TECHNOLOGY

Computing 103 (CMP103)	**Teacher to see:** Mr Qureshi

This course is based on unit standards in the area of computing with an emphasis on acquiring practical computing skills in spreadsheets, presentations, desktop publishing, and word processing.

Prerequisites: None

Credits			**Standards**	**Cost**	None
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
14	**0**	**14**		**UE approved**	Not applicable

Future possibilities: This course will provide students with computing skills they can use in almost all work situations and careers. It will also prepare students for the Level 2 computing course.

Computing 203 (CMP203)

Teacher to see: Mr Qureshi

In this course students have the opportunity to use the main features and functions of a wide range of office computing applications such as spreadsheets, presentations, work processing, desktop publishing, and databases using industry leading software.

Prerequisites: None, however, successful completion of CMP103 recommended at Year 11.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
17	**0**	**17**		**UE approved**	Not applicable

Future possibilities: This course gives students valuable skills in office computing applications. It can also be the starting point for students achieving the National Certificate in Computing Level 2.

Computing 303 (CMP303)

Teacher to see: Mr Qureshi

This course offers unit standards in the main office computing applications such as word processing, spreadsheets, presentations, and databases.

Prerequisites: None, however, successful completion of CMP203 recommended.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
17	**0**	**17**		**UE approved**	No

Future possibilities: This course provides students the opportunity to engage in learning in practical computing applications at Year 13 level. Units completed successfully in this course can go towards meeting the requirements for the National Certificate of Computing Level 3.

Design and Visual Communication - Fashion 101 (DVC101)

Teacher to see: Ms Bunt

This course covers fashion history and design in Aotearoa. Students learn creative design techniques and how to illustrate their ideas. Students will also have the opportunity to develop their ideas and construct their garment/s. This could also include jewellery and accessory design.

Prerequisites: Yr 10 DVT and/or Yr9 or 10 Fashion/Soft Materials is preferred.

Credits			Standards	Cost	$30 fabric and materials.
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
10	**10**	**20**		**UE approved**	Not applicable

Future possibilities: Fashion designer, fashion industry.

Design and Visual Communication 101 (DVC101)

Teacher to see: Ms Bunt

This course covers architectural design, heritage and application in Aotearoa. Students learn creative design and sketching techniques. They also learn how to present their ideas using a range of visual communication modes and media including freehand and CAD.

Prerequisites: Yr 10 DVT is preferable.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
10	**10**	**20**		**UE approved**	Not applicable

Future possibilities: Creative design industries particularly architecture and spatial, product or fashion design.

Design and Visual Communication 201 (DVC201)

Teacher to see: Ms Bunt

This course covers design history, freehand sketching, CAD and modelling. Students develop design solutions to a range of product and architectural contexts.

Prerequisites: Level 1 DVC and HOD discretion.

Credits			Standards	Cost	$20 specialist drawing equipment and supplies.
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
19	**3**	**22**		**UE approved**	Not applicable

Future possibilities: Creative design industries particularly architecture and spatial, product or fashion design.

Design and Visual Communication 301 (DVC301)

Teacher to see: Ms Bunt

This course establishes students as independent designers, developing their own individualised product or architectural solution. Students will develop sophisticated visual communication techniques to accurately present their ideas in both freehand and CAD.

Prerequisites: Level 2 DVC.

Credits			Standards	Cost	$30 Specialised drawing equipment
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
19	**3**	**22**		**UE approved**	Yes

Future possibilities: Creative design industries particularly architecture and spatial, product or fashion design.

Digital Technology 101 (DGT101)

Teacher to see: Mr Qureshi

This course focuses on developing student knowledge and skills in the areas of programming and game development. Students will learn coding skills using the Python programming language. They will also design and develop games using the Godot game engine.

Prerequisites: Successful experience in 10DGT would be preferable but is not a prerequisite.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
14	**3**	**17**		**UE approved**	Not applicable

Future possibilities: This course can lead students to several rewarding and fulfilling pathways. These include software development, game design and development and computer scientist.

Digital Technology 201 (DGT201)

Teacher to see: Mr Qureshi

This course builds on the knowledge and skills gained in DGT101. Students use advanced programming techniques to develop a computer program and implement advanced procedures to design and develop a 2D RPG outcome.

