Information Processing and Publishing

2019 Subject Outline | Stage 1 and Stage 2
This subject outline is accredited for teaching at Stage 1 from 2010 and at Stage 2 from 2011
INTRODUCTION

SUBJECT DESCRIPTION

Information Processing and Publishing is a 10-credit subject or a 20-credit subject at Stage 1, and a 10-credit subject or a 20-credit subject at Stage 2.

Information Processing and Publishing focuses on the use of technology to design and implement information-processing solutions. The subject emphasises the acquisition and development of practical skills in identifying, choosing, and using the appropriate computer hardware and software for communicating in a range of contexts. It focuses on the application of practical skills to provide creative solutions to text-based communication tasks.

Students create both hard copy and electronic text-based publications, and critically evaluate the development process. They choose and use appropriate hardware and software to process, manage, and communicate information.

Students develop solutions to text-based problems in information processing and publishing, using imagination and creativity to make proposals and choices. They use the design process to apply problem-solving, critical-thinking, and decision-making skills. They learn a variety of strategies for meeting identified needs. They generate, synthesise, and realise ideas, using a wide range of techniques to communicate their thinking and design proposals.

Students are able to evaluate their progress by analysing and critiquing existing text-based publications. They question the principles used in design, and the methods and resources used in the development of products. They analyse the impacts and consequences of the use of publishing technologies.

Throughout their learning, students are provided with opportunities to develop an appreciation of the current social, legal, and ethical issues that relate to the processing, management, and communication of text-based information, and to assess their impact on individuals, organisations, and society.

CAPABILITIES

The capabilities connect student learning within and across subjects in a range of contexts. They include essential knowledge and skills that enable people to act in effective and successful ways.

The five capabilities that have been identified are:

- communication
- citizenship
- personal development
- work
- learning.
The capabilities for communication and learning are reflected in the learning requirements, content, assessment design criteria, and performance standards of this subject.

**Communication**

In this subject students develop their capability for communication by, for example:
- using a wide range of techniques to communicate design proposals
- clearly documenting and reporting design processes
- effectively considering the target audience and using appropriate terminology
- evaluating the effectiveness of communicating an intended message
- communicating with others about the outcomes of a task
- producing paper-based and/or electronic publications.

**Citizenship**

In this subject students develop their capability for citizenship by, for example:
- appreciating that forms of communication and the technologies used are determined by cultural influences on communication
- appreciating the social, legal, and ethical issues that accompany the rapid changes in information-processing technologies and assessing their impact on individuals, organisations, and society
- considering the social, ethical, and legal issues associated with publishing materials (e.g. security, health and safety, intellectual property, and environmental concerns).

**Personal Development**

In this subject students develop their capability for personal development by, for example:
- critiquing and evaluating their progress when designing and making products
- critiquing the processes used to complete a task
- reflecting on personal performance and learning
- involving other people in the evaluation process.

**Work**

In this subject students develop their capability for work by, for example:
- acquiring and building practical skills in identifying, choosing, and using the appropriate computer systems and tools for communicating in a range of contexts
- developing an awareness of career pathways and documenting evidence of personal skills
- recognising the transference of skills to a variety of situations (e.g. paid employment or voluntary work).
Learning
In this subject students develop their capability for learning by, for example:
• understanding, analysing, critically responding to, and using information-processing and publishing systems and tools
• understanding and applying design thinking in planning and undertaking tasks
• using practical, decision-making, and planning skills to effectively manage the potential of information-processing tools
• thinking creatively to generate, synthesise, and realise ideas
• applying problem-solving, critical-thinking, and decision-making skills, using the design process
• researching and interpreting information
• seeking imaginative, innovative outcomes, using information-processing or publishing skills and software.

LITERACY IN INFORMATION PROCESSING AND PUBLISHING
In this subject students have opportunities to develop the following literacy skills:
• communicating information and ideas, using relevant and appropriate forms and terminology
• using appropriate language conventions of grammar, spelling, and punctuation
• presenting material in a variety of appropriate formats
• effectively considering the target audience
• researching and interpreting information
• documenting and reporting a design process
• communicating with others about the outcomes of a task
• critiquing and communicating ideas and designs.

NUMERACY IN INFORMATION PROCESSING AND PUBLISHING
In this subject students have opportunities to develop the following numeracy skills:
• applying mathematical concepts appropriate to information processing
• collecting and analysing data and information from a variety of physical and electronic sources
• collecting, collating, representing, and manipulating data into new formats
• verifying information and data
• understanding and using appropriate spatial concepts when designing tasks
• reading and interpreting numerical and digital information
• displaying data, using a range of graphical illustrations.
ABORIGINAL AND TORRES STRAIT ISLANDER KNOWLEDGE, CULTURES, AND PERSPECTIVES

In partnership with Aboriginal and Torres Strait Islander communities, and schools and school sectors, the SACE Board of South Australia supports the development of high-quality learning and assessment design that respects the diverse knowledge, cultures, and perspectives of Indigenous Australians.

The SACE Board encourages teachers to include Aboriginal and Torres Strait Islander knowledge and perspectives in the design, delivery, and assessment of teaching and learning programs by:

• providing opportunities in SACE subjects for students to learn about Aboriginal and Torres Strait Islander histories, cultures, and contemporary experiences

• recognising and respecting the significant contribution of Aboriginal and Torres Strait Islander peoples to Australian society

• drawing students’ attention to the value of Aboriginal and Torres Strait Islander knowledge and perspectives from the past and the present

• promoting the use of culturally appropriate protocols when engaging with and learning from Aboriginal and Torres Strait Islander peoples and communities.
Stage 1 Information Processing and Publishing
LEARNING SCOPE AND REQUIREMENTS

LEARNING REQUIREMENTS
The learning requirements summarise the knowledge, skills, and understanding that students are expected to develop and demonstrate through their learning in Stage 1 Information Processing and Publishing.

