Information and Digital Technology

**Mandatory Focus Area: Working in the industry**

Welcome. This module will assist you to review and revise the content of the mandatory focus area ‘Working in the industry’. Each focus area prescribes the scope of learning for the HSC and is drawn from associated units of competency.

You will have studied this competency, which addresses the scope of learning:

[ICTICT202 Work and communicate effectively in an ICT environment](https://training.gov.au/Training/Details/ICTICT202)

This module is broken up into:

* Important notes
* Key terms and concepts
* Activities
* Putting the theory into practice
* HSC Focus Areas

How to use the resource

Work through the notes and the suggested activities. You can mix up the order. Great revision techniques include working through how a problem is solved, explaining the concept, testing yourself and retrieving information from your memory. Spread your revision over a number of sessions rather than sitting at one subject for lengthy periods.

Discuss your responses with your teacher, fellow students or an interested family member.

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# Important Notes

You should use the information here as a prompt and guide when revising your **study** **notes** or **text-book information** or **other resources** provided by your teacher.

The unit [ICTICT202 Work and communicate effectively in an ICT environment](https://training.gov.au/Training/Details/ICTICT202)
describes the skills and knowledge required to work and communicate effectively within organisational policies and governance arrangements, using information and communications technology (ICT) systems, equipment and software.

Students must be able to:

* Prepare to communicate and work effectively within an ICT organisation and
* Use positive and varied communication strategies with ICT clients.

The outcomes of the HSC mandatory focus area ‘Working in the industry’ require that the student:

* examines the nature of the information and communications technology (ICT) industry
* demonstrates an understanding of how to deliver quality support for users of ICT services
* explains how to communicate and work effectively with colleagues and clients.

The Scope of learning for the HSC can be found towards the end of this module in ‘HSC focus area’.

# Key terms and concepts

You can use the following information to revise the key terms and concepts from this unit of competency. Perhaps you could:

* Copy the table into your own file, remove all the key terms, then fill in the blanks (without peeking at the original file) with your own answers.
* Copy the table into your own file and remove the definitions. Write a definition in your own words – it doesn’t have to word perfect but should show you understand the concept.
* You could add an example of this term or concept which is relevant to the information technology environment. If the key term was ‘diversity and inclusion’ your IDT example might be ‘the organisation supports flexible working arrangements including part time and job sharing arrangements for those who require it.

