Centre of Excellence in Applied Artificial Intelligence (CEAAI)

AMG

Grade 9 Technology+

Comprehensive coverage of tech domains.

- IT Concepts & Terminology
- Infrastructure,
- Applications,
- Software Development → Focus on Python, SQL & Hackathons
- Security.

This foundation course in technology will align with industry-based certificates such as CompTIA Tech+. Students who qualify/wish to sit the CompTIA Tech+ will obtain an internationally recognised industry-level certificate early in their cyber career.

Alternatively, we can create our own recognised national qualification for students who successfully pass this.

https://gamma.app/docs/Grade-9-Scheme-of-Work-Introduction-to-IT-Digital-Systems-CompTIA-6rveiie6wkne50s

Grade 10 Applied Artificial Intelligence & Cybersecurity

This interdisciplinary course introduces students to the real-world application of cybersecurity, data science, and artificial intelligence. Building on programming experience from Technology Foundations, students will explore how systems are secured, how data is analyzed for threats, and how AI can be applied in ethical and meaningful ways. The course culminates in a digital portfolio aligned with the Google Cybersecurity Certificate pathway.

Tech Stack: Python, Pandas, NumPy, Matplotlib, Teachable Machine, SQL, Markdown, Google Sites

Delivery Platform: Google Colab / Jupyter Notebooks

https://gamma.app/docs/Applied-Artificial-Intelligence-Cybersecurity-cl6hge84tq9r3so?mode=doc

G11 Model Engineering and Deployment

To empower students with the skills and experience to design, build, evaluate, and deploy AI models using real-world data pipelines and software engineering tools.

The course builds on foundational IT, Python, and AI knowledge from earlier grades and focuses on production-ready thinking, preparing students for industry, university, or advanced capstones. Students should have the chance to complete work placement at the end of Term 3.

https://gamma.app/docs/Grade-1112-AI-Model-Engineering-Deployment-8psod9sdy6ouasd

G12 Future Tech Leadership Lab: AI Engineering Pathway

This comprehensive 28-week course features 4 periods per week, totaling approximately 112 contact hours. The curriculum is divided into 7 modules, each spanning about 4 weeks and culminating in a project or milestone. The structure provides ample time for hands-on coding, extended project work, mini-presentations, and weekly reflection and documentation.

https://gamma.app/docs/Grade-12-Future-Tech-Leadership-Lab-AI-Engineering-Pathway-050hdrd57nkm1ep