Government of Western Australia
School Curriculum and Standards Authority

Applied Information Technology

Foundation course

Year 12 syllabus

IMPORTANT INFORMATION

This syllabus is effective from 1 January 2018.

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.

Content

Introduction to the Foundation courses

Foundation courses are designed for students who have not demonstrated the Western Australian Certificate of Education (WACE) standard of numeracy and Standard Australian English (SAE) literacy skills. These standards are based on Level 3 of the Australian Core Skills Framework (ACSF) which outlines the skills required for individuals to meet the demands of everyday life and work in a knowledge-based economy.

Foundation courses provide support for the development of functional literacy and numeracy skills essential for students to meet the WACE standard of literacy and numeracy through engagement with the ACSF Level 3 reading, writing, oral communication and numeracy core skills.

The Foundation courses are:

- Applied Information Technology (AIT) (List B)
- Career and Enterprise (List A)
- English (List A)
- English as an Additional Language or Dialect (EAL/D) (List A)
- Health, Physical and Outdoor Education (List B)
- Mathematics (List B)

Eligibility

Eligibility to enrol in Foundation courses is restricted to students who meet the eligibility criteria. For further information regarding eligibility refer to the *WACE Manual* at www.scsa.wa.edu.au/publications/wace-manual.

Literacy and numeracy focus

While much of the explicit teaching of literacy and numeracy occurs in the English, English as an Additional Language or Dialect and Mathematics Foundation courses, all Foundation courses provide opportunities for the development of the literacy and numeracy capabilities identified in the Pre-primary to Year 10 Western Australian curriculum. Further, a set of literacy and numeracy skills, drawn from both the ACSF (Level 3) core skills of reading, writing, oral communication and numeracy, and the Pre-primary to Year 10 English and Mathematics curriculum, have been identified These skills are common to all Foundation courses. Where appropriate, opportunities for students to engage in activities with significant literacy and numeracy demands should be the focus of teaching, learning and assessment programs.

Literacy

Literacy involves students:

- developing the knowledge, skills and dispositions to interpret and use language confidently for learning and communicating in and out of school and for effective participation in society
- listening to, reading, viewing, speaking, writing and creating, which includes oral, print, visual and digital texts
- using and modifying language for different purposes and for different audiences
- understanding how the English language works in different social contexts.

Foundation courses provide meaningful contexts for learning and practising specific literacy (L) skills as outlined below:

L1 acquiring words leading to an appropriately expanding vocabulary

L2 developing pronunciation and spelling of key words

L3 using Standard Australian English (SAE) grammar and punctuation to communicate effectively

L4 expressing increasingly complex ideas using a range of simple and complex sentence structures

L5 using a range of language features, including the use of tone, symbols, simple description, and factual as opposed to emotive language

L6 organising ideas and information in different forms and for different purposes and audiences

L7 achieving cohesion of ideas at sentence, paragraph and text level

L8 editing work for accuracy, coherence, clarity and appropriateness

L9 using a range of speaking and listening skills

L10 comprehending and interpreting a range of texts

L11 developing visual literacy skills.

Numeracy

Numeracy involves students:

- recognising and understanding the role of mathematics in the world
- developing the dispositions and capacities to use mathematical knowledge and skills purposefully
- increasing their autonomy in managing everyday situations.

Foundation courses provide meaningful contexts for learning and practising specific numeracy (N) skills and mathematical thinking processes as outlined in the examples below:

N1 identifying and organising mathematical information

N2 choosing the appropriate mathematics to complete a task

N3 applying mathematical knowledge, tools and strategies to complete the task

N4 representing and communicating mathematical conclusions

N5 reflecting on mathematical results in order to judge the reasonableness of the conclusions reached

The level of complexity of mathematical information to which the above numeracy skills are applied is outlined below:

- whole numbers and familiar or routine fractions, decimals and percentages
- dates and time, including 24 hour times
- familiar and routine 2D and 3D shapes, including pyramids and cylinders
- familiar and routine length, mass, volume/capacity, temperature and simple area measures
- familiar and routine maps and plans
- familiar and routine data, tables, graphs and charts, and common chance events.

Representation of the other general capabilities

In addition to the literacy and numeracy capabilities, teachers may find opportunities to incorporate the remaining capabilities into the teaching and learning program for the Applied Information Technology Foundation course. The general capabilities are not assessed unless they are identified within the specified unit content.

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.

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.

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. 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.

