Applied Information Technology

General course

Year 11 syllabus

**IMPORTANT INFORMATION**

This syllabus is effective from 1 January 2022.

Users of this syllabus are responsible for checking its currency.

Syllabuses are formally reviewed by the School Curriculum and Standards Authority on a cyclical basis, typically every five years.

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# Rationale

The development and application of digital technologies impact most aspects of living and working in our society. Digital technologies have changed how people interact and exchange information. These developments have created new challenges and opportunities in lifestyle, entertainment, education and commerce.

Throughout the Applied Information Technology General course, students investigate client-driven issues and challenges, devise solutions, produce models or prototypes and then evaluate and refine the design solution in collaboration with the client. Students are provided with the opportunity to experience, albeit in a school environment, developing digital solutions for real situations.

The practical application of skills, techniques and strategies to solve information problems is a key focus of the course. Students also gain an understanding of computer systems and networks. In undertaking projects and designing solutions, the legal, ethical and social issues associated with each solution are also considered and evaluated.

This course provides students with the opportunity to develop the knowledge and skills of digital technologies. It also encourages students to use digital technologies in a responsible and informed manner.

The Applied Information Technology General course provides a sound theoretical and practical foundation, offering pathways to further studies and a wide range of technology based careers.

# Course outcomes

The Applied Information Technology General course is designed to facilitate achievement of the following outcomes.

### Outcome 1 – Design process

Students apply a design process when creating or modifying information solutions using digital technologies in response to a client brief.

In achieving this outcome, students:

* research ideas, considering alternatives
* analyse, design, produce, communicate and evaluate proposals in an efficient and appropriate manner.

### Outcome 2 – Understanding digital communication technologies

Students understand the nature and use of computer hardware and software to achieve digital solutions.

In achieving this outcome, students:

* understand the digital concepts, formats and terminology required to select and use appropriate software and hardware to achieve client-driven digital solutions
* understand procedures, techniques and management skills relevant to the client’s needs
* produce a quality solution that adheres to the accepted standards and conventions associated with the content relevant to the client brief.

### Outcome 3 – Impacts of technology

Students understand how legal, ethical and social considerations are interconnected in the development of digital solutions.

In achieving this outcome, students:

* understand the legal, ethical and social consequences that digital developments have in effectively securing data
* understand the legal, ethical and social implications of data distribution.

# Organisation

This course is organised into a Year 11 syllabus and a Year 12 syllabus. The cognitive complexity of the syllabus content increases from Year 11 to Year 12.

## Structure of the syllabus

The Year 11 syllabus is divided into two units, each of one semester duration, which are typically delivered as a pair. The notional time for each unit is 55 class contact hours.

### Unit 1 – Personal communication

The focus of this unit is to enable students to use technology to meet personal needs. Students develop a range of skills that enable them to communicate using appropriate technologies and to gain knowledge that assists in communicating within a personal context.

### Unit 2 – Working with others

The focus of this unit is to enable students to use a variety of technologies to investigate managing data, common software applications and wireless network components required to effectively operate within a small business environment. They examine the legal, ethical and social impacts of technology within society.

Each unit includes:

* a unit description – a short description of the focus of the unit
* unit content – the content to be taught and learned.

## Organisation of content

The content is divided into the following areas:

* Design concepts (Unit 1)
* Managing data (Unit 2)
* Hardware (Unit 1)
* Networks (Unit 2)
* Impacts of technology (Unit 1 and Unit 2)
* Applications skills (Unit 1 and Unit 2)
* Project management (Unit 1 and Unit 2)

Design concepts

When designing quality solutions, it is necessary to consider the intended audience and use the appropriate elements of design and the principles of design. Students develop strategies for applying digital technologies in creative and original ways for different purposes.

Managing data

Students acquire an understanding of how to source, organise, process, transform, store and manage a range of digital data types. They apply efficient search strategies for research purposes. An understanding of security and statutory requirements in relation to information processing and management is developed.

Hardware

Students develop an understanding of common computer hardware system components, their compatibility and connectivity. Functions, such as processing, input, output, memory/storage and communication are considered. Students use appropriate terminology, technical references/manuals, help procedures and other support facilities.

Networks

The components of a network, including the communication media used to connect them, are examined. Content includes the types, purpose and use of protocols, servers, operating systems in communications and network security.