In this subject, students are expected to:
1. select and use appropriate hardware and software in the completion of text-based communication tasks
2. apply manipulative skills appropriate to the use of information-processing hardware and software
3. apply acquired skills to produce text-based information accurately
4. understand and apply the design process and layout principles to text-based tasks
5. evaluate a text-based product and the design process used
6. understand, analyse, and evaluate the impact of social and/or ethical issues related to information-processing and publishing technologies.

CONTENT
Information Processing and Publishing is a 10-credit subject or a 20-credit subject at Stage 1. It consists of the following five topics:
- Business Publishing
- Digital Presentations
- Digital Publishing
- Personal Publishing
- Data Input.

The topics have a practical basis and emphasise the development of skills and understanding in designing, making, and critiquing publications and presentations.

A 10-credit subject consists of one or two topics.
A 20-credit subject consists of two or more topics.

If selected for study, Data Input must be combined with another topic for a 10-credit subject, and combined with two or more topics for a 20-credit subject.

When only one topic is studied in a 10-credit subject, the use of the software must be extended, or the topic must have more than one emphasis or include the use of additional software applications.

The topics studied should form a coherent developmental package.
The Design Process

Students are encouraged to adopt an enterprising approach to design. This involves developing innovative and creative design solutions that can be used to communicate information or develop promotional options for products and services.

The use of a four-part design process is recommended: investigating, devising, producing, and evaluating. The process is not necessarily linear, and students are evaluating and critiquing throughout.

Investigating the Processing or Publishing Task

This can include activities such as:
- identifying or clarifying the task
- considering the target audience.

Devising or Planning to Complete the Task

This can include activities such as:
- choosing the most appropriate software application to complete the task
- preparing layout and design plans.

Producing the Task

This can include activities such as:
- implementing the layout and design plans
- using computer hardware, software, and peripheral equipment
- developing and applying skills of manipulation and organisation
- using skills in the composition or selection of elements to be used in the task.

Evaluating the Process and the Product

This can include activities such as:
- considering the effectiveness of the product
- critiquing the process(es) used to complete the task
- reflecting on personal performance and learning
- involving other people in the evaluation process.

The greatest emphasis should be on producing the task, because of the practical basis of this subject.
Topics

Business Publishing
Business Publishing involves the use of information-processing and publishing tools in a business context. Students have the opportunity to develop paper-based publications, which will provide them with broad, entry-level industry skills. They consider issues related to information processing and publishing in business environments.

Business Publishing combines the use of software with the elements and principles of design and an understanding of the processes and procedures involved in using information to produce business publications. Integral aspects of this topic are publication design and the production of paper-based publications such as letters, business reports, agendas, minutes of meetings, invitations, menus, advertisements, itineraries, business forms, and brochures.

Students are encouraged to adopt an enterprising approach, including in the design process, to tackle the tasks set. This involves the development of innovative and creative design solutions that can be used to communicate information or develop promotional options for products and services. A student could also develop publications for another subject area. The teacher would assess the publication, including the design, against the performance standards of this subject outline.

Digital Presentations
Digital Presentations involves the development of digital presentations to enhance information presented to an audience in personal, community, or business contexts. Students consider issues related to the production and use of digital presentations.

Digital presentations incorporate the use of information-processing and publishing equipment as well as image projectors, monitors, or televisions to display presentations that are either interactive or self-running. Digital presentations may be suitable for interactive information kiosks or unattended product displays, as well as for an audience.

Students are encouraged to adopt an enterprising approach, including in the design process, to tackle the tasks set. This involves the development of innovative and creative design solutions that can be used to communicate information. A student could also develop a presentation for another subject area. The teacher would assess the presentation, including the design, against the performance standards of this subject outline.

Digital Publishing
Digital Publishing involves the development of products to be published in a digital format. Students who undertake this topic develop skills in the creation, manipulation, storage, and use of digital media to solve publishing problems in personal, community, or business contexts. Students consider issues related to the production and use of digital publications.

Although text and image publications are emphasised, static and dynamic graphic, audio, video, and animation software may also be included. Examples of materials in digital format include web-based pages or sites, CD-ROM, and other non-linear or interactive forms of publications.
Students are encouraged to adopt enterprising approaches, including in the design process, to tackle the tasks set. This involves the development of innovative and creative design solutions that can be used to communicate information. A student could also develop a presentation for another subject area. The teacher would assess the publication, including the design, against the performance standards of this subject outline.

**Personal Publishing**

Personal Publishing involves the use of software appropriate to paper-based publications. It also provides a sound basis for the investigation and use of new personal publishing tools in the future. The type of publishing software used depends on the learning context and the needs of the students. They consider issues related to information processing and publishing for personal use.

Students follow the design process to produce, for personal use, paper-based publications such as essays, letters, reports, flyers, menus, and invitations.

Students are encouraged to adopt an enterprising approach, including in the design process, to tackle the tasks set. This involves the development of innovative and creative design solutions that can be used to communicate information. A student could also develop publications for another subject area. The teacher would assess the publication, including the design, against the performance standards of this subject outline.

**Data Input**

Data Input involves the use of equipment to input data that can be used in information processing and publishing. Students who undertake this topic develop skills in the use and application of data input and manipulation of equipment. Students should also develop an awareness of the diversity of methods and forms of data input.

If speed is considered an appropriate skill, the study of Data Input may include instruction in, and testing of, speed and accuracy. The testing of speed and accuracy can be undertaken through an accreditation process deemed, at a local level, to be appropriate.