|  |  |
| --- | --- |
| Key term or concept | and Definition |
| Absenteeism | In Australia, absenteeism is generally considered to be non-attendance at work by employees when they are rostered to work. Absenteeism can include genuine absences (such as illness or caring for an ill child) and questionable absences (for example where an employee is not actually ill or caring for a family member). |
| Agreement | Enterprise agreements and other registered agreements set out minimum employment conditions |
| Anti-discrimination | Opposing or preventing discrimination |
| Audit | An on-site verification activity, such as inspection or examination, of a process or quality system, to ensure compliance to requirements. |
| Award  | Awards set the minimum standards that an employer in any industry is allowed to pay for your kind of work. It is a legal ruling which grants all employees in one industry or employer the same conditions of employment and wages. |
| Breach | Failure to follow requirements. |
| Bullying | [Workplace bullying](https://www.safeworkaustralia.gov.au/glossary#Workplace_bullying) is repeated and unreasonable behaviour directed towards a worker or group of workers that creates a risk to health and safety. Examples include abusive or offensive language or comments, aggressive and intimidating behaviour, belittling, or humiliating comments, practical jokes or initiation and/or unjustified criticism or complaints. |
| Clear and concise language | Giving a lot of information clearly and in a few words; brief but comprehensive. |
| Code of conduct | Provides advice on the standards of behaviour that are required of all employees. Industry codes of conduct are intended to protect dealings between a business and its customers. |
| Compensation | The cost of workplace injuries is enormous to our society through both compensation monies and lost production time. Compensation monies may be paid to make up for someone's loss, damage, or injury, giving the injured party an appropriate benefit. |
| Consultation | Consultation is a statutory requirement of most WHS legislations around the world. The aim is to gather information from all stakeholders in the organisation and allow effective participation in the establishment of meaningful health and safety policies and procedures. |
| Contract | An employment contract is an agreement between an employer and employee that sets out terms and conditions of employment. A contract can be in writing or verbal. |
| Current industry practice | Industry currency and professional obsolescence are terms that relate to the capacity of an individual to continue to perform their job. |
| Deadline | The latest time or date by which something should be completed |
| Diversity and inclusion | Workforce diversity and inclusion mean valuing and respecting all employees |
| Duty Statement | A personnel management tool which describes the overall intent or purpose of a position, the tasks being performed by that position, the purpose for those tasks and the manner in which they are performed. |
| Emergency | An emergency is an incident or a situation which endangers, or may endanger, the health, safety and welfare of persons in the workplace, and which requires urgent action to control. |
| Emergency Plan  | An emergency plan is a written set of instructions that outlines what workers and others at the workplace should do in an emergency. |
| Emerging technologies | New technologies that are currently developing or will be developed over the next five to ten years, and which will substantially alter the business and social environment. |
| Employment conditions | A condition of employment refers to something that both the employee and employer agree to at the beginning of a worker’s employment eg duties, hours of work, salary etc. |
| Environmental sustainability | The ability to maintain things or qualities that are valued in the physical environment; the study of how natural systems function, remain diverse and produce everything it needs for the ecology to remain in balance |
| Equal Employment Opportunity (EEO) | The principle that everyone can have equal access to employment opportunities based on merit, without fear of discrimination or harassment. |
| Ergonomics | the process of designing or arranging workplaces, products and systems so that they fit the people who use them. |
| Evacuation | All organisations and businesses must have an Emergency Evacuation Plan displayed to guide people out of the building to an assembly area, as quickly as possible. Procedures for fire and other emergencies should always include provisions for the evacuation of people including those with a disability. |
| External client | A person who is not directly connected to your organisation other than by purchasing your product or service |
| Feedback | Constructive feedback is a robust tool for creating healthy environment, boosting productivity and engagement, and achieving better results. |
| Harassment | Harassment can be against the law when a person is treated less favourably on the basis of certain personal characteristics, such as race, sex, pregnancy, marital status, breastfeeding, age, disability, sexual orientation, gender identity or intersex status. Harassment can include behaviours such as: telling insulting jokes about particular racial groups; sending explicit or sexually suggestive emails or text messages; displaying racially offensive or pornographic posters or screen savers; making derogatory comments or taunts about someone’s race; asking intrusive questions about someone’s personal life, including his or her sex life. |
| Health | Includes both physical and psychological health. |
| Health and Safety Representative | A worker who has been elected by their work group under the WHS Act to represent them on health and safety matters. |