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.

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.

Representation of the cross-curriculum priorities

The cross-curriculum priorities address 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 Foundation 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 Foundation course may provide opportunities for students to learn about Aboriginal and Torres Strait Islander histories and cultures, and 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 Foundation 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 communications technologies (ICT) services; and globalisation. Students could also consider the contribution of Australia's contemporary and emerging technological achievements to the Asia and Pacific region.

Sustainability

The Applied Information Technology Foundation 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 could evaluate the extent to which information systems solutions can embrace sustainability. Students could also reflect on current practices, and assess new and emerging technologies from a sustainability perspective.

Rationale for the Applied Information Technology Foundation course

The development and application of digital technologies impacts upon most aspects of living and working in our society. Information and communication technologies have changed how people interact and exchange information. These technologies have created new opportunities and challenges in lifestyle, entertainment, education and business. Possessing an awareness of the potential, and the ability to use and exploit these technologies, provides individuals with the ability to participate within the wider community.

A key focus of this course is the development of literacy and numeracy skills, within an information and communication technologies context, relevant to a range of career, further study and work pathways. Students will explore and apply the essential skills of literacy and numeracy in both work and personal contexts.

This course provides students with the opportunity to develop the knowledge, understandings and skills to use information and communication technologies in a responsible and informed manner.

The course caters for a range of students' needs and interests. The course structure enables a flexibility of approach and delivery to meet students' needs through a combination and/or integration of core modules and electives. Each unit is comprised of a combination of core modules and electives modules that provide a focus and extension to meet students' needs.

Course outcomes

The Applied Information Technology Foundation 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 for personal use.

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 for personal use
- understand procedures, techniques and time management skills relevant to personal use
- produce a quality solution that adheres to the accepted standards and conventions associated with the content relevant to personal use.

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 12 syllabus is divided into two units, which are delivered as a pair. The notional time for the pair of units is 110 class contact hours.

Unit 3

This unit is comprised of four core modules and one elective module selected from a set of five elective modules.

C12.1 The computer system
C12.2 Word processing and data management
C12.3 Presentation software
C12.4 Project management

Unit 4

This unit is comprised of two core modules and two elective modules selected from a set of five elective modules.

C12.5 Social collaboration
C12.6 Spreadsheets

Elective modules

E12.1 Sound editing
E12.2 Video editing
E12.3 Animation
E12.4 Website development
E12.5 Gaming

To ensure breadth and depth of learning, core modules and elective modules cannot be repeated.

Each core module and elective module includes:

- module description – a short description of the focus of the module
- module content – the content to be taught and learned

Learning activities which could be included in a teaching and learning program can be found in the teacher support materials on the Applied Information Technology course page on the Authority website at www.scsa.wa.edu.au.

The table below illustrates the structure of the Year 12 syllabus.

Unit	Time allocation for the unit (hours)	Core modules	Time allocation (hours)	Electives	Elective time allocation (hours)
3	55	C12.1 The computer system	10	Choose one from five elective modules	18
		C12.2 Word processing and data management	10		
		C12.3 Presentation software	10		
		C12.4 Project management	7		
4	55	C12.5 Online ethics	9	Choose two from five elective modules	36
		C12.6 Spreadsheets	10		

When deciding which elective modules to be taught, teachers should consider the needs, interests and abilities of students.

Resources

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
  - digital photograph editing software
  - personal communication software
  - collaborative management software
  - browser software
  - web authoring software
  - game authoring software

Unit 3

An understanding of the Year 11 content is assumed knowledge for students in Year 12. It is recommended that students studying Unit 3 and Unit 4 have completed Unit 1 and Unit 2.

This unit is comprised of four core modules, which are compulsory, and one elective module.

Core modules

C12.1 The computer system
C12.2 Word processing and data management
C12.3 Presentation software
C12.4 Project management

Elective modules

E12.1 Sound editing
E12.2 Video editing
E12.3 Animation
E12.4 Website development
E12.5 Gaming

To ensure breadth and depth of learning, core modules and elective modules cannot be repeated.

A description, learning outcomes and content for each elective module is provided in Appendix 2.

Literacy and numeracy skills developed through the study of Unit 3

This core modules should involve, where appropriate, explicit teaching of the following literacy (L) and numeracy (N) skills in the context of the Applied Information Technology Foundation course.