If selected for study, Data Input must be combined with another topic for a 10-credit subject, and combined with two or more topics for a 20-credit subject.
ASSESSMENT SCOPE AND REQUIREMENTS

Assessment at Stage 1 is school based.

EVIDENCE OF LEARNING

The following assessment types enable students to demonstrate their learning in Stage 1 Information Processing and Publishing:

- Assessment Type 1: Practical Skills
- Assessment Type 2: Product and Documentation
- Assessment Type 3: Issues Analysis.

For a 10-credit subject, students should provide evidence of their learning through four or five assessments, with at least one assessment from each assessment type. Each assessment type should have a weighting of at least 20%.

For a 20-credit subject, students should provide evidence of their learning through eight to ten assessments, with at least two assessments from each assessment type. Each assessment type should have a weighting of at least 20%.

ASSESSMENT DESIGN CRITERIA

The assessment design criteria are based on the learning requirements and are used by teachers to:

- clarify for the student what he or she needs to learn
- design opportunities for the student to provide evidence of his or her learning at the highest possible level of achievement.

The assessment design criteria consist of specific features that:

- students should demonstrate in their learning
- teachers look for as evidence that students have met the learning requirements.

For this subject the assessment design criteria are:

- understanding
- analysis and evaluation
- application.

The specific features of these criteria are described below.

The set of assessments, as a whole, must give students opportunities to demonstrate each of the specific features by the completion of study of the subject.
Understanding
The specific features are as follows:

U1 Understanding of the design process and layout principles as they relate to text-based tasks.
U2 Understanding of the impact of social and/or ethical issues related to information-processing and publishing technologies.

Analysis and Evaluation
The specific features are as follows:

AE1 Evaluation of a text-based product and the design process used.
AE2 Analysis and evaluation of the impact of social and/or ethical issues related to information-processing and publishing technologies.

Application
The specific features are as follows:

A1 Application of appropriate hardware and software in the completion of text-based communication tasks.
A2 Application of manipulative skills appropriate to the use of information-processing hardware and software.
A3 Application of the design process and layout principles appropriate to a text-based task.
A4 Application of acquired skills to produce text-based information accurately.

SCHOOL ASSESSMENT

Assessment Type 1: Practical Skills
Students undertake at least one practical skills assessment for a 10-credit subject and at least two practical skills assessments for a 20-credit subject.

Students demonstrate the practical skills they have developed through studying the subject. Each assessment should be a minimum of one A4 page or its equivalent with sufficient text, which may be enhanced by graphics where appropriate.

The use of automated publishing software or supplied templates is not recommended.

There is flexibility for teachers to structure practical tasks to suit the topic studied. A variety of tasks could be used, including:

- personal documents such as letters, emails, or invitations
- business documents such as reports, forms, or minutes
- advertisements
- flyers
- web-based pages
- digital presentations.
For this assessment type, students provide evidence of their learning primarily in relation to the following assessment design criterion:

- application.

**Assessment Type 2: Product and Documentation**

Students undertake at least one product and documentation assessment for a 10-credit subject and at least two product and documentation assessments for a 20-credit subject.

For each assessment, students complete, for an identified audience, a text-based product that demonstrates knowledge and use of the four parts of the design process: investigating, devising, producing, and evaluating.

The use of automated publishing software or supplied templates is not recommended.

The final product should be at least one A4 page or its equivalent. The product must demonstrate the use of appropriate principles of design and layout, and could be, for example, a brochure, a compact disc cover, linked web pages, or a digital slide presentation. The content of the task may come from another subject area. There must be sufficient text in the final product to demonstrate use of design elements. The text may be given to, or generated by, the student.

The design process must be covered in separate documentation, which should include annotated examples, detailed plans, annotated drafts of the final product, and an evaluation. The evaluation should be a maximum of 400 words. The documentation for the design process, including the evaluation, is submitted for assessment.

A product and documentation assessment, including the evaluation, should be a maximum of 750 words.

For this assessment type, students provide evidence of their learning in relation to the following assessment design criteria:

- understanding
- analysis and evaluation
- application.

**Assessment Type 3: Issues Analysis**

Students undertake at least one issues analysis assessment for a 10-credit subject and at least two issues analysis assessments for a 20-credit subject.

For each assessment, students concisely analyse and critique an issue related to information processing and publishing for a specific purpose. An issues analysis may be presented in written, oral, visual, or multimodal form. The use of features such as headings, dot points, tables, and annotated diagrams will help students to organise their information.

An issues analysis assessment should be a maximum of 400 words if written or a maximum of 3 minutes for an oral presentation. Students who want to present their task in another form must negotiate an equivalent length or time with their teacher.

In all cases, documentation must accompany the issues analysis and is part of the assessment. Documentation could include, for example, references, a bibliography, or appendices for a written assessment, or notes or cards for an oral assessment.
For this assessment type, students provide evidence of their learning primarily in relation to the following assessment design criteria:

- understanding
- analysis and evaluation.

**PERFORMANCE STANDARDS**

The performance standards describe five levels of achievement, A to E.

Each level of achievement describes the knowledge, skills, and understanding that teachers refer to in deciding how well a student has demonstrated his or her learning on the basis of the evidence provided.

During the teaching and learning program the teacher gives students feedback on their learning, with reference to the performance standards.

At the student’s completion of study of a subject, the teacher makes a decision about the quality of the student’s learning by:

- referring to the performance standards
- taking into account the weighting of each assessment type
- assigning a subject grade between A and E.