Impacts of technology

The rights of individuals, groups and communities regarding privacy, including responsibility for the access, availability and security of information and their potential misuse, are explored. Students examine the role of relevant government and regulatory bodies in protecting these rights.

Applications skills

Students learn, select and apply appropriate software application skills in the development of digital solutions. Students need to be aware of the purpose and desired output in order to integrate the various applications and associated skills.

Project management

Students use problem-solving skills to develop digital solutions that meet client needs. Individuals use project management skills to produce digital solutions according to a design brief.

Resource requirement

It is recommended that for delivery of the course students have access to the following resources:

* computers with access to the internet
* peripheral devices, including:
	+ scanner/photocopier/printer (multi-function device)
	+ printer(s)
	+ digital still and video cameras
	+ microphones and speakers
	+ mobile devices
* applications software
	+ spreadsheet software
	+ word processing software
	+ presentation software
	+ multimedia software
	+ personal communication software
	+ collaborative management software
	+ browser software
	+ web authoring software

## Progression from the Year 7–10 curriculum

This syllabus continues to develop student learning around the knowledge, understandings and skills within the Year 7–10 Digital Technologies curriculum and focuses on the components of digital systems: software, hardware and networks and their use.

The syllabus also continues to develop the skills associated with the production of digital solutions through: collecting, managing and analysing data; defining problems; designing, implementing and evaluating solutions; and communicating, collaborating and managing projects.

## Representation of the general capabilities

The general capabilities encompass the knowledge, skills, behaviours and dispositions that will assist students to live and work successfully in the twenty-first century. Teachers may find opportunities to incorporate the capabilities into the teaching and learning program for the Applied Information Technology General course. The general capabilities are not assessed unless they are identified within the specified unit content.

### **Literacy**

Students become literate as they develop the knowledge, skills and dispositions to use and interpret language confidently for learning and communicating in and out of school and for participating effectively in society. Literacy involves students in listening to, reading, viewing, speaking, writing and creating oral, print, visual and digital texts, and using and modifying language for different purposes in a range of contexts.

In the Applied Information Technology General course, students develop literacy capability as they learn how to communicate ideas, concepts and detailed proposals to a variety of audiences; recognise how language can be used to manipulate meaning; and read and interpret detailed written instructions. They learn to understand and use language to discuss and communicate information, concepts and ideas related to the course.

In the Applied Information Technology General course, students understand that language varies according to context and they increase their ability to use language flexibly. The vocabulary of the Applied Information Technology General course is technical and includes specific terms for concepts, processes and production. Students learn to understand that much technological information is presented in the form of drawings, diagrams and digitally. They also learn the importance of listening, and talking when learning about technologies processes, especially in articulating, questioning and evaluating ideas.

Numeracy

Students become numerate as they develop the knowledge and skills to use mathematics confidently across other learning areas at school and in their lives more broadly. Numeracy involves students in recognising and understanding the role of mathematics in the world, and having the dispositions and capacities to use mathematical knowledge and skills purposefully.

In the Applied Information Technology General course, students work with the concepts of scale and proportion. The course provides opportunities for students to interpret and use mathematical knowledge and skills in a range of real life situations. Students develop and apply mathematical knowledge and skills to analyse, interpret and present information in numerical and graphical form and to make sense of data presented.

Information and communication technology capability

Students develop information and communication technology (ICT) capability as they learn to use ICT effectively and appropriately to access, create and communicate information and ideas, solve problems and work collaboratively, and in their lives beyond school. The ICT capability involves students in learning to make the most of the digital technologies available to them. They adapt to new ways of doing things as technologies evolve, and limit the risks to themselves and others in a digital environment.

In the Applied Information Technology General course, students create solutions that consider social and environmental factors when operating digital systems with digital information. They develop an understanding of the characteristics of data, digital systems, audiences and procedures. They apply this when they investigate, communicate and create purpose-designed digital solutions. Students learn to formulate problems, logically organise and analyse data and represent it in abstract forms. Students decide the best combinations of data, procedures and human and physical resources to generate efficient and effective digital solutions.

Critical and creative thinking

Students develop capability in critical and creative thinking as they learn to generate and evaluate knowledge, clarify concepts and ideas, seek possibilities, consider alternatives and solve problems. Critical and creative thinking are integral to activities that require students to think broadly and deeply using skills, behaviours and dispositions such as reason, logic, resourcefulness, imagination and innovation in all learning areas at school and in their lives beyond school.