Prerequisites: Preferable to have successfully completed CDT101. Students with a passion for digital technology who have not taken the subject in Year 11 can also take the course with HOD permission.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
16	**3**	**19**		**UE approved**	Not applicable

Future possibilities: Students can acquire the knowledge and skills to specialise in a wide variety of careers or study options within the area of computer science and game design and development.

Digital Technology 301 (DGT301)

Teacher to see: Mr Qureshi

This course focuses on using advanced techniques and skills to develop complex computer programs, 3D games, and databases. The external standard is based on analysing an area of computer science.

Prerequisites: Successful completion of Digital Technologies at Level 2 is strongly recommended. Students who have not taken the subject previously at senior school should see the teacher in charge.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
16	**3**	**19**		**UE approved**	Yes

Future possibilities: This course is essential for those students wishing to study computer science at university. It is also valuable for students interested in pursuing higher studies in other areas such as engineering and science.

Engineering Technology 103 (EGT103)

Teacher to see: Ms Bunt

Students will develop practical solutions in the workshop by making a range of engineered projects. New skills are developed using engineering processes with workshop tools and equipment. Assessments include finished engineered products with a written component evidencing knowledge gained and are both Unit and Achievement Standards.

Prerequisites: Engineering in Year 10 an advantage.

Credits			Standards	Cost	$40 for materials used for take home projects
Internal	**External**	**Total**	Achievement Standards, Unit Standards	**Course endorsement**	No
18	**0**	**18**		**UE approved**	Not applicable

Future possibilities: Any mechanical engineering industry, automotive engineering

Engineering Technology 202 (EGT202)

Teacher to see: Ms Bunt

Students will develop higher level practical solutions in the workshop by making a range of engineered projects an advancement of skills from Level 1 Engineering. These advanced skills are developed using engineering processes with workshop tools and equipment. Assessments include finished engineered products with a written component evidencing knowledge gained and are both Unit and Achievement Standards.

Prerequisites: Students should have studied Level 1 Engineering or at HOD discretion.

Credits			Standards	Cost	$60 for materials used for take home projects.
Internal	**External**	**Total**	Achievement Standards, Unit Standards	**Course endorsement**	No
20	**0**	**20**		**UE approved**	Not applicable

Future possibilities: Any mechanical engineering industry, general engineering, fitting turning and tool making, marine engineering and fabrication, accuracy and precision in manufacturing.

Engineering Technology (EGT303)

Teacher to see: Ms Bunt

This course is for students who wish to complete further engineering skills and develop high level practical solutions by making a range of engineering projects using advanced machinery and processes. This is a unit standard based course where assessment is both through practical outcome and paperwork that shows evidence of accuracy, precision, engineering knowledge and understanding.

Prerequisites: Students should have studied and achieved in Level 2 Engineering.

Credits			Standards	Cost	$60 material costs for take home projects (further costs could be added for large projects)
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
20	**0**	**20**		**UE approved**	No

Future possibilities: Mechanical engineering industry, general engineering, fitting & turning, tool making, marine engineering and fabrication.

Food and Nutrition 101 (FNT101)

Teacher to see: Ms Pepper

Through the processes of selecting, preparing, cooking, and serving food, students enhance their creativity and develop skills that contribute to well being. Students will have the opportunity to investigate healthy eating and cultural foods in our communities along with building the knowledge and skills to interpret food packaging.

Prerequisites: None although food at Year 9 or 10 would be an advantage.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
10	**5**	**15**		**UE approved**	Not applicable

Future possibilities: Career pathways include: Food marketing, public health, dietician, nutritionist, food technology and health promotion

Furniture Production Technology 103 (FPT103)

Teacher to see: Mr Perillo

Students will develop practical solutions in our wood workshops by making a range of products both for the building industry and the cabinet/furniture making industry. Students will learn to use a range of tools and modern machinery as well as traditional manufacturing methods to unit standard requirements. Projects can include: Stepladder and a second project where students are encouraged to investigate and produce their own project.

Prerequisites: Year 10 Woodwork would be useful but not essential.

Credits			Standards	Cost	$60 towards materials used for take home projects
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
15	**0**	**15**		**UE approved**	Not applicable

Future possibilities: Any Building and Construction career, cabinet making, furniture making.

Furniture Production Technology 203 (FPT203)

Teacher to see: Mr Perillo

Students will make a range of projects in our woodwork shops. They learn new skills using tools and equipment, observing and performing woodworking processes and investigating work methods. Projects can include: Cape Cod chair and side table where they are introduced to setting up and using the wood lathe to produce table legs.

