, Aims and Benefits of the Course

In all Computing Science Levels:

The **4 topic areas** that students will cover:

- Software Design & Development, Computer Systems, Database Design & Development and Web Design & Development

Within National 5 and Higher Computing Students will have one final exam that is worth 69% of their overall grade. There is also a piece of "open book" coursework covering all 4 topic areas, worth 31% of the overall grade.

National 4 and 5 Computing Science

The Course aims to enable learners to:

- apply computational-thinking skills across a range of contemporary contexts
- apply knowledge and understanding of key concepts and processes in computing science
- apply skills and knowledge in analysis, design, implementation, testing and evaluation to a range of digital solutions
- communicate computing concepts and explain computational behaviour clearly and concisely using appropriate terminology
- develop an understanding of the role and impact of computing science in changing and influencing our environment and society

Higher Computing Science

The Course aims to enable learners to:

- extend and apply knowledge and understanding of advanced concepts and processes in computing science
- communicate advanced computing concepts and explain computational behaviour clearly and concisely, using appropriate terminology
- develop awareness of current trends in computing technologies and their impact in transforming and influencing our environment and society

Progression Routes

Computing and ICT are specialisms that are found in all career areas. From IT support to Games companies, Scotland has a nationwide shortage of trained personnel. Computing Science courses will provide a gateway into these areas, either through direct entry into industry or as a firm platform for further study at National 5 /Higher level/Further Education.

TECHNOLOGIES

CREATIVE DESIGN AND TECHNOLOGY Across the subjects on offer within CDT there is a new focus on ***creativity***, ***problem solving*** and ***critical thinking***.

DESIGN AND MANUFACTURE

Faculty Contact: Ms E Taylor, PT Technologies

Levels Available

National 5 and Higher

Purpose, Aims and Benefits of the Course

This course allows you to explore the multi-faceted world of product design and manufacturing. **Creativity** is at the heart of this course and its combination with technology makes it exciting and dynamic.

Design and Manufacture provides you with skills in designing and communicating design proposals, allowing you to refine and resolve your design ideas effectively. The course stresses the integration of designing and making, highlighting the close relationship between designing, making, testing, and refining design ideas. The skills you learn in this course give you a broad range of potential for jobs or careers; in the expressive arts, mathematics, science, information technology, as well as in craft, design, engineering and graphics.

This course provides a broad practical introduction to design, and materials and manufacturing processes. You will develop design skills, as well as skills in making models, prototypes and products. And, you will look at the life cycle of a product; from idea through design, manufacture, and use, including its disposal or re-use. You will learn to appreciate the relationships between factors such as aesthetics, function, ergonomics, economics and the environment.

Progression routes

- National 5 and Higher
- Graphic Communication (National 5 and Higher)
- Engineering Science (National 5 and Higher)
- Practical Woodworking (National 5)
- HNC/HND
- Degrees (BA and BSc) and careers in: Product Design, Industrial Design, Engineering Design, Furniture Design, Product Design Engineering, Design Management, Computer Aided Design, Architectural Design and Technology

TECHNOLOGIES

CREATIVE DESIGN AND TECHNOLOGY Across the subjects on offer within CDT there is a new focus on ***creativity***, ***problem solving*** and ***critical thinking***.

ENGINEERING SCIENCE

Faculty Contact: Ms E Taylor, PT Technologies

Levels Available

National 5 and Higher

Purpose, Aims and Benefits of the Course

Engineering is vital to everyday life; it shapes the world in which we live and its future. Engineers play key roles in meeting the needs of society in fields which include climate change, medicine, IT and transport. Our society needs more engineers, and more young people with an informed view of engineering.

In this course you will develop and extend knowledge and understanding of key engineering concepts and processes and learn to apply these to a variety of problems. On completing the course, you will learn skills in: analysis and problem solving, engineering design, the use of equipment and materials, and evaluation.

The skills you learn from this course are valuable for a wide range of career areas and industries. This includes Engineering, Electronics, Oil, Renewable Energy Production, Science, Mechanics, Construction and the Built Environment.