In the Applied Information Technology General course, students develop capability in critical and creative thinking as they imagine, generate, develop, produce and critically evaluate ideas. They develop reasoning and the capacity for abstraction through challenging problems that do not have straightforward solutions. They identify, explore and clarify technologies, information and use the knowledge gained in a range of situations. In the Applied Information Technology General course, students think critically and creatively; consider how data, information, and systems impact our lives; and how these elements might be better designed and managed.

Personal and social capability

Students develop personal and social capability as they learn to understand themselves and others, and manage their relationships, lives, work and learning more effectively. The personal and social capability involves students in a range of practices, including: recognising and regulating emotions; developing empathy for others and understanding relationships; establishing and building positive relationships; making responsible decisions; working effectively in teams; handling challenging situations constructively; and developing leadership skills.

In the Applied Information Technology General course, students develop personal and social capability as they engage in project management and development in a collaborative workspace. They direct their own learning, plan and carry out investigations, and become independent learners who can apply design thinking, technologies understanding and skills when making decisions. Students develop social and employability skills through working cooperatively in teams, sharing resources, tools, equipment and processes, making group decisions, resolving conflict and showing leadership. Design and innovation involve a degree of risk taking, and as students work with the uncertainty of sharing new ideas, they develop resilience.

The Applied Information Technology General course enhances students’ personal and social capability by developing their social awareness. Students develop understanding of diversity by researching and identifying user needs. They develop social responsibility through the understanding of empathy with and respect for, others.

Ethical understanding

Students develop ethical understanding as they identify and investigate concepts, values, character traits and principles, and understand how reasoning can help ethical judgement. Ethical understanding involves students in building a strong personal and socially oriented, ethical outlook that helps them to manage context, conflict and uncertainty, and to develop an awareness of the influence that their values and behaviour have on others.

In the Applied Information Technology General course, students develop the capacity to understand and apply ethical and socially responsible principles when collaborating with others and creating, sharing and using technologies, data, processes, tools and equipment. Students consider their own roles and responsibilities as discerning citizens, and learn to detect bias and inaccuracies. Understanding the protection of data, intellectual property and individual privacy in the school environment helps students to be ethical digital citizens.

Intercultural understanding

Students develop intercultural understanding as they learn to value their own cultures, languages and beliefs, and those of others. They come to understand how personal, group and national identities are shaped, and the variable and changing nature of culture. The capability involves students in learning about, and engaging with, diverse cultures in ways that recognise commonalities and differences, create connections with others and cultivate mutual respect.

In the Applied Information Technology General course, students consider how technologies are used in diverse communities at local, national, regional and global levels, including their impact and potential to transform people’s lives. They explore ways in which past and present practices enable people to use technologies to interact with one another across cultural boundaries.

## Representation of the cross-curriculum priorities

The cross-curriculum priorities address the contemporary issues which students face in a globalised world. Teachers may find opportunities to incorporate the priorities into the teaching and learning program for the Applied Information Technology General course. The cross-curriculum priorities are not assessed unless they are identified within the specified unit content.

Aboriginal and Torres Strait Islander histories and cultures

The Applied Information Technology General course may provide opportunities for students to learn about Aboriginal and Torres Strait Islander histories and cultures. Students could explore creative, engaging and diverse learning contexts so they can value and appreciate the contribution by the world’s oldest continuous living cultures to past, present and emerging technologies.

Asia and Australia's engagement with Asia

The Applied Information Technology General course may provide opportunities for students to explore contemporary and emerging technological achievements that the Asia region and Pacific region have made, and continue to make, to global technological advances, including: innovation in hardware and software design and development; the regions’ role in outsourcing of information and communication technologies (ICT) services; and globalisation. Students could also consider the contribution of Australia’s contemporary and emerging technological achievements to the Asia and Pacific regions.

Sustainability

The Applied Information Technology General course may provide an opportunity for students, within authentic contexts, to choose and evaluate digital technologies and information systems with regard to the risks and opportunities they present. Students evaluate the extent to which information systems solutions can embrace sustainability. They could reflect on past and current practices, and assess new and emerging technologies from a sustainability perspective.

