KING JAMES'S SCHOOL
KNARESBOROUGH

Year 9 Computing and IT Learning Journey

Introduction to Year 9

Know what you will be studying in Year 9 Computing.

Use Teams and OneDrive to find and organise your work.

Python PowerUp

Build on Python skills from Years 7 and 8.
Use lists, dictionaries and file handling in Python.
Write clear, well-commented programs.

AI & Machine Learning

Define artificial intelligence and machine learning.
Train a machine to recognise different types of images.
Discuss moral issues and explore robotics breakthroughs.

Bebras

Computational Thinking Competition

Image Editing — Affinity

Explain the difference between raster and vector graphics.
Adjust brightness, contrast and saturation.
Use layers, masks and compositing techniques.

Digital Representation

Explain how images are stored as binary numbers.
Define pixel, resolution and colour depth.
Describe the RGB model and calculate file sizes.

HTML & CSS

Write HTML to build a structured web page.
Use CSS to style colours, fonts, borders and layout.
Mission to Mars project.

Cybersecurity

Identify types of cyber attack including malware.
Know technical and non-technical protection methods.
Investigate the WannaCry ransomware case study.

Networks

Describe the difference between a LAN and a WAN.
Explain what NICs, switches and routers do.
Explore how data is sent across the internet.

Audiobook — Audacity

Record a clear voiceover using Audacity.
Edit audio — trim, amplify and add fades.
Layer music and sound effects on separate tracks.

Video Editing — Canva

Trim clips, add transitions and apply text overlays.
Export your video in the right format and resolution.

Web Design — RocketCake

Plan your website with a mind map and wireframes.
Build and test a multi-page website.

Event Planning

Create a themed PowerPoint with animations.
Design a logo, poster and ticket for your event.
Use spreadsheet formulas to calculate costs.