Literacy

L1 acquiring words leading to an appropriately expanding vocabulary; for example desktop, server, technology, element of design, principles of design and proportion

L2 developing pronunciation and spelling of key words; for example, collaboration, alignment,

L3 using Standard Australian English (SAE) grammar and punctuation to communicate effectively

L4 expressing increasingly complex ideas using a range of simple and complex sentence structures

L5 using a range of language features, including the use of tone, symbols, simple description and factual as opposed to emotive language

L6 organising ideas and information in different forms and for different purposes and audiences; for example, providing information in dot point form, and/or providing information in a storyboard

L7 achieving cohesion of ideas at sentence, paragraph and text level

L8 editing work for accuracy, coherence, clarity and appropriateness; for example, ensuring subject and verb agreement, the correct use of apostrophes, and the appropriate use of vocabulary and verb forms

L9 using a range of speaking and listening skills; for example, using the etiquette of 'turn taking' in conversation and discussion, asking clarifying questions when listening, matching tone of voice to audience and using a pause for emphasis

L10 comprehending and interpreting a range of texts

L11 developing visual literacy skills; for example, creating images, designing graphs, reading tables and interpreting diagrams and symbols.

Numeracy

N1 identifying and organising mathematical information; for example, finding information about the relationship between typing speed and keyboard accuracy

N2 choosing the appropriate mathematics to complete a task; for example, identify a rule required to calculate typing speed and keyboard accuracy

N3 applying mathematical knowledge, tools and strategies to complete the task; for example, use a calculator and the rule to determine the keyboard accuracy and typing speed

N4 representing and communicating mathematical conclusions; for example, represent the typing speed and keyboard accuracy for a period of time in table form

N5 reflecting on mathematical results in order to judge the reasonableness of the conclusions reached; for example, check the calculated typing speed and keyboard accuracy is consistent with a predicted result.

C12.1 The computer system

Module description

This module focuses on developing the knowledge, understanding and skills required to operate a personal computer safely, and applying appropriate practices when using ICT. Students will learn of the types of computer systems, their key components, and strategies to care for a computer system.

Time allocation

The notional time for this module is 10 class contact hours.

Module content

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

Applied Information Technology knowledge

- key words associated with the computer system:
  - desktop
  - server
  - operating system
  - computer system
  - input
  - output
  - processing
  - storage
  - operating system
  - application
- types of computer systems
  - desktop
  - mobile
  - server
- purpose and types of hardware devices of a computer system
  - input
  - processing
  - output
  - storage
  - communication
- purpose and types of computer software
  - operating system
  - application
  - utility
- considerations for the physical care of a computer system
  - ventilation
  - proximity of liquids
  - dust minimisation

- strategies to minimise external threats to a computer system, including:
  - antivirus software
  - firewall
- Workplace Safety and Health (WSH) issues associated with the use of personal information and communications technology, including:
  - safe use of electrical equipment
  - time spent using technology

Applied Information Technology skills

- apply strategies to ensure appropriate physical care for a computer system
- maintain a safe ICT work environment

C12.2 Word processing and data management

Module description

This module focuses on developing the knowledge, understandings and skills to operate a word processing software, and apply a simple data management structure to manage and organise a personal digital workspace. Students learn to perform simple word processing functions, including creating, formatting and printing documents, and managing personal data.

Time allocation

The notional time for this module is 10 class contact hours.

Module content

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

Applied Information Technology knowledge

- key words associated with word processing and data management:
  - data
  - information
  - file format
  - passwords
  - file
  - folders
  - document version
  - naming convention
  - version
  - edit
  - proofread
  - print
- features of word processing software for personal use, including:
  - colour
  - graphics
  - shading
  - borders
  - horizontal and vertical alignment
  - tables
- edit and proofreading functions, including:
  - thesaurus
  - find and replace
- print preview and print options
- data management techniques for a personal digital workspace, including the use of:
  - passwords
  - files and folders
  - file and folder naming conventions
  - document version control

- the concepts of data and information
- the concepts of file formats and software associations
- types of data backup strategies
  - local
  - remote

Applied Information Technology skills

- use word processing software for personal use
- use word processing software for personal use to create, format and print documents
- apply edit and proofreading functions when using word processing software
- apply personal data management techniques to store and access electronic documents

C12.3 Presentation software

Module description

This module focuses on developing the knowledge, understandings and skills to operate presentation software. Students learn to perform simple operations, including creating, formatting and adding effects to presentations. Students create a presentation that will cater for a target audience.