Prerequisites: Level 1 FPT or HOD discretion.

Credits			Standards	Cost	$60 material costs for take home projects (further costs could apply for large projects)
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
17	**0**	**17**		**UE approved**	Not applicable

Future possibilities: Any building and construction career, cabinet making, furniture making.

Hospitality 103 (HOS103)

Teacher to see: Ms Pepper

This practical-based programme will provide an introduction to food production in the hospitality industry. The course has been designed to allow students to develop knowledge and skills of practical cookery. The course framework is derived from Pre-Tertiary Unit Standards and certificates of achievement provided by the Hospitality Industry Training Organisation, Service IQ.

Prerequisites: None but an interest in cooking and food at year 9 or 10 would be an advantage.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
19	**0**	**19**		**UE approved**	Not applicable

Future possibilities: This is a vocational course with future possibilities in cafes, restaurants and bars, catering and tourism.

Hospitality 203 (HOS203)

Teacher to see: Ms Pepper

This is a practical, hospitality industry focused course with standards in cookery and front of house service recognised by Service IQ. Students are expected to work at a higher level with greater accuracy and commercial equipment is used to prepare café quality dishes. Students have the opportunity to gain credits in the application of barista skills, though managing the Hot Shotz Café.

Prerequisites: Preference given to students who have completed food studies at Level 1.

Credits			Standards	Cost	None
Internal	**External**	**Total**	Unit Standards	**Course endorsement**	No
19	**0**	**19**		**UE approved**	Not applicable

Future possibilities: Careers in the hospitality industry in businesses such as cafes, restaurants and bars in front-of-house. Further study to gain chef qualifications. Careers in tourism.

Mixed Material Technology 101 (MXT101) (NOTE- NEW VERSION OF THIS COURSE)

Teacher to see: Ms Hine

This course follows the design process by developing skills in research, designing and a manufactured outcome from a range of mixed materials, including but not limited to wood, plastic and metal. Students will use practical skills both in the workshops and using clean technologies such as the laser cutter and 3D printer. (This course no longer includes fashion design which is now within Design Visual Communication- Fashion DVC).

Prerequisites: Year 9 or 10 DVT, HMT, EGT or WWT preferable.

Credits			Standards	Cost	$30 material costs for take home projects
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
16	**4**	**20**		**UE approved**	Not applicable

Future possibilities: Product/industrial designer, jewellery designer, manufacturing industry, computer aided design and manufacturing and designer maker.

Mixed Materials Technology 201 (MXT201)

Teacher to see: Ms Hine

This course follows on from current Mixed Materials Level 1 where students are required to be innovative and think creatively to design and make usable products. These products could be storage solutions, lamps, wall art, speakers OR a fashion product such as dresses, accessories, jewellery or design a brand.
Using specialist Design knowledge, students develop skills in CAD/CAM, modelling, manufacturing using a range of mixed materials including but not limited to, wood, plastic, metal and/or fabric. This course still includes Fashion Design for 2022.

Prerequisites: It would be an advantage for students to have studied MXT101, DVC101 or Year 10 Fashion/Soft Materials. HOD discretion.

Credits			Standards	Cost	$30 for materials used in take home projects
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
16	**4**	**20**		**UE approved**	Not applicable

Future possibilities: Product/industrial design, fashion design, jewellery and accessory design.

Mixed Materials Technology 301 (MXT301)	**Teacher to see:** Ms Hine

This course follows on from current Mixed Materials Level 2 where students are required to be innovative and think creatively to design and make usable products. At Level 3 students are required to use advanced procedures and design for a client of their choice. Products could include interior/exterior design solutions or be a fashion solution such as a range of clothing or development of a brand.
Using specialist design knowledge, students develop skills in CAD/CAM, modelling, manufacturing using a range of mixed materials including but not limited to, wood, plastic, metal and/or fabric.

Prerequisites: MXT201, DVC201 or at HOD discretion.

Credits			**Standards**	**Cost**	$30 towards materials for take home products
Internal	**External**	**Total**	Achievement Standards	**Course endorsement**	Yes
16	**4**	**20**		**UE approved**	Yes

Future possibilities: Any product or industrial design career or university course, interior designer, furniture design, textile design, fashion/jewellery/accessory design, computer aided design and manufacturing careers.