



ICAS DIGITAL TECHNOLOGIES ASSESSES THE SKILLS REQUIRED TO SUCCEED IN THE INFORMATION AGE

SKILL AREAS

Students are assessed across the skills and knowledge areas of:

- **Databases**
- **Graphics and multimedia**
- **Internet use and email programs**
- **Networks and other communications systems**
- **Operating systems and computer hardware**
- **Programming**
- **Spreadsheets**
- **Word processing.**

CONTENT

The papers cover content on:

- Digital systems including hardware and software, operating systems, cloud computing and data representation
- Basic and advanced operations and formatting in word processing, use of tables, style sheets, animations and referencing
- Presentations, integrated multimedia and data visualisation
- Use of search engines, emails, web design, social media, online collaborative projects and the application of social and ethical protocols and practices in the use of digital technologies
- Use of operations to maintain and manage data and databases
- Programming principles and concepts including block-based coding, flowcharts, sequence, loops, pseudocode, algorithms and desk checking.

ASSESSMENT STRUCTURE

CLASS	PAPER	QUESTION BREAKDOWN	DURATION
3	A	30 multiple choice	30 minutes
4	B	30 multiple choice	30 minutes
5	C	35 multiple choice	35 minutes
6	D	35 multiple choice	35 minutes
7	E	40 multiple choice	40 minutes
8	F	40 multiple choice	40 minutes
9	G	45 multiple choice	45 minutes
10	H	45 multiple choice	45 minutes

LEARN MORE

1. Ask for an appointment at your school
2. Download the comprehensive ICAS Digital Technologies Assessment Framework
3. View sample assessments
4. Watch introductory videos

Visit www.reseller.com/icas

HOW IS ICAS DIFFERENT?

ICAS is developed annually by a team of highly experienced assessment developers and psychometricians, with rigorous reviews at each stage of construction. Subject matter experts develop new ICAS questions each year, drawing on their in-depth understanding of the way students learn. All ICAS assessments are reviewed by experienced teachers to ensure that they accurately assess students' skills and are relevant to what they are learning at school.

This ensures that ICAS is:

- Valid
- Consistent from one assessment cycle to the next
- Appropriately targeted for the students being assessed
- Objective and reliable
- Fair (effect of gender, language background, cultural background is minimised through sensitivity reviews and statistical analyses)
- Constructed using appropriate examples and authentic contexts
- Represented in a visually appealing way to capture student attention and interest
- Underpinned by methodologies from psychometric measurement theory.

“ICAS Digital Technologies focuses on developing understanding of and skills in current, new and emerging technologies that are highly relevant to succeed in the information age.”

Sylvia Singh

ICAS International Assessment Expert, Digital Technologies
UNSW Global

SKILLS ASSESSED



ENGLISH

- Reading for meaning in factual texts
- Reading for meaning in literary texts
- Syntax
- Textual devices
- Vocabulary



MATHEMATICS

- Algebra and patterns
- Chance and data
- Measures and units
- Number and arithmetic
- Space and geometry



SCIENCE

- Observing and measuring
- Interpreting data
- Applying data
- Investigating
- Reasoning and problem-solving



DIGITAL TECHNOLOGIES

- Common operating systems and hardware
- Graphics and multimedia
- Internet and email
- Programming and scripting
- Spreadsheets and databases
- Word processing