| Help desk | A help desk, in the context of IT, is a department, inside an organisation, responsible for answering the technical questions of its users. |
| ICT environment | The technology used to handle telecommunications, broadcast media, intelligent building management systems, audio-visual processing and transmission systems, network-based control and monitoring functions etc  |
| Internal client | An internal customer or internal service provider can be anyone in the organisation who depends on us to provide a product or service. |
| Legislation | The [NSW Work Health and Safety Act 2011](https://www.legislation.nsw.gov.au/#/view/act/2011/10) (WHS Act) and the [NSW Work Health and Safety Regulation 2017](https://www.legislation.nsw.gov.au/#/view/regulation/2017/404) (WHS Regulation) define the obligations both employers and workers have to health and safety in the workplace. |
| Mental health | A person’s mental health affects how they feel, think, behave and relate to others. |
| Mission statement | A formal summary of the aims and values of a company, organisation, or individual. |
| Occupational Overuse Syndrome (OOS) | Sometimes referred to as repetitive strain injury (RSI), OOS is a malady affecting bones, muscles, and ligaments, usually arising from repetitive stressing of those body parts, such as repetitive movement. It can be exacerbated by such mental pressures as dislike of the task, or pressure to get the job finished. |
| Organisational chart | A diagram that visually conveys a company's internal structure by detailing the roles, responsibilities, and relationships between individuals within an entity. |
| Outsourcing | Obtain (goods or a service) by contract from an outside supplier. |
| Pain and suffering | ‘Pain and suffering’ is the legal term for the physical and emotional [stress](https://en.wikipedia.org/wiki/Stress_%28medicine%29) caused from an injury. |
| Participation | Participation is the act of sharing in the activities of a group; encouraging [involvement](https://www.thefreedictionary.com/involvement) [and](https://www.thefreedictionary.com/involution) [engagement](https://www.thefreedictionary.com/engagement) and action. The Work Health and Safety Act aims to provide for fair and effective workplace representation, consultation, co-operation and issue resolution in relation to work health and safety.  |
| PCBU | A PCBU is an umbrella concept which intends to capture all types of working arrangements. A ‘person conducting a business or undertaking’ (PCBU) might be a company, a partnership conducting a business, an unincorporated body or association, a sole trader or self-employed person.  |
| Policies and procedures | A set of rules, guidelines and/or methods designed and communicated to structure certain processes within an organisation. |
| Productivity | A link has been identified between WHS and productivity. Poor work, health and safety has been linked to lower levels of workplace productivity and performance.  |
| Reporting | WHS reporting, like any other business intelligence, needs to provide management with relevant, robust and timely information that can inform the decisions that influence ongoing business performance. Reporting of incidents and concerns contributes to a safe workplace. |
| Representation | The Work Health and Safety Act (the WHS Act) aims to provide for fair and effective workplace representation, consultation, co-operation and issue resolution in relation to work health and safety.Worker representation provides a means for facilitating consultation, involving workers and giving them a voice in health and safety matters. |
| Risk | The likelihood of a hazard becoming a danger. The possibility that harm (death, injury, illness) might occur when exposed to a hazard. |
| Risk management | The holistic approach to looking after health, safety and welfare of all people; a systematic process for addressing hazards in the workplace. |
| Significant Injury | Sometimes called ‘serious injury’ or ‘notifiable injury’, generally a significant injury is any injury likely to lead to a person being unable to perform their pre-injury functions for seven days or more. |
| Strategic Plan | Strategic planning is an organisation's process of defining its strategy, or direction, and making decisions on allocating its resources to pursue this strategy. |
| Teamwork  | Teamwork involves a set of interdependent activities performed by individuals who collaborate toward a common goal. Teamwork involves shared responsibility and collaboration toward a common outcome. |
| Visitor | Basically, under the conditions of the WHS Act, a visitor is considered to be anyone who is not doing ‘work’ on behalf of the firm, sometimes described as ‘others’. This will include door-to-door salespeople, relatives, and friends of employees, and so on. |
| WHS Policies and Procedures | WHS policies and procedures outline the requirements for complying with both external and internal WHS compliance requirements. |
| Work Health and Safety Management System  | A system that includes all the programmes, policies, procedures, organisational structures, planning activities, responsibilities, processes, practices and resources for developing, implementing, achieving, reviewing and maintaining the Work Health and Safety of all persons in, or affected by, the workplace. |
| Worker’s responsibilities | All workers are responsible for the WHS impact of their own actions. They also have a duty to make sure their work is carried out in line with WHS procedures and any applicable legislation. More specifically, workers must take reasonable care for their own health and safety. |
| Work schedules | A plan for performing work or achieving an objective by specifying the order and allotted time for each part |