# Unit 1 – Personal communication

## Unit description

The focus of this unit is to enable students to use technology to meet personal needs. Students develop a range of skills that enable them to communicate using appropriate technologies and to gain knowledge that assists in communicating within a personal context.

## Unit content

This unit includes the knowledge, understandings and skills described below.

The content of this unit encompasses theoretical aspects (Knowledge) and practical aspects (Skills). It is divided into the following areas:

* Design concepts
* Hardware
* Impacts of technology
* Application skills
* Project management

### Design concepts

**Knowledge**

* the elements of design
	+ line
	+ shape
	+ space
	+ texture
	+ colour
* the principles of design
	+ balance
	+ emphasis (contrast and proportion)
	+ dominance
* typography
	+ typeface
	+ size
	+ alignment
	+ format
	+ spacing
* compositional rules
	+ rule of thirds
	+ grid and alignment

**Skills**

* identify the elements of design and the principles of design in an existing digital product and/or solution
* apply the elements of design and the principles of design to page layouts

### Hardware

**Knowledge**

* types of computer systems
	+ desktop systems
	+ mobile devices
	+ server
* purpose of the central processing unit
* purpose of memory
	+ primary memory
	+ secondary memory
* purpose of input devices
* purpose of output devices
* types of peripheral devices
	+ printer/scanner/photocopier (multi-function devices)
	+ microphone
	+ speakers
	+ webcam
	+ cameras – video and still
* troubleshooting techniques to resolve common computer system faults

**Skills**

* apply troubleshooting techniques to the following situations:
	+ faulty monitor
	+ no power to computer
	+ printer not working

### Impacts of technology

**Knowledge**

* work health and safety (WHS) considerations for a personal work area, including:
	+ lighting
	+ ventilation
	+ ergonomics
* responsibilities of users when storing and maintaining private/personal information
* the concept of digital citizenship
* consequences of different methods of disposal of outdated technologies
* recycling of technology products
* consequences of using digital media compared to traditional methods of communication
* implications of placing information and images online, including:
	+ identity theft
	+ cyber stalking
* impact of changes in digital technology on:
	+ personal values
	+ productivity in the workplace
	+ lifestyle

### Application skills

**Knowledge**

* features of word processing applications for personal use, including:
	+ formatting text
	+ tables
	+ headers and footers
	+ drawing objects
* features of spreadsheet applications for personal use, including:
	+ simple formulas (addition, subtraction, multiplication and division)
	+ functions (sum, average, max, min)
	+ formatting and graphs
* features of email and webmail for personal use, including:
	+ attachments
	+ storage
	+ sorting
	+ address book
* considerations for document design and development, including:
	+ purpose
	+ target audience
* considerations for the layout and design of documents, including:
	+ typography
	+ alignment
	+ white space
	+ insertion and placement of images
	+ compositional rules
	+ bulleted lists
	+ readability
	+ usability
* types of collaborative software tools

**Skills**

* apply a design strategy to ensure:
	+ usability
	+ visual design
	+ accessibility
* use application software of word processing for personal use
* use spreadsheet software for personal budgets
* use email software for personal use
* use appropriate collaborative software tools for personal communication
* apply layout and design considerations for the construction of digital product and/or digital solution

**Project management**

**Knowledge**

* considerations for the development of a digital product and/or digital solution, including:
	+ purpose
	+ target audience
	+ content
	+ presentation medium
	+ design concepts
* criteria and methods for evaluating a digital product and/or digital solution, including:
	+ peer
	+ self
	+ target audience

**Skills**

* identify the purpose and intended audience for a digital product and/or digital solution
* apply selected design elements and principles to create a personal digital product and/or digital solution
* evaluate the completed product and/or solution

# Unit 2 – Working with others

## Unit description

The focus of this unit is to enable students to use a variety of technologies to investigate managing data, common software applications and wireless network components required to effectively operate within a small business environment. They examine the legal, ethical and social impacts of technology within society.

## Unit content

This unit builds on the content covered in Unit 1.

This unit includes the knowledge, understandings and skills described below.

The content of this unit encompasses theoretical aspects (Knowledge) and practical aspects (Skills). It is divided into the following areas:

* Managing data
* Networks
* Impacts of technology
* Application skills
* Project management.