Time allocation

The notional time for this module is 10 class contact hours.

Module content

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

Applied Information Technology knowledge

- key words associated with presentation software:
  - transitions
  - animation
  - hyperlinks
  - elements of design
  - principles of design
- features of presentation software, including:
  - use of transitions and/or effects
  - use of animation
  - embedding hyperlinks
  - design layout
  - print preview and print options
- the elements of design
  - line
  - shape
  - space
  - colours
- the principles of design
  - balance
  - emphasis (contrast and proportion)
  - unity

Applied Information Technology skills

- use presentation software
- plan and create a digital presentation that meets the requirements of a target audience and applies the appropriate elements of design and the principles of design
- deliver a digital presentation using presentation software
- apply edit and proofreading functions when using presentation software

C12.4 Project management

Module description

This module focuses on developing knowledge, understanding and skills to use aspects of a design process when producing digital product and/or digital solution. Students learn time management strategies which can be applied to all aspects of personal ICT use, and which can assist students to more efficient.

Time allocation

The notional time for this module is 7 class contact hours.

Module content

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

Applied Information Technology knowledge

- key words associated with project management:
  - target audience
  - design process
  - digital product
  - digital solution
  - group work protocols
  - time management
- the concept of a target audience
- stages of a design process, such as:
- investigate and plan
  - design and draft
  - produce
  - evaluate
- types of roles and functions when working in teams to create a digital product and/or digital solution, including:
  - project manager
  - researcher
  - media coordinator
  - content writer
- strategies for effective collaboration while working in a team, including:
  - establishing group work protocols
  - clearly identifying roles
  - effective communication
  - establishing clear goals and time lines

Applied Information Technology skills

- apply time management techniques
- apply techniques to represent a draft/storyboard
- apply a design process to create a digital product and/or digital solution

Unit 4

An understanding of the Year 11 content is assumed knowledge for students in Year 12. It is recommended that students studying Unit 3 and Unit 4 have completed Unit 1 and Unit 2.

This unit is comprised of two core modules, which are compulsory, and two elective modules. The unit builds on the content covered in Unit 3.

Core modules

C12.5 Online ethics
C12.6 Spreadsheets

Elective modules

E12.1 Sound editing
E12.2 Video editing
E12.3 Animation
E12.4 Website development
E12.5 Gaming

To ensure breadth and depth of learning, core modules and elective modules cannot be repeated.

A description, learning outcomes and content for each elective module is provided in Appendix 2.

Literacy and numeracy skills developed through the study of Unit 4

The core modules should involve, where appropriate, explicit teaching of the following literacy (L) and numeracy (N) skills in the context of the Applied Information Technology Foundation course.

Literacy

L1 acquiring words leading to an appropriately expanding vocabulary; for example, spreadsheet, protocol, collaboration, target audience and worksheet

L2 developing pronunciation and spelling of key words; for example, digital solution and target audience

L3 using Standard Australian English (SAE) grammar and punctuation to communicate effectively

L4 expressing increasingly complex ideas using a range of simple and complex sentence structures

L5 using a range of language features, including the use of tone, symbols, simple description, and factual as opposed to emotive language

L6 organising ideas and information in different forms and for different purposes and audiences; for example, providing information in dot point form, and/or providing information in an explosion chart

L7 achieving cohesion of ideas at sentence, paragraph and text level

L8 editing work for accuracy, coherence, clarity and appropriateness; for example, ensuring subject-verb agreement, the correct use of apostrophes, and the appropriate use of vocabulary and verb forms

L9 using a range of speaking and listening skills; for example, using the etiquette of 'turn taking' in conversation and discussion, asking clarifying questions when listening, matching tone of voice to audience and using a pause for emphasis

L10 comprehending and interpreting a range of texts

L11 developing visual literacy skills; for example, creating images, designing graphs, reading tables and interpreting diagrams and symbols.

Numeracy

N1 identifying and organising mathematical information; for example, finding information about the relationship between typing speed and keyboard accuracy

N2 choosing the appropriate mathematics to complete a task; for example, identify a rule required to calculate typing speed and keyboard accuracy

N3 applying mathematical knowledge, tools and strategies to complete the task; for example, use a calculator and the rule to determine the keyboard accuracy and typing speed

N4 representing and communicating mathematical conclusions; for example, represent the typing speed and keyboard accuracy for a period of time in table form

N5 reflecting on mathematical results in order to judge the reasonableness of the conclusions reached; for example, check the calculated typing speed and keyboard accuracy is consistent with a predicted result.

