/Computing@Balcarras_

SUBJECT	YEAR	TERM
A-Level Computer Science (OCR)	**12**	**3**

UNIT

Software Development

INTENT

PRIOR LEARNING (TOPIC) – GCSE Software

Creating software is rarely a solo endeavour and part of being a successful developer is being able to work on larger projects and as part of a team. This unit not only looks at types of software in broad terms, but also software development and project management techniques. This is a very useful unit in terms of the programming project as pupils are expected to use some of these software development strategies during this.	**Specification Points:** This unit covers point 1.2.1 to 1.2.3

FUTURE LEARNING (TOPIC): Programming Project

IMPLEMENTATION	IMPACT
Throughout the unit pupils will cover: - The need for and uses of operating systems, including processor and memory management techniques. - Types of software including licencing options. - The stages of compilation. - The use of linkers, libraries and loaders. - Software development methodologies such as waterfall, agile, RAD and extreme.	**Assessment:** Pupils will sit a 40 mark in-lesson assessment at the end of the unit, the score from which will be translated into an A* to E style grading. In addition to this, pupils will complete regular exam style questions both during lesson and as part of homework tasks.

HOW CAN PARENTS HELP AT HOME?

All course materials are available via Firefly. In the build-up to the assessment, parents can help by supporting their child's revision. This can include testing them using flash cards or simply getting them to explain topics to you.

HELPFUL READING/FURTHER DISCUSSION

READING/EXTRA-LEARNING	CAREERS	WIDER SKILLS
There are an enormous number of online courses and tutorials to help pupils develop their computer science skills further. Visit the Next Steps section of the Computing department's Firefly page for more details.	The skills / knowledge learnt in this unit lead perfectly into a wide range of careers including software development and project management.	Digital Literacy Problem Solving Resilience

VOCABULARY

OS, Paging, Segmentation, ISR, Round Robin, MLFQ, FCFS, Distributed, Embedded, Multi-Tasking, Multi-User, Real-time, BIOS, Drivers, Virtual Machines, Utilities, Open Source, Closed Source, Translation, Interpreting, Compiling, Linker, Loader, Library, Lexical Analysis, AST.