### Managing data

**Knowledge**

* characteristics of the accuracy and reliability of sources of data, including:
	+ currency
	+ author
	+ purpose
* characteristics of search engines
* internet search strategies, including the use of Boolean search operators (AND, OR, NOT)
* difference between data and information
* awareness of common file formats for:
	+ documents
	+ graphics
	+ audio
	+ video
* personal data organisation methods, including:
	+ files and folders
	+ appropriate file and folder naming
	+ version control

**Skills**

* use a variety of search engines to locate similar data
* use Boolean search operators for detailed searches
* create and save data using different file types
* apply personal data organisation methods

### Networks

**Knowledge**

* components of a personal wireless network, including:
	+ network interface cards (NIC)
	+ router
	+ access point
* considerations for selecting hardware for a personal wireless network, including:
	+ hardware compatibility
	+ usability
	+ internet service providers (ISP)
* considerations for network security, including:
	+ use of a firewall
	+ virus protection

**Skills**

* connect to a wireless network
* check connectivity of a wireless network

### Impacts of technology

**Knowledge**

* types of computer crime, including:
	+ development of computer viruses
	+ hacking
	+ identity theft
	+ cyber stalking
* introduction to the relevant regulations that apply to personal ICT use, including:
	+ copyright acknowledgement
	+ slander
	+ cyber bullying
	+ piracy
* purpose of the fair dealing amendment of the *Copyright Act 1968* (Australia) for educational purposes
* purpose of the *Spam Act 2003*, (Australia) including appropriate use
* responsible digital citizenship related to cyber bullying
* impact of digital technology on:
	+ the health of individuals
	+ communication methods

**Application skills**

**Knowledge**

* features of presentation software, including:
	+ design layout
	+ transitions
	+ animation
	+ hyperlinks
* features of audio software, including:
	+ editing
	+ effects
* features of image manipulation software, including:
	+ select
	+ copy
	+ paste
	+ crop
	+ rotate/flip
	+ resize
	+ filters
* features of online database tools, including:
	+ data input
	+ data submission
	+ data searching
* strategies for troubleshooting software issues and undertaking online training, including:
	+ manuals
	+ online help
	+ peer assistance
	+ online tutorials

**Skills**

* use word processing software
* use presentation software
* use audio software
* use image manipulation software
* use online databases
* apply software troubleshooting and training options
* plan, design and present an interactive project

**Project management**

**Knowledge**

* components of a design process to develop a digital product and/or digital solution
	+ identify a need
	+ schedule of tasks (timeline)
	+ research ideas
	+ specifications
	+ develop ideas
	+ develop solutions
	+ test solutions
	+ modify and adapt
	+ evaluate
* time management skills
	+ scheduling of events
	+ prioritisation of tasks
	+ development of timelines
	+ following up of tasks
	+ backup of data
* techniques for representing the design of a digital product and/or digital solution, including:
	+ annotated diagrams/sketches
	+ storyboards
	+ wireframe and grid

**Skills**

* apply a design process to create a digital product and/or digital solution
* apply time management skills
* apply the elements of design and the principles of design to create a digital solution to meet user requirements
* present a completed project for user evaluation

# School-based assessment

The Western Australian Certificate of Education (WACE) Manual contains essential information on principles, policies and procedures for school-based assessment that needs to be read in conjunction with this syllabus.

Teachers design school-based assessment tasks to meet the needs of students. The table below provides details of the assessment types for the Applied Information Technology General Year 11 syllabus and the weighting for each assessment type.

### Assessment table – Year 11

|  |  |
| --- | --- |
| Type of assessment | Weighting |
| ProjectStudents research information technology based ideas and processes to create digital solutions. This involves the application of project management approaches/techniques to a design process. The project can require students to refer to stimulus material. Stimulus material can include: extracts from newspapers or journal articles; screen captures of online media; diagrams; multimedia and/or graphics; and/or a scenario. | 70% |
| Short answerShort answer questions typically require students to respond to specific questions and/or analyse digital technology products and/or trends. Formats can include multiple-choice, and open and closed questions that can be scaffolded or sectionalised. Scaffolded or sectionalised questions may increase in difficulty. Questions can require students to refer to stimulus material. Stimulus material can include: extracts from newspapers or journal articles; screen captures of online media; diagrams; multimedia and/or graphics; and/or a scenario. | 20% |
| Extended answer Extended answer questions can be scaffolded or sectionalised. Questions are connected by a theme, idea and/or concept. Questions can require students to refer to stimulus material and use interpretative skills, and/or the application of critical thinking and analysis. Stimulus material can include: extracts from newspapers or journal articles; screen captures of online media; diagrams; multimedia and/or graphics; and/or a scenario. | 10% |

Teachers are required to use the assessment table to develop an assessment outline for the pair of units
(or for a single unit where only one is being studied).