Teachers can use a SACE Board school assessment grade calculator to help them to assign the subject grade. The calculator is available on the SACE website (www.sace.sa.edu.au).
Performance Standards for Stage 1 Information Processing and Publishing

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<tr>
<th>Understanding</th>
<th>Analysis and Evaluation</th>
<th>Application</th>
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<tbody>
<tr>
<td><strong>A</strong> Comprehensive understanding of the design process and layout principles as they relate to text-based tasks. Insightful and well-informed understanding of the impact of social and/or ethical issues closely related to information-processing and publishing technologies.</td>
<td>Perceptive and thorough evaluation of a text-based product and the design process used. Perceptive analysis and evaluation of the impact of social and/or ethical issues related to information-processing and publishing technologies.</td>
<td>Highly proficient application of appropriate hardware and software in the completion of text-based communication tasks. Highly effective application of manipulative skills appropriate to the use of information-processing hardware and software. Comprehensive application of the design process and layout principles appropriate to a text-based task. Highly proficient application of acquired skills to produce text-based information accurately.</td>
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<tr>
<td><strong>B</strong> Well-informed understanding of the design process and layout principles as they relate to text-based tasks. Well-informed understanding of the impact of social and/or ethical issues related to information-processing and publishing technologies.</td>
<td>Well-considered evaluation of a text-based product and the design process used. Well-considered analysis and evaluation of the impact of social and/or ethical issues related to information-processing and publishing technologies.</td>
<td>Proficient application of appropriate hardware and software in the completion of text-based communication tasks. Effective application of manipulative skills appropriate to the use of information-processing hardware and software. Well-considered application of the design process and layout principles appropriate to a text-based task. Proficient application of acquired skills to produce text-based information accurately.</td>
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<tr>
<td><strong>C</strong> Informed understanding of the design process and layout principles as they relate to text-based tasks. Informed understanding of the impact of social and/or ethical issues related to information-processing and publishing technologies.</td>
<td>Competent evaluation of a text-based product and the design process used. Considered analysis and evaluation of the impact of social and/or ethical issues related to information-processing and publishing technologies.</td>
<td>Competent application of appropriate hardware and software in the completion of text-based communication tasks. Generally consistent application of manipulative skills appropriate to the use of information-processing hardware and software. Competent application of the design process and layout principles appropriate to a text-based task. Competent application of acquired skills to produce text-based information accurately.</td>
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<tr>
<td>Understanding</td>
<td>Analysis and Evaluation</td>
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<td><strong>D</strong></td>
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<tr>
<td>Some understanding of basic aspects of the design process and layout principles as they relate to text-based tasks.</td>
<td>Some basic assessment of a text-based product, with some reference to the design process, using mostly description.</td>
<td>Application of some basic appropriate hardware and software in undertaking text-based communication tasks.</td>
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<td>Some recognition of the impact of social and/or ethical issues related to information-processing and publishing technologies.</td>
<td>Recognition of aspects of the impact of social or ethical issues related to information-processing and publishing technologies.</td>
<td>Some application of basic manipulative skills appropriate to the use of some information-processing hardware and software.</td>
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<td><strong>E</strong></td>
<td>Attempted description of aspects of a text-based product, with limited reference to the design process.</td>
<td>Limited application of basic hardware and software in attempting text-based communication tasks.</td>
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<tr>
<td>Identification of one or more aspects of the design process and layout principles as they relate to text-based tasks.</td>
<td>Emerging awareness of one or more aspects of the impact of a social or ethical issue related to information-processing and publishing technologies.</td>
<td>Limited application of simple manipulative skills in attempting to use some information-processing hardware or software.</td>
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<tr>
<td>Emerging awareness of a social or ethical issue that may have little relationship to information-processing and publishing technologies.</td>
<td>Attempted application of few elements of the design process and layout principles appropriate to a text-based task.</td>
<td>Attempted application of one or more skills to produce elements of simple text-based information with limited accuracy.</td>
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<th>Application</th>
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<tr>
<td>Application of some basic appropriate hardware and software in undertaking text-based communication tasks.</td>
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<tr>
<td>Some application of basic manipulative skills appropriate to the use of some information-processing hardware and software.</td>
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<tr>
<td>Some application of elements of the design process and layout principles appropriate to a text-based task.</td>
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<tr>
<td>Application of some acquired skills to produce some simple text-based information with some inconsistencies.</td>
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ASSESSMENT INTEGRITY

The SACE Assuring Assessment Integrity Policy outlines the principles and processes that teachers and assessors follow to assure the integrity of student assessments. This policy is available on the SACE website (www.sace.sa.edu.au) as part of the SACE Policy Framework.

The SACE Board uses a range of quality assurance processes so that the grades awarded for student achievement in the school assessment are applied consistently and fairly against the performance standards for a subject, and are comparable across all schools.

Information and guidelines on quality assurance in assessment at Stage 1 are available on the SACE website (www.sace.sa.edu.au).
SUPPORT MATERIALS

SUBJECT-SPECIFIC ADVICE
Online support materials are provided for each subject and updated regularly on the SACE website (www.sace.sa.edu.au). Examples of support materials are sample learning and assessment plans, annotated assessment tasks, annotated student responses, and recommended resource materials.

ADVICE ON ETHICAL STUDY AND RESEARCH
Advice for students and teachers on ethical study and research practices is available in the guidelines on the ethical conduct of research in the SACE on the SACE website (www.sace.sa.edu.au).
Stage 2 Information Processing and Publishing
LEARNING SCOPE AND REQUIREMENTS

LEARNING REQUIREMENTS
The learning requirements summarise the knowledge, skills, and understanding that students are expected to develop and demonstrate through their learning in Stage 2 Information Processing and Publishing.

In this subject, students are expected to:
1. understand, select, and use appropriate hardware and software for the completion of text-based communication tasks
2. apply manipulative and organisational skills to the use of information-processing technology
3. apply layout and design principles to the production of text-based documents or presentations
4. understand and apply the design process in planning and producing text-based products
5. evaluate text-based products and the design process used
6. understand, analyse, and evaluate the impact of social, ethical, and/or legal issues related to information-processing and publishing technologies.