C12.5 Online ethics

Time allocation

This module focuses on developing an awareness of online social media and applying ethical behavior while collaborating online. Students learn that appropriate online behaviour for personal use is an essential skill when collaborating online with others. The focus is on developing positive behaviours and investigating the consequences of using and engaging in social media when participating in an online environment.

Time allocation

The notional time for this module is 9 class contact hours.

Module content

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

Applied Information Technology knowledge

- key words associated with online social collaboration:
  - social media
  - ethical behaviour
  - collaboration
  - digital reputation
  - privacy
  - code of conduct
  - connectivity
- the concept of online social media
- types and features of social media tools
- advantages and disadvantages of online collaboration, including:
  - improved connectivity
  - increased engagement
  - disclosing personal information and physical location
- considerations for appropriate online ethical behaviour, including:
  - using online social media
  - sharing of personal information and images
- consequences of inappropriate online ethical behaviour, including impact on:
  - digital reputation
  - relationships
  - employment
- the concept of privacy in an online environment and the use of online digital content
- the reason for an ICT code of conduct in a school and/or workplace

Applied Information Technology skills

- apply appropriate online ethical behaviour when collaborating online

C12.6 Spreadsheets

Module description

This module focuses on developing the knowledge, understanding and skills to operate a spreadsheet program. Students learn to perform simple operations, including creating, formatting, incorporating charts and printing spreadsheets. Students create a spreadsheet that will cater for a target audience.

Time allocation

The notional time for this module is 10 class contact hours.

Module content

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

Applied Information Technology knowledge

- key words associated with spreadsheets:
  - row
  - column
  - cell
  - worksheet
  - formula
  - function
  - chart
- features of spreadsheet software for personal use, including:
  - components (rows, columns, cell reference, menus, formula bar, worksheets)
  - formulas (addition, subtraction, multiplication and division)
  - functions (sum, average, percentage)
  - charts (column, pie, line, bar)
  - print preview and print options
- considerations for format, design and layout of spreadsheets, including:
  - colour
  - readability
  - graphs/charts

Applied Information Technology skills

- apply formulas, functions and graphics to a spreadsheet
- create charts from a spreadsheet
- use spreadsheet software to create a spreadsheet for a target audience
- apply design and layout concepts to the design and layout of spreadsheets
- apply edit and proofreading functions when using spreadsheet software

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 Foundation Year 12 syllabus and the weighting for each assessment type.

Assessment table – Year 12

Type of assessment	Weighting
Project Students 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 respond to stimulus materials, which can include: extracts from newspapers or journal articles; screen captures of online media, diagrams, multimedia and/or graphics; and/or a scenario.	60%
Short answer Short answer questions 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 materials, which can include: extracts from newspapers or journal articles; screen captures of online media, diagrams, multimedia and/or graphics; and/or a scenario.	15%
Extended answer Extended answer questions require students to respond to questions which are connected by a theme, idea or concept. Questions can require students to refer to stimulus materials, which can include: extracts from newspapers or journal articles; and/or screen captures of online media, diagrams, multimedia and/or graphics; and/or a scenario.	10%
Externally set task A written task or item or set of items of 50 minutes duration developed by the School Curriculum and Standards Authority and administered by the school.	15%

Teachers are required to use the assessment table to develop an assessment outline for the pair of units.

The assessment outline must:

- include a set of assessment tasks
- include a general description of each task
- indicate the module 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).

All assessment types must be included in the assessment outline at least twice with the exception of the externally set task which only occurs once.

The set of assessment tasks must provide a representative sampling of the content for Unit 3 and Unit 4.

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

Externally set task

All students enrolled in the Applied Information Technology Foundation Year 12 course will complete the externally set task developed by the Authority. Schools are required to administer this task in Term 2 at a time prescribed by the Authority.

Externally set task design brief – Year 12

Time	50 minutes
Format	Written
	Conducted under invigilated conditions
	Typically between five and ten questions
	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
Content	The Authority informs schools during Term 3 of the previous year of the Unit 3 syllabus content (Core modules only) on which the task will be based

Refer to the WACE Manual for further information.