The assessment outline must:

* include a set of assessment tasks
* include a general description of each task
* indicate the unit content to be assessed
* indicate a weighting for each task and each assessment type
* include the approximate timing of each task (for example, the week the task is conducted, or the issue and submission dates for an extended task).

In the assessment outline for the pair of units, each assessment type must be included at least twice. In the assessment outline where a single unit is being studied, each assessment type must be included at least once.

The set of assessment tasks must provide a representative sampling of the content for Unit 1 and Unit 2.

Assessment tasks not administered under test/controlled conditions require appropriate validation/authentication processes.

## Grading

Schools report student achievement in terms of the following grades:

|  |  |
| --- | --- |
| Grade | Interpretation |
| A | Excellent achievement |
| B | High achievement |
| C | Satisfactory achievement |
| D | Limited achievement |
| E | Very low achievement |

The teacher prepares a ranked list and assigns the student a grade for the pair of units (or for a unit where only one unit is being studied). The grade is based on the student’s overall performance as judged by reference to a set of pre-determined standards. These standards are defined by grade descriptions and annotated work samples. The grade descriptions for the Applied Information Technology General Year 11 syllabus are provided in Appendix 1. They can also be accessed, together with annotated work samples, through the Guide to Grades link on the course page of the Authority website at [www.scsa.wa.edu.au](http://www.scsa.wa.edu.au)

To be assigned a grade, a student must have had the opportunity to complete the education program, including the assessment program (unless the school accepts that there are exceptional and justifiable circumstances).

Refer to the WACE Manual for further information about the use of a ranked list in the process of assigning grades.

# Appendix 1 – Grade descriptions Year 11

|  |  |
| --- | --- |
| **A** | **Knowledge and understanding**Accurately uses digital technology terminology, and explains processes and concepts in context.  |
| **Design concepts**Identifies and successfully applies the elements of design and the principles of design relating to page layouts and/or existing digital products and/or solutions. |
| **Application skills**Successfully applies relevant layout and design considerations to consistently plan and present an interactive project, digital products and/or solutions.Selects and consistently uses appropriate application(s), and a range of relevant features, effectively and consistently creating and/or modifying original digital products and/or solutions. |
| **Project management**Consistently applies and explains the use of relevant time management techniques, efficiently and effectively creating digital products and/or solutions to meet client requirements or a design brief.Consistently applies a design process/plan and/or relevant techniques, successfully creating and evaluating digital products and/or solutions, to meet client requirements and/or a design brief.  |

|  |  |
| --- | --- |
| **B** | **Knowledge and understanding**Uses digital technology terminology, and describes processes and concepts in context. |
| **Design concepts**Identifies and appropriately applies the elements of design and the principles of design relating to page layouts and/or existing digital products and/or solutions. |
| **Application skills**Successfully applies appropriate layout and design considerations to plan and present an interactive project, digital products and/or solutions. Selects and uses application(s) and a range of appropriate features, consistently creating and/or modifying original digital products and/or solutions. |
| **Project management**Consistently applies and describes the use of time management techniques, effectively creating a digital products and/or solutions to meet client requirements or a design brief.Applies a design process/plan and/or appropriate techniques, successfully creating and evaluating digital products and/or solutions, to meet client requirements and/or a design brief.  |

|  |  |
| --- | --- |
| **C** | **Knowledge and understanding**Uses digital technology terminology, and recalls processes and concepts. |
| **Design concepts**Identifies and applies the elements of design and the principles of design relating to page layouts and/or existing digital products and/or solutions. |
| **Application skills**Applies layout and design considerations to plan and present an interactive project, digital products and/or solutions.Uses application(s) and range of appropriate features, to create and/or modify digital products and/or solutions. |
| **Project management**Applies and identifies the use of time management techniques to create a digital products and/or solutions to meet client requirements or a design brief.Applies a design process/plan and/or techniques, creating and evaluating digital products and/or solutions considering client requirements and/or a design brief. |