CONTENT
Information Processing and Publishing is a 10-credit subject or a 20-credit subject at Stage 2. It consists of the following four focus areas:
- Desktop Publishing
- Electronic Publishing
- Personal Documents
- Business Documents.

For a 10-credit subject, students undertake one focus area.
For a 20-credit subject, students undertake two focus areas.

Each focus area includes a practical skills section. The practical skills sections focus on using the design process in a variety of applications to complete specified text-based information-processing or publishing tasks.

The issues and understanding sections focus on knowledge and understanding of processes, concepts, procedures, and issues related to computerised processing and publishing tasks.

Students of Stage 2 Information Processing and Publishing use the design process in planning and undertaking communications tasks. The interaction between the methods of the design process and the content principally occurs through a focus on information and systems.
Information is knowledge that is stored and used in everyday life. The communication of information encompasses the use of visual and sound images as well as print, numerical, and graphical representations. Central to the processing and publishing of information is the development of the skills and techniques needed to gather, input, sort, interpret, store, retrieve, manipulate, and communicate effectively.

Systems in this subject outline are defined as combinations of human and physical resources that together achieve required outcomes. Systems can be simple or complex, and involve the stages of input, process, and outcomes.

**The Design Process**

It is essential that students understand and use the design process, which is central to teaching and learning in this subject. There are many interpretations of the design process in technology, and this subject outline adopts a four-part model: investigating, devising, producing, and evaluating.

The four parts of the process are rarely linear, and there will be times when they will receive different emphases. In Stage 2 Information Processing and Publishing the parts of the design process involve the following activities, whether students are working alone or collaboratively:

**Investigating the Processing or Publishing Task**

This can include activities such as:

- identifying or clarifying the task
- researching and interpreting information
- considering the appropriate hardware and software for the task.

**Devising or Planning to Complete the Task**

This can include activities such as:

- choosing hardware and software to complete the task
- seeking imaginative, innovative outcomes, using information-processing or publishing skills and software
- preparing layout and design plans that may incorporate visual and sound images in support of print, numerical, and graphical representations.

**Producing the Task**

This can include activities such as:

- implementing the layout and design plans
- using computer hardware, software, and peripheral equipment
- developing and applying skills of manipulation and organisation
- displaying and communicating information
- using skills in the composition or selection of elements to be used in the task
- managing the input, storage, retrieval, and output processes and procedures involved in publishing and disseminating information.
Evaluating the Process and the Product

This can include activities such as:
- determining how well the requirements of the task have been met
- assessing the effectiveness of the communication
- reporting on the use of the design process
- reflecting on the use of the chosen hardware and software
- considering personal performance and learning
- involving other people in the evaluation process
- communicating with other people about the outcomes of the task.
Focus Areas

Desktop Publishing

Introduction
Desktop Publishing involves the use of a computer and page layout and other software to assemble text and graphics electronically for publishing on paper. This focus area contains two sections: one on practical skills and the other on issues and understanding.

Practical Skills
Students use computer technology and apply the design process to develop and present desktop publishing solutions to design briefs. They apply the principles of design and page layout (e.g. the use of fonts, text enhancement, graphics, white space, and colour) in completing tasks. The tasks may require students to provide original composition, work from instructions, and display provided material. Tasks may include programs, leaflets, stationery, posters, brochures, and advertising material.

Intended Learning
At the end of their study of Desktop Publishing, students should be able to:

- operate and manage computer hardware and software efficiently
- understand and apply the design process in planning and completing tasks
- use the appropriate software functions to create, store, retrieve, edit, and publish paper-based tasks
- understand and use effective design and page-layout principles
- produce a document that uses imported text and graphics
- choose and use resources (including manuals and online help) to solve operational problems.

Issues and Understanding
Students consider the social, ethical, and/or legal issues associated with publishing materials (e.g. security, health and safety, intellectual property, and environmental concerns). They develop their knowledge and understanding of current computer hardware and software for publishing documents from the desktop. They learn efficient ways to manage computer hardware and software to complete publishing tasks, and appreciate the complexity of file management in desktop publishing.

Intended Learning
At the end of their study of Desktop Publishing, students should be able to:

- show an understanding of social, ethical, and/or legal issues associated with publishing (e.g. security, health and safety, intellectual property, and environmental concerns)
- demonstrate knowledge of efficient computer-management practices in desktop publishing
- demonstrate an understanding of efficient file-management practices in desktop publishing
- use appropriate terminology
- show an awareness of current computer hardware and software used in desktop publishing.
Electronic Publishing

Introduction
Electronic Publishing involves the use of computer hardware and software capable of integrating a variety of elements for publishing electronically. This focus area contains two sections: one on practical skills and the other on issues and understanding.

Practical Skills
Students use computer technology and apply the design process to develop and present electronic publishing solutions to design briefs. They apply the principles of design and layout (e.g. the use of fonts, text enhancement, graphics, white space, and colour) in completing tasks. The tasks may require students to develop original media material (working from instructions) or to display provided material.

Publications may include Internet and intranet pages and sites, and electronic presentations. Examples of hardware and software used may include graphical and optical character-recognition scanners, digital cameras, MIDI players, and authoring, browser, and file-transfer software.

Intended Learning
At the end of their study of Electronic Publishing, students should be able to:
- operate and manage computer software and hardware efficiently
- understand and apply the design process in planning and completing tasks
- use the appropriate software and hardware to create, store, retrieve, edit, and complete electronic publishing tasks
- understand and use effective design and layout principles for electronic presentations and publications
- create, retrieve, or import relevant elements to meet the requirements of the task
- choose and use resources (including manuals and online help) to solve operational problems.

