AL-MADINAH SCHOOL

Technology Department Newsletter

2026 Academic Year Outline

اَلسَّلامُ عَلَيْكُمْ وَ رَحْمَةُ اللهِ وَ بَرَكَاتُه

WELCOME BACK!

Welcome to Term 2. We are thrilled to have you as part of our school community and choosing a subject linked to the department.

UPCOMING EVENTS

Students would be completing the first assessment that they had started in term 1. These assessments would be marked, moderated and then their grades would be shared with them. While this is happening the students would be learning and working on their next set of assessments.

TEACHERS IN THE DEPARTMENT

Shafina Mohammed - Digital Technology teacher for year 11 to 13 boys and girls and Technology teacher for year 9 and 10 girls.
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Mohammed Ashif Khan - DVC teacher for year 11 to 13 boys and Technology teacher for year 11 and 12 boys.
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Intaz Shah - Technology for year 9, year 10 and 13 boys. Contact: ishah@al-madinah.school.nz

Why Should Students Study Technology, DVC, and Digital Technology?

The students gain a lot of hands- on experience by doing this subject.
The students are able to design digital or material outcomes and prototype. By doing this the students gain better understanding and can visualise what they have created.

COVERAGE OF CURRICULUM

Junior secondary school covers the 5 strands of technology which are:

1. Computational thinking – where students use the problem-solving approach that involves breaking down complex problems into smaller, more manageable parts and using logical reasoning, pattern recognition, and algorithms to find solutions.

2. Design and develop a digital outcome – where students can design a digital outcome like a website or an infographic.

3. Design and develop a material outcome – where students will use their design and manufacturing skills to design using wood, metal, plastic, or textile.

4. Design and develop a processed outcome – where students will be doing some cooking.

5. Design and visual communication – students will use sketching skills to design a plan and can also use sketch-up applications to design a model.

These 5 stands are the basic requirements for NCEA subjects - Technology, Digital Technology, and Design and Visual Communication.

For NCEA

Technology

Students develop skills in:

- sketching,
- Planning,

- using tools and machines to create functional products using different materials such as wood, metal, plastic, and textiles.
- Automotive.

Digital Technology

Students develop skills in:

- writing a proposal for designing a digital outcome of their choice.
- designing a digital outcome of their choice – website, game, animation, video, infographic, database, and coding.
- Understanding the conventions and protocols of their design.
- How human-computer interaction takes place.

Design and Visual communication

What Do Students Learn in DVC?

Students will engage in a range of activities that enhance their spatial awareness, design capabilities, and drawing techniques. Some of the key learning areas include:

- Freehand Sketching & Rendering – Developing quick visual representations of ideas.
- Technical Drawing – Learning to create precise and structured drawings using industry-standard conventions.
- Digital Design – Using software applications to create and refine design concepts.
- Product & Architectural Design – Exploring how objects and spaces are designed for function and aesthetics.
- Visual Storytelling & Presentation – Effectively communicating ideas through graphics and layouts.

ASSESSMENT OUTLINE

Year 9	Ice Cream Making Term 1 and Mid-term 2	Researching the timeline of ice cream making. Designing an infographic. Designing their company logo. Making ice cream.
Year 9	Online Shopping Mid Term 2 and Term 3	Research ways of shopping and draw a timeline. Design a logo for your shop and design a website. Make a product for your shop either using hard or soft material
Year 10	Shipping container as a restaurant/ Cafe Term 1 and Midterm 2	Identifying the properties and sizes of shipping containers with the council's requirements. Designing an infographic. Sketching a floor plan for the restaurant/ cafe. Cooking for the restaurant/ cafe
Year 10	Media Design Mid-term 2 and Term 3	Learning the Design principles and conventions of different digital outcomes. Designing different digital outcomes like a business card, flyers, newsletters, cards, etc

Technology

Level 1

Standard Number Standard Title	Int/Ext Due date	Credit
AS92012 Develop a Materials and Processing Technology outcome in an authentic context	Int Week2 Term 2	6
AS92013 Experiment with different materials to develop a materials and Processing Technology outcome	Int Week5 Term 3	6
AS92014 Demonstrate understanding of sustainable practices in the development of a Materials and Processing Technology design	Ext Term 4 Week 1	4

Level 2

Standard Number Standard Title	Int/ Ext	Credit
AS91344 Implement Advanced procedures using resistant materials to make a specified product with special features.	Int	6
AS91347 Demonstrate understanding of advanced concepts used to make products	int	4
AS91358 Demonstrate understanding of how technological modelling supports risk management	Ext	4

Level 3

Standard Number Standard Title	Int/ Ext	Credit
US30435 DKO vehicle emission	Int	4
US30436 DKO electronic fuel injection system.	int	2
US30477 DKO petrol and diesel engines.	int	4
US 30480 DKO automotive cooling system and engine coolant	int	2

Digital Technology

Level 1

Standard Number Standard Title	Int/Ext Due date	Credit
AS92005 Develop a digital Technologies outcome	Int Term 2 Week 2	5
AS92004 Create a computer program	Int Term 3 Week 5	5
AS92006 Demonstrate understanding of usability in human-computer interface	Ext Term 4	5

Level 2

Standard Number Standard Title	Int/Ext Due date	Credit
AS91890 Conduct an inquiry to propose a digital technologies outcome	Int Term 1 Week 10	6
AS91891 Apply Conventions to Develop a Design for a Digital Technologies Outcome	Int Term 2 Week 10	3
AS91897 Use advanced processes to develop a	Int Term 3 Week 6	6

digital technologies outcome.		
AS91899 Present a summary of developing a digital outcome.	Ext Term 4	4

Level 3

Standard Number Standard Title	Int/Ext Due date	Credit
91900 Conduct a critical inquiry to propose a digital technologies outcome	Int Term 1 Week 10	6
AS91907 Use complex processes to develop a digital technologies outcome	Int Term 3 Week 6	6
91903 Use complex techniques to develop a digital media outcome	Int Term 3 Week 6	4
AS91909 Present a reflective analysis of developing a digital outcome	Ext	3

Design and Visual Communication

Level 1

Standard Standard Title	Int/Ext Due date	Credit
AS92000 Generate product or spatial design ideas using visual communication techniques in response to design influence	Int Term 2 Week 1	5
AS92001 Use presentation techniques to visually communicate own product or spatial design outcome	Int Term 3 Week1	5
AS2003 Use instrumental drawing techniques to communicate own product or spatial design outcome	Ext Term 4	5

Level 2

Standard Standard Title	Int/Ext Due date	Credit
AS91342 Develop a product through Graphic practice	Int Term 1 Week 10	6
AS91341 Develop a spatial design through graphics practice	Int Term 2 Week 9	6
AS91343 Use visual communication techniques to compose a presentation	Int Term 3 Week 10	4
AS91337 Use visual communication techniques	Ext Term 4 Week 2	3

Level 3

Standard Standard Title	Int/Ext Due date	Credit
AS91629 Resolve a spatial design through graphics practice Retreat	Int Term 2 Week 1	6
AS91630 Resolve a product design through graphics practice	Int Term 3 Week 1	6
AS91628 Develop a visual presentation that exhibits a desired outcome to an audience	Int Term 4 Week 1	6

Hopefully, the above information provides a detailed outline of what the department offers and the opportunity your child has as a subject.

With your and our support and commitment to your child's learning, your child will be able to achieve well in the subject.

Shafina Mohammed

HOD Technology