# Activities

1. [Open Universities Australia](https://www.open.edu.au/your-career/information-communication-technology) describe the IT industry as ‘a fast growing field, with new specialisations emerging rapidly …’
	1. Identify the key points in the article and consider the impact of emerging technology and the convergence of technologies on the ICT industry
	2. Scroll down to ‘IT careers’. Investigate three careers you might be interested in and identify the knowledge, skills and training (qualifications, vendor certifications and vendor-neutral certifications) required for these different job roles.
	3. Maintaining industry currency is an important component of working in IDT. Scroll down to ‘skills and personality’ and identify how you would build and maintain your skills. What would you do to maintain those attributes which do not come easily to you?
2. ICT is an ever changing field. Investigate and write up several (at least three) examples of how ICT services contribute to the success of an organisation or business. Include a variety of business types and technologies.
3. What is the difference between [discrimination, harassment and bullying](https://humanrights.gov.au/our-work/employers/workplace-discrimination-harassment-and-bullying)? Construct a table to remind yourself of definitions, key points and examples. Add as many rows as you need.

Discrimination, harassment and bullying

|  |  |  |
| --- | --- | --- |
| Discrimination | Harassment | Bullying |
|  |  |  |

1. This clip ‘Myths about working conditions ‘ from [FairWork](https://www.fairwork.gov.au/find-help-for/young-workers-and-students/myths-and-tips-for-young-workers) is fun to watch and might help you remember some facts. Fairwork.gov.au provides [15 minute training courses](https://www.fairwork.gov.au/how-we-will-help/online-training/workplace-basics) on workplace basics: complete any that you need to revise. Using F5 reloads the page.
2. Fill in the blanks, using the words provided.

|  |  |  |  |
| --- | --- | --- | --- |
| Use these words |  |  |  |
| conflicts | official | alcohol | ethical |
| confidential | document | treatment | work |
| workplace | disciplinary | email | dress |

According to Workplacelaw.com.au [a Code of Conduct](https://www.workplacelaw.com.au/what-is-a-workplace-code-of-conduct/) is essentially
a ( ) that establishes behavioural and ( ) standards for employees in a particular ( ) and confirms the business’ ( ) position on a range of issues.

For example, a Code of Conduct might have policies on:

* Employee (including management) ( ) of other employees and the business’ clients
* Business ethics and ( ) of interest
* Drug and ( ) use
* Internet and ( ) use
* ( ) information
* Quality of ( )
* ( ) codes; and
* Health and safety.

A Code of Conduct should also outline that breaches of the Code may result in
( ) action.

1. Summarise characteristics of a good team and a good team member.
The [information here](http://www.innovativeteambuilding.co.uk/characteristics-of-a-good-team-and-team-member/) is useful.

  **Image licenced under**[**CC0**](https://pixabay.com/service/terms/#usage)**. The original version can be found on** [**Pixabay**](https://www.pexels.com/photo/close-up-photography-of-yellow-green-red-and-brown-plastic-cones-on-white-lined-surface-163064/)

1. Read each scenario and decide the correct answer:

Scenario 1
Alan is confined to a wheelchair. He works as a web site content developer and his manager often makes disparaging remarks about the quality of his work. The manager has also had to speak with Alan about his frequent tardiness and violations of the company’s dress code. Would this be considered harassment?

* 1. Yes, because the manager is discriminating because of Alan’s impairment
	2. No, because the manager speaks about work performance, not disability
	3. No, because Alan has the right to wear whatever he likes if he has a disability
	4. Yes, because Alan should be given some extra leeway due to his disability

Scenario 2
Augustine is a 45-year-old refugee from an Eastern European country. Her supervisor calls everyone by a ‘nickname’ because he thinks it makes everyone feel welcome. The supervisor uses the nickname ‘Babushka’ for Augustine because of the bright scarves she wears as part of her traditional dress.

Is this an example of harassment?

1. Yes, because the harassment is aimed at Augustine’s country of origin
2. No, because the supervisor calls everyone by a nickname
3. No, because the derogatory comments are not meant maliciously
4. Yes, because the supervisor is discriminating against Augustine because of her age and her status as a refugee

Scenario 3
Maria emigrated, as a child, from Peru with her family. She works on the help desk in your organisation. She tells you that some co-workers have been using racially derogatory language toward her, as well as making jokes at her expense. She’s ignored them as much as possible, but once burst into tears in front of them. The co-workers didn’t apologise and continue to mock her, her accent and her nationality.
Is this an example of harassment?