Issues and Understanding
Students consider the social, ethical, and/or legal issues associated with electronic publishing (e.g. security, intellectual property, censorship, privacy, access, and health and safety). They develop their knowledge and understanding of current computer hardware and software for publishing documents electronically. They learn efficient ways to manage computer hardware and software to complete publishing tasks. They also learn to appreciate the complexity of file management in electronic publishing. They are aware of the availability of a range of hardware, software, and media used in electronic publishing.

Intended Learning
At the end of their study of Electronic Publishing, students should be able to:
- show an understanding of the social, ethical, and/or legal issues associated with electronic publishing (e.g. security, intellectual property, censorship, privacy, access, and health and safety)
- demonstrate knowledge of efficient computer-management practices in electronic publishing
• demonstrate an understanding of efficient file-management practices in electronic publishing
• use appropriate terminology
• show an awareness of a range of current hardware, software, and media used in electronic publishing.
Personal Documents

Introduction

Personal Documents involves the use of computer hardware and software to present and display personal documents for the purpose of communication. This focus area, on the use of the computer as a personal communication tool for individuals, contains two sections: one on practical skills and the other on issues and understanding.

Practical Skills

Students learn the efficient use of computer technology and apply the design process to develop and present communication tasks for individuals. They apply the principles of design and page layout (e.g. the use of fonts, text enhancement, white space, and the placement of text, graphics, columns, and tables) in completing tasks. The tasks may require students to provide original composition, work from instructions, and manipulate retrieved work. Students are required to use word processing in conjunction with at least one other software application. Personal communication tasks may include assignments, essays, letters, tables, reports, résumés, and display items. These can be disseminated in print or electronic form (e.g. email).

Intended Learning

At the end of their study of Personal Documents, students should be able to:

- operate and manage computer hardware and software efficiently
- understand and apply the design process in planning and completing tasks
- use the appropriate word-processing software functions to input, store, retrieve, and edit information for personal use, and disseminate this information
- understand and use effective design and page-layout principles
- use text and import associated material (such as graphics, charts, graphs, tables, and lists) into a document to meet the requirements of the task
- choose and use resources (including manuals and online help) to solve operational problems.

Issues and Understanding

Students consider the social, ethical, and/or legal issues associated with the use of computer technology for personal communication (e.g. security, personal health and safety, intellectual property, plagiarism, and employment). They develop their knowledge and understanding of current computer hardware and software used in information processing and publishing. They learn efficient ways to manage computer hardware and software to complete tasks.

Intended Learning

At the end of their study of Personal Documents, students should be able to:

- show an understanding of social, ethical, and/or legal issues associated with the use of computer technology for personal communication (e.g. security, personal health and safety, intellectual property, plagiarism, and employment)
- demonstrate knowledge of efficient computer-management practices
- demonstrate an understanding of efficient file-management practices
- use appropriate terminology
- show an awareness of current computer hardware and software used in information processing and publishing.
Business Documents

Introduction

Business Documents involves the use of computer hardware and software to present and display material for the purpose of communication. This focus area, on the use of the computer as a communication tool for businesses (including clubs, societies, and charitable institutions), contains two sections: one on practical skills and the other on issues and understanding.

Practical Skills

Students use computer technology and apply the design process to develop and present solutions to communication tasks for business. They apply the principles of design and page layout (e.g. the use of fonts, text enhancement, white space, and the placement of text, graphics, columns, and tables) in completing tasks. The tasks may require students to provide original composition, work from oral or written instructions, retrieve prepared drafts, and conform to a given organisational or house style. Students are required to use word processing in conjunction with at least one other software application in completing communication tasks for businesses.

Tasks may include letters, reports, tables, memoranda, forms, agreements, financial statements, newsletters, programs, and itineraries. These can be disseminated in print or electronic form (e.g. email).

Intended Learning

At the end of their study of Business Documents, students should be able to:
• operate and manage computer hardware and software efficiently
• understand and apply the design process in planning and completing tasks
• use the appropriate word-processing software functions to input, store, retrieve, and edit information for business use, and disseminate this information
• understand and use effective design and layout principles
• integrate software applications by importing or linking to meet the requirements of the design brief
• choose and use resources (including manuals and online help) to solve operational problems.

Issues and Understanding

Students consider the social, ethical, and/or legal issues associated with the use of computer technology for communication within businesses (e.g. security, confidentiality, retraining, multiskilling, work health and safety, and intellectual property). They develop their knowledge and understanding of current computer hardware and software used by organisations to process and publish information. They learn efficient ways to manage computer hardware and software to complete tasks, and appreciate the complexity of file management and work flow in a business.

Intended Learning

At the end of their study of Business Documents, students should be able to:
• show an understanding of social, ethical, and/or legal issues associated with the use of computer technology for communication within businesses (e.g. security, confidentiality, retraining, multiskilling, work health and safety, and intellectual property)
• demonstrate an understanding of efficient file-management practices for information-processing systems and procedures within a business
• use appropriate terminology
• show an awareness of current computer hardware and software used by businesses to process and publish information.
ASSESSMENT SCOPE AND REQUIREMENTS

All Stage 2 subjects have a school assessment component and an external assessment component.

EVIDENCE OF LEARNING

The following assessment types enable students to demonstrate their learning in Stage 2 Information Processing and Publishing:

10-credit Subject

School Assessment (70%)
• Assessment Type 1: Practical Skills (50%)
• Assessment Type 2: Issues Analysis (20%)

External Assessment (30%)
• Assessment Type 3: Product and Documentation (30%)

20-credit Subject

School Assessment (70%)
• Assessment Type 1: Practical Skills (40%)
• Assessment Type 2: Issues Analysis (30%)

External Assessment (30%)
• Assessment Type 3: Product and Documentation (30%).