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. 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 Foundation Year 12 syllabus are provided in Appendix 1. They can also be accessed through the Guide to Grades link on the course page of the Authority website at 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 12

A	**Design process** Independently researches ideas, considering a limited range of options, when creating or modifying digital solutions with a provided context. Independently analyses, designs, produces, communicates and evaluates proposals with a provided context and in an appropriate manner.
	Understanding digital communication technologies Independently applies the digital concepts, formats and terminology required to select and use appropriate software and hardware with a provided context. Independently applies the procedures, techniques and time management skills relevant to the use of digital technologies. Independently produces a quality digital solution that reflects the accepted standards and conventions associated with a provided context.
	Impacts of technology Accurately demonstrates the legal, ethical and social consequences that digital developments have in effectively securing data. Accurately demonstrates the legal, ethical and social implications associated with data distribution and the use of digital communication technologies.
B	**Design process** Researches ideas, considering options when creating or modifying digital solutions for personal use. Analyses, designs, produces, communicates and evaluates proposals in an efficient and appropriate manner.
	Understanding digital communication technologies Applies the digital concepts, formats and terminology required to select and use appropriate software and hardware for personal use. Applies the procedures, techniques and time management skills relevant to the personal use of digital technologies. Produces a digital solution that reflects the accepted standards and conventions associated with the provided context and that is relevant for personal use.
	Impacts of technology Identifies the legal, ethical and social consequences that digital developments have in effectively securing data for personal use. Identifies the legal, ethical and social implications associated with data distribution and the use of digital communication technologies.
C	**Design process** With guidance, researches ideas, considering options when creating or modifying digital solutions for personal use. With guidance, analyses designs, produces, communicates and evaluates proposals in an efficient and appropriate manner.
	Understanding digital communication technologies With guidance, applies the digital concepts, formats and terminology required to select and use appropriate software and hardware for personal use. With guidance, applies the procedures, techniques and time management skills relevant to the personal use of digital technologies. With guidance, produces a quality digital solution that reflects the accepted standards and conventions associated with the provided context and that is relevant for personal use.

D	**Impacts of technology** Identifies the legal, ethical and social consequences that digital developments have in effectively securing data for personal use. Identifies the legal, ethical and social implications associated with data distribution and the use of digital communication technologies.
	Design process Demonstrates a limited ability to research ideas or consider options when creating or modifying digital solutions for personal use. Demonstrates a limited ability to analyse, design, produce, communicate and evaluate proposals in an efficient and appropriate manner.
	Understanding digital communication technologies Demonstrates a limited capacity to apply digital concepts, formats and terminology required to select and use appropriate software and hardware for personal use. Demonstrates a limited capacity to apply the procedures, techniques and time management skills relevant to the personal use of digital technologies. Demonstrates a limited capacity to apply the accepted standards and conventions associated with the provided context and that is relevant for personal use.
	Impacts of technology Inconsistently identifies the legal, ethical and social consequences that digital developments have in effectively securing data for personal use. Inconsistently identifies the legal, ethical and social implications associated with data distribution and the use of digital communication technologies.

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 – Elective modules Year 12

For Unit 3 and Unit 4 the teacher selects one elective module to make up 18 hours of the 55 hours for unit 3 and two elective modules to make up 36 hours of the 55 hours for unit 4

The set of elective modules for unit 3 and 4:

E12.1 Sound editing
E12.2 Video editing
E12.3 Animation
E12.4 Website development
E12.5 Gaming

To ensure breadth and depth of learning, elective modules cannot be repeated.

Time allocation

The notional time for each elective module is 18 class contact hours.

E12.1 Sound editing

Module description

This module focuses on developing the knowledge, understandings and skills to use sound editing software to create simple audio files. Students explore basic concepts in sound editing and the creation of audio files.

Time allocation

The notional time for this module is 18 class contact hours.

Module content

This elective module includes the knowledge, understandings and skills described below.

Applied Information Technology knowledge

- key words associated with sound editing:
  - create
  - capture
  - edit
  - effects
  - audio formats
- features of sound editing applications, including:
  - create
  - capture
  - edit
  - effects
- types of audio formats and their respective characteristics, including:
  - Waveform Audio File Format (WAVE, WAV)
  - Moving Picture Experts Group-1 or 2 (MPEG-1 or MPEG-2) Audio Layer III (MP3)
  - Windows Media Audio (WMA)

Applied Information Technology skills

- use a sound editing application
- use a sound editing application to create a digital product and/or solution
- edit an existing audio file
- combine two or more audio files

E12.2 Video editing

Module description

This module focuses on operating a suitable digital video editing application to edit and create a simple video presentation for a target audience.