|  |  |
| --- | --- |
| **D** | **Knowledge and understanding**Attempts to use digital technology terminology, and inconsistently recalls processes and concepts. |
| **Design concepts**Identifies and attempts to apply the elements of design and the principles of design relating to page layouts and/or existing digital products and/or solutions. |
| **Application skills**Inconsistently applies layout and design considerations to plan and present an incomplete interactive project, digital products and/or solutions.Unsuccessfully creates and/or modifies digital products and/or solutions. |
| **Project management**Attempts to apply time management techniques to create incomplete digital products and/or solutions.Attempts to apply a design process/plan and/or techniques to create incomplete digital products and/or solutions. |

|  |  |
| --- | --- |
| **E** | Does not meet the requirements of a D grade and/or has completed insufficient assessment tasks to be assigned a higher grade. |

# Appendix 2 – Glossary

This glossary is provided to enable a common understanding of the key terms in this syllabus.

**Compositional rules**

Provide the rules that include focal point/centre of interest, framing, leading lines, reading gravity, rule of thirds, underlying geometric frame work, eye-flow.

* **Focal point/Centre of interest** – the central point of attention or interest within a design.
* **Framing** – a technique used to present an image so that it immediately captures the viewer’s attention.
* **Leading lines** – used to draw the viewer into an image so that it is seen in the way intended. The designer uses leading lines so the image is viewed in a prescribed sequence.
* **Reading gravity** – the manner in which Western audiences read from left to right and top to bottom.
* **Rule of thirds** – an image can be divided into thirds both, horizontally and vertically, creating nine parts. The eye is naturally drawn to the intersection points of these thirds. This provides a grid for the designer to employ to direct attention.
* **Underlying geometric framework, eye-flow** – the way a designer plans their design to ensure that the viewer moves their eye around the page.

**Digital citizenship**

The manner in which a user accesses and interacts using digital technologies. Responsible digital citizenship refers to the major considerations of responsible digital behaviour, including:

* **Digital** **access** – the ability to access electronic technologies
* **Digital** **commerce** – the electronic sale and/or purchase of goods
* **Digital communication** – the exchange of information via electronic devices
* **Digital literacy** – the process of teaching and learning about technology and how it can be used
* **Digital etiquette** – acceptable codes of conduct when communicating online
* **Digital law** – the laws that govern acceptable behaviours in the online environment, including copyright and spam
* **Digital rights and responsibilities** – the rights and responsibilities of anyone operating within the digital world
* **Digital health and wellness** – the physical and mental well-being of those operating in the digital world, including ergonomics, and Internet addiction
* **Digital security** – ensuring electronic safety of digital content from external threat.

**Elements of design**

The parts or components within a design that can be individually defined. Together, the elements of design constructs the principles of design. They provide the basic structure for the product and are responsible for communicating the design intentions. The placement of the elements of design can alter the message communicated.

**Evaluation criteria**

The criteria employed to provide a consistent, standardised evaluation of a product’s performance against an established benchmark or set of standards

**Layout**

The process of planning and arranging, in detail, how the design will be reproduced. The process of planning and arranging of the design enables the various elements of the design to produce an aesthetically pleasing and harmonious product.

**Principles of design**

Specific concepts utilised to organise or arrange the structural aspects of a design. Designers choose principles to ensure that the intention of their message is clear to the target audience.

**Project**

A process or enterprise that is planned, designed and developed to achieve an aim. In the context of the Applied Information Technology General course, students research information technology-based ideas and processes that require the application of project management approaches/techniques to a design process to create quality digital solutions.

**Project management**

The discipline of planning, organising, securing and managing resources to bring about the successful completion of a project efficiently and effectively.

**Production process**

The production process refers to the stages required to complete a product, from the idea to the completion of the final product.

**Responsive design**

A web design approach aimed at producing sites to provide an optimal viewing experience. This includes: easy reading and navigation, requiring minimal resizing, panning, and scrolling. Designs should also be suitable across a wide range of devices, including smart phones, tablets, laptops and desktop monitors.

**Style guide**

The set of rules, conventions, procedures or standards used for the designing and development of documents for publication, either electronic or print.