For a 10-credit subject, students should provide evidence of their learning through four or five assessments, including the external assessment component. Students undertake:
• two or three practical skills assessments
• one issues analysis assessment
• one product and documentation assessment.

For a 20-credit subject, students should provide evidence of their learning through eight to ten assessments, including the external assessment component. Students undertake:
• at least five practical skills assessments
• one or two issues analysis assessments and one technical and operational understanding assessment
• one product and documentation assessment.
ASSESSMENT DESIGN CRITERIA

The assessment design criteria are based on the learning requirements and are used by:

• teachers to clarify for the student what he or she needs to learn
• teachers and assessors to design opportunities for the student to provide evidence of his or her learning at the highest possible level of achievement.

The assessment design criteria consist of specific features that:

• students should demonstrate in their learning
• teachers and assessors look for as evidence that students have met the learning requirements.

For this subject the assessment design criteria are:

• understanding
• development and application
• analysis and evaluation.

The specific features of these criteria are described below.

The set of assessments, as a whole, must give students opportunities to demonstrate each of the specific features by the completion of study of the subject.

Understanding

The specific features are as follows:
U1 Understanding of appropriate hardware and software for the completion of text-based communication tasks.
U2 Understanding of the design process in planning, producing, and evaluating text-based products.
U3 Understanding of the impact of social, ethical, and/or legal issues related to information-processing and publishing technologies.

Development and Application

The specific features are as follows:
DA1 Selection and use of appropriate hardware and software in the completion of text-based communication tasks.
DA2 Application of manipulative and organisational skills in the use of information-processing technology.
DA3 Application of layout and design principles to the production of text-based documents or presentations.
DA4 Application of the design process in planning and producing text-based products.

Analysis and Evaluation

The specific features are as follows:
AE1 Analysis and evaluation of the impact of social, ethical, and/or legal issues related to information-processing and publishing technologies.
AE2 Evaluation of text-based products and the design process used.
SCHOOL ASSESSMENT

Assessment Type 1: Practical Skills
This assessment type is weighted at 50% for a 10-credit subject and 40% for a 20-credit subject.
For a 10-credit subject, students undertake two or three practical skills assessments.
For a 20-credit subject, students undertake at least five practical skills assessments.
Students complete a folio of text-based assessments that derive from any of the focus areas they have studied and demonstrate a range of skills developed. Students apply the design process and layout principles in planning, producing, and evaluating text-based products.
The use of automated publishing software or supplied templates is not recommended.
For a 10-credit subject, practical skills assessments should total a minimum of five A4 pages or the equivalent with sufficient text, which may be enhanced by graphics.
For a 20-credit subject, practical skills assessments should total a minimum of eight A4 pages or the equivalent with sufficient text, which may be enhanced by graphics.
For this assessment type, students provide evidence of their learning primarily in relation to the following assessment design criteria:
- development and application
- analysis and evaluation.

Assessment Type 2: Issues Analysis
This assessment type is weighted at 20% for a 10-credit subject and 30% for a 20-credit subject.
For a 10-credit subject, students undertake one issues analysis assessment.
For a 20-credit subject, students undertake one or two issues analysis assessments and one technical and operational understanding assessment.

Issues Analysis
Students analyse an issue related to one or both of the focus areas they have studied. An issues analysis may be presented in written, oral, visual, or multimodal form. The use of features such as headings, dot points, tables, and annotated diagrams will help students to organise their information.
For a 10-credit subject, a written presentation should be a maximum of 600 words and an oral presentation should be a maximum of 4 minutes.
For a 20-credit subject in which students undertake one issues analysis assessment, a written presentation should be a maximum of 1200 words and an oral presentation should be a maximum of 8 minutes.
For a 20-credit subject in which students undertake two issues analysis assessments, the combined length of written presentations should be a maximum of 1200 words and the combined length of oral presentations should be a maximum of 8 minutes. Students negotiate with their teacher the length or time for each presentation.
Presentation(s) must demonstrate use of an appropriate software application. Students who want to present their findings in another form must negotiate an equivalent length or time with their teacher.

In all cases, documentation must accompany the issues analysis and is part of the assessment. Documentation could include, for example, references, a bibliography, or appendices for a written presentation, or notes or cards for an oral presentation.

**Technical and Operational Understanding (20-credit subject only)**

For a 20-credit subject, students undertake one technical and operational understanding assessment from one of the focus areas they have studied.

Students demonstrate their knowledge and understanding of the availability, operation, and management of computer technology to support the processing, management, and communication of information.

A written presentation should be a maximum of 1000 words and an oral presentation should be a maximum of 6 minutes.

For this assessment type, students provide evidence of their learning primarily in relation to the following assessment design criteria:

- understanding
- analysis and evaluation.

**EXTERNAL ASSESSMENT**

**Assessment Type 3: Product and Documentation (30%)**

This assessment type is weighted at 30% for both a 10-credit subject and a 20-credit subject.

Students undertake one product and documentation assessment that may come from one focus area or the integration of two focus areas.

Students complete, for an identified audience, a text-based product that demonstrates understanding and use of the four parts of the design process: investigating, devising, producing, and evaluating.

The use of automated publishing software or supplied templates is not recommended.

**Product**

The final product should be at least three A4 pages or the equivalent for a 10-credit subject, and at least five A4 pages or the equivalent for a 20-credit subject. There must be sufficient text in the final product to demonstrate use of design elements. The text may be given to, or generated by, the student and should be approximately 900 words for a 10-credit subject and approximately 1500 words for a 20-credit subject.

**Documentation**

The design process must be covered in separate documentation (a maximum of 800 words for a 10-credit subject and a maximum of 1500 words for a 20-credit subject), which is submitted with the final product. The documentation includes an evaluation of the product and of the design process used.
The following specific features of the assessment design criteria for this subject are assessed in the product and documentation:

- understanding — U1 and U2
- development and application — DA1, DA2, DA3, and DA4
- analysis and evaluation — AE2.