1. No, because the comments are not severe even though they’re directed at Maria on the basis of race and national origin
2. No, because her co-workers’ behaviour doesn’t compromise Maria’s work
3. Yes, because the comments and jokes are targeted at Maria’s race and national origin, and the incidents keep occurring even though it’s clear they upset Maria
4. Yes, because her co-workers continue to harass her after she burst into tears
5. Fair Work.gov.au provides advice about a range of [employment entitlements](https://www.fairwork.gov.au/employee-entitlements).
At rows to your table, making notes as you go. The first one is started for you.

|  |  |
| --- | --- |
| Employment entitlements |  |
| Types of employees -full-time, part-time, casual, fixed term, shift work, daily hire, probation, outworkers |  |
|  |  |

1. The [National Employment Standards (NES)](https://www.fairwork.gov.au/employee-entitlements/national-employment-standards) detail the 10 minimum employment entitlements that have to be provided to all employees in Australia.
	1. Who is covered by the NHS?
	2. Make up your own table listing the [10 minimum entitlements](https://www.fairwork.gov.au/how-we-will-help/templates-and-guides/fact-sheets/minimum-workplace-entitlements/introduction-to-the-national-employment-standards) and give a quick explanation of each

National Employment Scheme

|  |  |
| --- | --- |
| NES | Explanation |
| Maximum weekly hours of work | For full-time workers, 38 hours per week plus reasonable additional hours |

* 1. What do the NES say about the minimum entitlements to personal/carer’s leave?
	2. What would be considered as reasonable grounds for requesting or refusing to work on a public holiday?
	3. Define the word ‘redundancy’. What does the NES say about redundancy pay?
	4. Define full-time, part-time, casual and contract work.
1. Click on the link and scroll down the page to watch the video ‘[How minimum wages work](https://www.fairwork.gov.au/pay/minimum-wages/junior-pay-rates)’. Have a look at the topic ‘[Junior pay rates’](https://www.fairwork.gov.au/pay/minimum-wages/junior-pay-rates#1653-1657) and identify what to do if you think there is an error in your pay.
2. Read about [superannuation](http://worksite.actu.org.au/what-is-superannuation/) then take the quiz ‘Superannuation’ at the bottom of the page.
3. [Research](https://www.employeemanual.com.au/awards-vs-agreements/): Are awards legally binding? Why or why not? What about industrial or enterprise agreements? What role do unions play in award agreements? What award/s would apply in the IDT industry.
4. [Equal pay for equal work](http://worksite.actu.org.au/equal-pay-equal-value/). Click and read this [article](http://worksite.actu.org.au/equal-pay-equal-value/) then complete the [quiz](http://worksite.actu.org.au/equal-pay-quiz/) ‘Equal Pay quiz’ at the bottom of the page.
5. Correctly match the two halves of each sentence. Draw a line between each or rewrite (or copy and paste) the corrected sentences, in full, below the table.

|  |  |
| --- | --- |
| Match the correct halves of the sentences |  |
| Your employer can require you to work reasonable additional hours  | in a manner that is ‘harsh, unjust or unreasonable’. |
| Your employer must consider a request for flexible working arrangements  | is secured by new federal laws |
| Employees are entitled to 12 months unpaid parental (or adoption) leave  | to work a public holiday. |
| You are entitled to Notice of termination  | and can only refuse on reasonable business grounds. |
| Existing long service leave  | and must leave employees better off overall than they would be if the award applied.  |
| You have the right to reasonably refuse  | but you have the right to refuse unreasonable hours |
| An enterprise agreement must be genuinely agreed to by the majority of employees at the workplace,  | and redundancy pay  |
| Your employer should not dismiss you  | for each parent after the birth (or adoption) of a child |

1. Consider ways the information and digital technology industry could reduce its impact on the [environment](https://www.business.gov.au/Planning/Industry-information/Retail-and-wholesale-trade-industry). Provide examples of measures you have seen implemented in the sector. Add as many rows as you need.

