Differences between the two Institutes	CREATIVE Technologies Institute	STEM Institute
Duration of Course	Years 7 to 9	Years 7 to 9
Curriculum Focus	Enriched Digital Technologies curriculum.	Enriched and accelerated Science and Maths curriculum.
Student Entry	Selection by online testing and an interview may be required. Students will also be required to participate in a range of STEM & ICT based activities; both individual and group work will be included.	Selection by online testing and an interview may be required. Students will also be required to participate in a range of STEM & ICT based activities; both individual and group work will be included.
Hours per week in Specialty Area	IT - 2 hours Creative Lab - 1 hour	IT - 2 hours Creative Lab - 1 hour
Before school commitment	1 hour per week	1 hour per week
Remain with specialist group in other Learning Areas	No	Yes - Science and Maths
Hardware and Software requirements	Laptop or MacBook (please see device specification sheet)	Laptop or MacBook (please see device specification sheet)
Suggested pathway options in Senior School	STEM Innovation (Year 10) Computer Science Applied Information Technology Design - Photography Design - Graphics Cert II Business	STEM Innovation (Year 10) Mathematics Specialist Mathematics Methods Chemistry Physics Human Biology Biology Psychology Earth and Environmental Science Computer Science Cert II Engineering

#### **KEY CONTACTS**

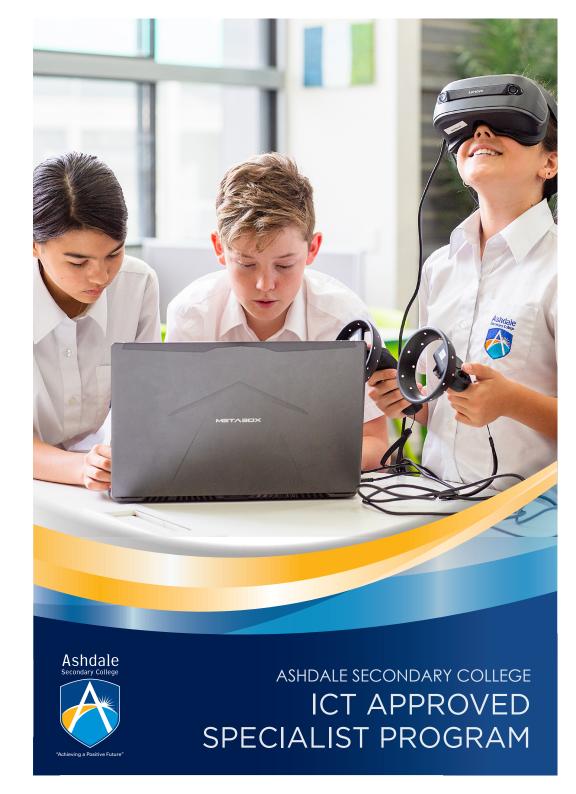
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#### ICT APPROVED SPECIALIST PROGRAM

The ICT Approved Specialist Program at Ashdale Secondary College immerses students in the world of innovation and creativity. Students will engage with the latest technology and teaching methods, placing them at the forefront of an exciting, fast-paced industry.

As part of the ICT Approved Specialist Program, students will have the opportunity to have input in their learning, work on solutions to real-world problems and engage with current research initiatives.

The ICT Approved Specialist Program offers students the choice of two Institutes to further develop their knowledge and skills;

- 1) Creative Technologies Institute or
- 2) STEM Institute

The ICT Approved Specialist Program requires a three-year commitment (Years 7 to 9) to develop the students as self-directed learners fully. Students must also commit to a compulsory one (1) hour lesson out of normal school hours i.e. before or after school.



**INSTITUTE** 

WE OFFER WORLD CLASS **EDUCATION FOSTERING** INNOVATION AND CREATIVITY

## CREATIVE TECHNOLOGIES INSTITUTE

The Creative Technologies Institute delivers an enriched digital technologies curriculum while developing student skills in various areas of ICT such as graphic design, photo media, coding, Lego robotics, circuitry, entrepreneurial skills, project management, CREATIVE video game design and the latest innovations in the technology **TECHNOLOGIES** industry.

> Classes are designed to provide students with a unique learning experience, focused on fostering creativity and innovation. Students also have access to specialised excursions, incursions, quest speakers, industry partnerships and expos.

The College's research-based learning models are used to develop the ICT capability of students, as they learn to use ICT effectively and appropriately to access, create and communicate information and ideas, solve problems and work collaboratively.

Students engaged in the Creative Technologies Institute are involved in a range of competitions such as Robocup, Screen It, the NCSS Programming Challenge and Young ICT Explorers to demonstrate their skills. Students have access to the TV studio, virtual reality equipment and the Creative and iMac labs for ongoing project and skills development.

#### STFM INSTITUTE

The STEM Institute delivers an enriched and accelerated curriculum across Science, Technology, Engineering and Mathematics, nurturing high achieving students to target career paths across a vast range of STEM professions.

Curriculum delivery focuses on an interdisciplinary approach across the STEM subjects. Lessons are designed around finding solutions to real-world problems. The STEM Institute develops skills such as critical thinking and problem solving, and creates an environment that promotes innovation, collaboration and an entrepreneurial mindset.



Students in the STEM Institute will have access to tertiary and industry partners, exposing them to professionals within STEM fields. Participants will have the opportunity to showcase their work in various forums, including expos, competitions and business projects. Incursions and excursions are a valuable part of the program, enriching and enhancing the learning experience.

Students within the STEM Institute have opportunities to be involved in the development of Mendel's Garden, provided access to Class Pads in mathematics and use of mechatronics workshop with laser cutters, as well as 3D printers for prototyping.

### What else should I know?

Both Institutes provide a clear pathway to Senior School, targeting career paths across a vast range of leading-edge professions. Our expert teachers undertake development programs that encourage inquiry-based teaching and learning strategies. There is a strong emphasis on creative and critical thinking, scientific method and problem-solving.

The program is offered in a learning environment that is technology smart and rich. To ensure that every student has access to the appropriate technology; parents will be required to supply a laptop for school and home use (see specifications sheet on our website for further details).

# What do I need to do to apply?

Entry into this program is based on merit. All students will sit an online test focusing on Numeracy and general ability. Students will also be required to participate in a range of STEM and ICT based activities; both individual and group work will be included. The session will conclude with a getting to know you chat with a member of ASC staff.

For further information, see our website - http://www.ashdalesc.wa.edu.au