Engineering Science develops a broad range of technological skills, including analysis, problem solving and design skills. The course comprises three areas of study: engineering contexts and challenges, electronics and control and mechanisms and structures. Within these areas you will learn how to use equipment and materials, evaluate products and systems, look at key engineering concepts and processes, solve a variety of problems and look at the impact of engineering on society and the environment.

Progression routes

National 5 and Higher

- Design and Manufacture (National 5 and Higher)
- Physics (National 5 and Higher)
- HNC/HND
- Degrees (BSc and BEng) and careers in: Engineering, Mechanical Engineering, Robotics, Civil Engineering, Aerospace Engineering, Automotive Engineering, Mechatronics, Aeronautical Engineering, Design Engineering, Architectural Engineering

TECHNOLOGIES

CREATIVE DESIGN AND TECHNOLOGY Across the subjects on offer within CDT there is a new focus on ***creativity***, ***problem solving*** and ***critical thinking***.

GRAPHIC COMMUNICATION

Faculty Contact: Ms E Taylor, PT Technologies

Levels Available

National 5, Higher and Advanced Higher

Purpose, Aims and Benefits of the Course

Graphic Communication in all its forms is vital to society. This course is designed to increase your awareness of how graphics are used, and to learn about the technology used to create them. You will create 2D, 3D and pictorial graphics with visual impact or that transmits information, digitally and on paper. The skills you learn in this course are useful in many career areas including Graphic Design, Web Design, Architecture, Surveying, Engineering or Design, Marketing and Advertising.

Students broaden their skills in a **creative** environment and are encouraged to exercise imagination, creativity and critical thinking. The course allows students to develop an awareness of graphic communication as an international language and an understanding of how graphic communication technologies impact on society and the environment. Students initiate, develop and communicate ideas graphically, and develop spatial awareness and visual literacy through graphic experiences. They interpret graphic communications initiated by others, and use graphic communication equipment, software and materials effectively.

This course is a broad-based qualification, suitable for students with an interest in both digital and paper-based graphic communication. It is largely learner-centred, includes practical and experiential learning opportunities and is suitable for those wanting to progress onto higher levels of study or a related career in graphics, design, marketing, and related disciplines. The course also offers a complementary experience for those studying other subjects in the technologies and expressive arts.

Progression routes

National 5 and Higher

- Design and Manufacture (National 5 and Higher)
- Art and Design (National 5 and Higher)
- HNC/HND
- Degrees and careers in: Architecture, Graphic Design, Illustration, Animation, Digital Design, Computer Graphics, Computer Aided Design, Visual Effects, Web Design

TECHNOLOGIES

CREATIVE DESIGN AND TECHNOLOGY Across the subjects on offer within CDT there is a new focus on ***creativity***, ***problem solving*** and ***critical thinking***.

PRACTICAL WOODWORKING

Faculty Contact: Ms E Taylor, PT Technologies

Levels Available

National 4 and National 5

Purpose, Aims and Benefits of the Course

The Practical Woodwork course is workshop-based, combining elements of tool and material knowledge with practical woodworking techniques. Students develop skills in traditional furniture manufacture primarily using hand tools. They are required to work safely and become proactive in matters of health and safety.

Students develop skills in transferring measurements from drawings to materials and using hand tools to produce basic wooden products using traditional furniture manufacturing joints. Course activities also provide opportunities to build resilience and to enhance skills in the measuring aspects of numeracy.

This course is suitable for students with an interest in entering the handmade furniture manufacturing industry. It is largely based around the manufacture of practice joints leading to the manufacture and assembly of 3 small projects before undertaking the final course assignment. It is well complemented with study of the N5 Design and Manufacture course where the practical activities covered in this course will enable students to manufacture the items they design in D&M to a higher standard.

Progression routes

Design and Manufacture (National 5 and Higher)

- HNC/HND Furniture
- College course in: Furniture Design, Furniture and Product Design, 3D Design and Craft