

Digital Technologies

Learning Area Overview

The learning and teaching program at Kilbreda College is both dynamic and innovative, catering for the students' spiritual, academic, social, emotional and physical development. Students are challenged to be creative, critical and reflective thinkers and to develop a broad and transferable skill set. Opportunities for both independent and collaborative learning are provided and contemporary technologies are integrated throughout the learning and teaching program.

At the College, we are committed to providing a challenging, enriching and contemporary learning environment for students in the areas of STEM. We aim to foster ICT literacy and confidence in our students, so that they can use these skills in other subjects and other areas of their lives. We do this by encouraging creative, collaborative and critical ways of learning.

Digital Technologies is taught to all Year 7 and 8 students. Students in later years can choose to study electives in the Learning Area. In the junior years, the key focus of the Learning Area is to build on the ever-improving ICT skills that students have learnt at their primary schools.

Students are introduced to a diverse and challenging range of ICT including A.I., robotics, programming, Internet of Things, multi-media and data analytics. Innovative and creative ways of working with technology are fostered.

From Year 9 onwards, students can choose to study a variety of electives through to VCE.

Every student from Years 7 to 9 has a College issued laptop to enable ready access to digital/online resources and to develop their skills in the effective and responsible use of technology. Students from Year 10 onwards utilise the 'Bring-Your-Own-Device' (BYOD) model. The BYOD model enables students to choose the technology that best suits their needs and learning style. It provides a more flexible learning environment to individualise their learning journey.

The College is extremely well resourced in terms of information and communication technology with a wireless network, data projectors/interactive whiteboards and high definition screens in classrooms.

We also have a dedicated STEM Room for Science, Technology, Engineering and Mathematics.

This specialist facility provides students with a space to participate in the programming of robots, microcontrollers, 3D printer, audio recording equipment and green screen technology.

Digital Technologies Curriculum

The Digital Technologies curriculum includes a range of core subjects and electives, both semester based and year long.

YEAR 7	YEAR 8	YEAR 9
Core Study – Year Long	Core Study – Year Long	Elective Study – Semester Based
<ul style="list-style-type: none">Digital Technologies	<ul style="list-style-type: none">Digital Technologies	<ul style="list-style-type: none">Emerging Technologies
YEAR 10	YEAR 11	YEAR 12
Elective Study– Semester Based	Elective Study – Year Long	Elective Study – Year Long
<ul style="list-style-type: none">Programming, Gaming and Web Design Accelerated Studies (VCE Units 1&2) <ul style="list-style-type: none">Applied Computing	<ul style="list-style-type: none">Applied Computing 1&2	<ul style="list-style-type: none">Data Analytics 3&4

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Cocurricular and Enrichment Opportunities

- *Big Day In* at RMIT University
- *Go Girls for IT* Conference
- *Grok* Programming and Web Design competitions
- *Kilbreda in STEM* lunch
- *Kilbreda Lego Masters* workshop
- *Robogals Cave Challenge*
- *STEM Video Game Challenge*
- *STEM MAD (make a difference) Program*
- University of Melbourne *Girl Power Engineering and IT* Program
- University of Melbourne *Superhack challenge*