Time allocation

The notional time for this module is 18 class contact hours.

Module content

This elective module includes the knowledge, understandings and skills described below.

Applied Information Technology knowledge

- key words associated with video editing:
  - multimedia (videos, images, audio)
  - transitions
  - effects
  - animations
  - scenes
  - layout
  - timing
  - video formats
  - project files
  - export files
  - aspect ratio and resolution
- features of digital video editing software, including:
  - text (title, captions, credits)
  - multimedia (videos, images, audio)
  - split and clip a video
  - transitions, effects and animations
  - scenes
  - layout
  - timing
- the concept of video file formats
- types of video file formats, including:
  - project files
  - exported files
- the concepts of aspect ratio and resolution

Applied Information Technology skills

- use digital video editing software
- apply a design process to plan and create a simple video presentation
- apply elements and principles of design when creating a video presentation to meet the requirements of a target audience
- use project management strategies when planning, creating and presenting a video presentation

E12.3 Animation

Module description

This module focuses on producing a simple digital animation. Students will use an appropriate digital animation authoring and viewing software to create, play back and present their simple digital animation that caters for a target audience.

Time allocation

The notional time for this module is 18 class contact hours.

Module content

This elective module includes the knowledge, understandings and skills described below.

Applied Information Technology knowledge

- key words associated with animation:
  - animation
  - cel
  - frame
  - key frames
  - timeline
  - timing
  - playhead
  - tweening
  - guide layer
  - media elements
  - simple actions
  - animation effects
- the concept of animation
- types of digital animation, including:
  - stop motion animation
  - cel animation
  - computer generated animation
- the purpose of digital animation authoring software
- features of digital animation authoring software, including:
  - customise settings
  - frame/s
  - frames per second (FPS)
  - key frames
  - timeline
  - timing
  - playhead
  - tweening
  - guide layer
  - media elements
  - simple actions
  - animation effects
- the purpose of digital animation viewing software

Applied Information Technology skills

- use digital animation authoring software
- use digital animation viewing software
- apply a design process to plan a simple digital animation
- use digital animation authoring software to create a simple digital animation
- apply the elements of design and principles of design when creating an animation to meet the requirements of a target audience
- use project management strategies when planning, creating and presenting a simple digital animation

E12.4 Website development

Module description

This module focuses on developing a simple website that caters for a target audience. Students will develop and apply skills to organise and store data for a simple website.

Time allocation

The notional time for this module is 18 class contact hours.

Module content

This elective module includes the knowledge, understandings and skills described below.

Applied Information Technology knowledge

- key words associated with website development:
  - navigation
  - media elements
  - hyperlinks
  - authoring
- the concept of website design
- types of web authoring software, including:
  - basic text editors
  - source code editors
  - what you see is what you get applications (WYSIWYG)
  - word processors
- features of web authoring software, including:
  - customise settings
  - media elements
  - hyperlinks
  - navigation structure
  - test and publish
- tools and techniques used to represent the development and design of a website, including:
  - website layout
  - navigation of the website
  - use of media elements
  - use of fonts
  - use of a colour scheme
  - use of hyperlinks
  - location of content

Applied Information Technology skills

- use digital web authoring software to create, test and publish a website
  - apply a design process
  - apply elements of design and principles of design
  - use project management strategies
- apply edit and proofreading functions when using website authoring software

E12.5 Gaming

Module description

This module focuses on the use of game authoring software to create a simple computer game. Students will learn about the key concepts of computer game creation and the different aspects of computer games. Students also develop the value of identifying a target audience and catering to them when creating a computer game.

Time allocation

The notional time for this module is 18 class contact hours.

Module content

This elective module includes the knowledge, understandings and skills described below.

Applied Information Technology knowledge

- key words associated with game development:
  - actions
  - sprites
  - objects
  - sounds
  - backgrounds
  - rooms
  - flow/levels
- the concept of game design
- features of game authoring software, including:
  - actions
  - sprites
  - objects
  - sounds
  - backgrounds
  - rooms
- design aspects used to represent the design of a computer game, including:
  - environment
  - game objects
  - sounds
  - controls
  - flow/levels

Applied Information Technology skills

- use game development software to create a simple computer game
- apply elements of design and principles of design to meet the requirements of a target audience
- test the functionality of a created simple computer game
- export/compile a created simple computer game
- use project management strategies to plan, create, test and export/compile a simple computer game