**PERFORMANCE STANDARDS**

The performance standards describe five levels of achievement, A to E.

Each level of achievement describes the knowledge, skills, and understanding that teachers and assessors refer to in deciding how well a student has demonstrated his or her learning on the basis of the evidence provided.

During the teaching and learning program the teacher gives students feedback on their learning, with reference to the performance standards.

At the student’s completion of study of each school assessment type, the teacher makes a decision about the quality of the student’s learning by:

- referring to the performance standards
- assigning a grade between A+ and E− for the assessment type.

The student’s school assessment and external assessment are combined for a final result, which is reported as a grade between A+ and E−.
## Performance Standards for Stage 2 Information Processing and Publishing

<table>
<thead>
<tr>
<th>Understanding</th>
<th>Development and Application</th>
<th>Analysis and Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Discerning selection and highly proficient use of appropriate hardware and software in the completion of text-based communication tasks. Highly proficient application of manipulative and organisational skills in the use of information-processing technology. Consistent and thoughtful application of layout and design principles to the production of text-based documents or presentations. Comprehensive and well-considered application of the design process in planning and producing text-based products.</td>
<td>Perceptive and thorough analysis and evaluation of the impact of social, ethical, and/or legal issues most closely related to information-processing and publishing technologies. Discerning and thorough evaluation of text-based products and the design process used.</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Well-considered selection and proficient use of appropriate hardware and software in the completion of text-based communication tasks. Proficient application of manipulative and organisational skills in the use of information-processing technology. Thoughtful application of layout and design principles to the production of text-based documents or presentations. Well-considered application of the design process in planning and producing text-based products.</td>
<td>Well-considered analysis and evaluation of the impact of social, ethical, and/or legal issues closely related to information-processing and publishing technologies. Well-considered evaluation of text-based products and the design process used.</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Considered selection and use of appropriate hardware and software in the completion of text-based communication tasks. Competent application of manipulative and organisational skills in the use of information-processing technology. Competent application of layout and design principles to the production of text-based documents or presentations. Competent application of the design process in planning and producing text-based products.</td>
<td>Considered analysis and evaluation of the impact of social, ethical, and/or legal issues related to information-processing and publishing technologies. Competent evaluation of text-based products and the design process used.</td>
</tr>
<tr>
<td>Understanding</td>
<td>Development and Application</td>
<td>Analysis and Evaluation</td>
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<td><strong>D</strong></td>
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<tr>
<td>Some recognition of hardware or software for the completion of basic text-based communication tasks.</td>
<td>Partial use of basic hardware or software in the completion of basic text-based communication tasks.</td>
<td>Some awareness of the impact of one or more social, ethical, or legal issues related to information-processing and publishing technologies.</td>
</tr>
<tr>
<td>Some understanding of basic aspects of the design process in planning, producing, and evaluating text-based products.</td>
<td>Some application of basic manipulative and organisational skills in the use of information-processing technology.</td>
<td>Some basic assessment of text-based products, with some reference to the design process.</td>
</tr>
<tr>
<td>Awareness of some impacts of social, ethical, or legal issues that are partly related to information-processing and publishing technologies.</td>
<td>Some application of basic layout and design principles to the production of text-based documents or presentations.</td>
<td></td>
</tr>
<tr>
<td>Partial use of basic hardware or software in the completion of basic text-based communication tasks.</td>
<td>Basic application of some aspects of the design process in planning and producing one or more text-based products.</td>
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<tr>
<td><strong>E</strong></td>
<td></td>
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<tr>
<td>Identification of aspects of hardware or software related to text-based communication tasks.</td>
<td>Attempted use of basic hardware or software in attempting text-based communication tasks.</td>
<td>Emerging awareness of one or more aspects of the impact of a social, ethical, or legal issue related to information-processing and publishing technologies.</td>
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<tr>
<td>Some recognition of limited aspects of the role of the design process in planning, producing, and evaluating text-based products.</td>
<td>Limited application of manipulative and organisational skills in attempting to use information-processing technology.</td>
<td>Attempted description of one or more text-based products, with limited reference to the design process.</td>
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<tr>
<td>Limited consideration of any issues that may be related to information-processing and publishing technologies.</td>
<td>Attempted use of elements of layout and design principles in the attempted production of a text-based document or presentation.</td>
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<tr>
<td>Attempted use of basic hardware or software in attempting text-based communication tasks.</td>
<td>Attempted application of one or more aspects of the design process in planning and attempting to produce a simple text-based product.</td>
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</table>
ASSESSMENT INTEGRITY

The SACE Assuring Assessment Integrity Policy outlines the principles and processes that teachers and assessors follow to assure the integrity of student assessments. This policy is available on the SACE website (www.sace.sa.edu.au) as part of the SACE Policy Framework.

The SACE Board uses a range of quality assurance processes so that the grades awarded for student achievement, in both the school assessment and the external assessment, are applied consistently and fairly against the performance standards for a subject, and are comparable across all schools.

Information and guidelines on quality assurance in assessment at Stage 2 are available on the SACE website (www.sace.sa.edu.au).
SUPPORT MATERIALS

SUBJECT-SPECIFIC ADVICE
Online support materials are provided for each subject and updated regularly on the SACE website (www.sace.sa.edu.au). Examples of support materials are sample learning and assessment plans, annotated assessment tasks, annotated student responses, and recommended resource materials.

ADVICE ON ETHICAL STUDY AND RESEARCH
Advice for students and teachers on ethical study and research practices is available in the guidelines on the ethical conduct of research in the SACE on the SACE website (www.sace.sa.edu.au).