# GRADE 6 CURRICULUM

## Shaping Bright Futures: An Overview of Our Innovative Curriculum

In Grade 6, learners move into more advanced digital thinking and practical problem-solving, combining technology, design, and coding in meaningful, real-world projects. This programme prepares learners for the demands of the modern, connected world while building confidence and creativity.

🔗 The Internet of Things (IoT)
Learners explore how everyday objects can be connected to the internet to send, receive, and respond to information. They learn how smart homes, devices, and systems work together, linking technology to real-life applications.

🌍 Wired & Wireless Networks
Learners learn the difference between wired and wireless networks, understanding how data travels between devices. This builds essential knowledge about communication systems, safety, and connectivity in today's digital world.

📐 Design, Data & Digital Modelling
🟦 2D and 3D Shapes
Learners apply mathematical concepts by working with 2D and 3D shapes, supporting spatial awareness, measurement, and design thinking.

🛠️ TinkerCad Library
Using TinkerCad, learners design and model digital 3D objects. This encourages creativity, precision, and an understanding of how digital designs become real-world products.

📊 Visualising Data Using Excel
Learners collect, organise, and present data using Excel charts and graphs. This builds data literacy, interpretation skills, and logical analysis – essential skills for higher grades

🏠 Engineering & Home Automation
🧠 Building Home Automation Systems
Learners design and build simple home automation projects, applying IoT, programming, and engineering concepts to solve real-world problems.

⚙️ DC and Servo Motors
Leraners learn how motors create movement and how they can be controlled through code. This links physics, engineering, and technology in a practical, hands-on way.

🧩 Coding Projects with Micro:bit
🏡 Micro:bit Home Automation
Learners use the Micro:bit to control elements of a model home, applying coding, logic, and problem-solving skills in a meaningful project.

🎵 Using Music in the Micro:bit House
Leraners code sound and music features, learning how technology can interact with users and enhance everyday experiences

🔔 Programming the Doorbell
Learners program a working digital doorbell, combining input, output, sound, and logic. This project encourages creativity, testing, and refinement

Contact us for a detailed guide or to schedule a visit. Join us in nurturing the next generation of leaders, thinkers, and innovators.

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