Reducing environmental impact

|  |  |
| --- | --- |
| Issue | Reducing the impact on the environment |
|  |  |

1. List TWO examples of each of the following methods of communication used in the IDT environment.

Methods of communication in the IDT industry

|  |  |  |  |
| --- | --- | --- | --- |
|  | Verbal communication | Non-verbal communication | Written communication |
| Example 1 |  |  |  |
| Example 2 |  |  |  |

1. Provide a workplace scenario which shows how the following can be used well or poorly.

Communication in the IDT industry

|  |  |  |  |
| --- | --- | --- | --- |
|  | Verbal communication | Non-verbal communication | Written communication |
| Used well in the workplace |  |  |  |
| Used poorly in the workplace |  |  |  |

1. Summarise The [importance of Feedback in the Workplace](https://hrcentral.com.au/blog/feedback/)
2. Construct a chart with at least 20 ideas describing how to improve your time management in the workplace.
3. Draw up your own diagram to summarise effective communication in an IDT working environment. Provide examples.



# Putting the theory into practice

The following questions are from [past years’ NSW HSC examination papers](https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/resources/hsc-exam-papers) for this subject. HSC exams are intended to be rigorous and to challenge students of all abilities. To better understand a question, you should look for key words and identify the aspect of the course to which these relate. You are then in a position to formulate your answer from relevant knowledge, understanding and skills.

All questions in ‘Putting the theory into practice’ are acknowledged © [2019 NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales.](https://educationstandards.nsw.edu.au/wps/portal/nesa/mini-footer/copyright)

## Multiple Choice

1. Which of the following roles would be most difficult for an IT department to outsource?
	1. Analyst
	2. IT Manager
	3. Web Designer
	4. IT Helpdesk Operator
2. A manager repeatedly sends the following email to an employee:

*You are working too slowly. You never meet deadlines! There are plenty of people who would do your job better than you.*

What form of harassment is this?

* 1. Physical
	2. Psychological
	3. Sexual
	4. Verbal
1. Which of the following contains minimum wages and conditions across the ICT industry?
	1. Agreement
	2. Award
	3. Certification
	4. Contract
2. What is a purpose of equal employment opportunity (EEO) in the workplace?
	1. To ensure that all job interviews are recorded correctly
	2. To provide procedures for reducing bullying and intimidation
	3. To prohibit changes to conditions without consulting employees
	4. To ensure that people from minority groups are not disadvantaged
3. A company wants to assist its staff in maintaining industry currency. Which of the following is the most effective strategy for the company to use?
	1. Updating staff computers every three years
	2. Maintaining the latest versions of software on computers
	3. Regularly updating antivirus software on all workstations
	4. Ensuring that staff attend training courses for new software
4. In which of the following is an employee most likely to be accessing an intranet?
	1. Purchasing stationery online
	2. Using a mobile app to order pizza delivery
	3. Keeping in contact with clients via social media
	4. Viewing company documents on a work computer
5. An ICT consultant is employed by a business to work on a project for 12 months. What type of employment is this?
	1. Casual
	2. Contract
	3. Permanent
	4. Seasonal
6. What is a benefit for an IT professional of achieving vendor certification?
	1. It is attractive to a broader range of employers.
	2. It will not be outdated when software versions change.
	3. It demonstrates detailed knowledge of a particular vendor’s product.
	4. It shows flexibility and diversity in handling products from different vendors.
7. What type of document would be most likely to contain the following statement?

‘An employee must not share the personal information of another employee with co‑workers or the public.’

* 1. Code of conduct
	2. Employee role statement
	3. Work health and safety policy
	4. Equal employment opportunity policy
1. Read the following conversation.

CLIENT: Are you coming over to fix my printer?

TECHNICIAN: I’m busy at the moment. I’ll be there around three.

CLIENT: Three is okay.

TECHNICIAN: Cool, see you at three.

What type of feedback does the client give to the technician?

* 1. Direct
	2. Formal
	3. Indirect
	4. Negative
1. An employee was not promoted because she is pregnant.

Which of the following has been violated?

* 1. Code of conduct
	2. Equal employment legislation
	3. Anti-discrimination legislation
	4. Workplace anti-bullying policy
1. Sam is an ICT employee who is entitled to paid sick leave, paid annual leave and is required to work 20 hours per week.

Which type of employee is Sam most likely to be?

* 1. Casual
	2. Contract
	3. Full-time permanent
	4. Part-time permanent

## Questions from Section II

These questions should be answered in the suggested number of lines (handwritten) as it gives a guide to the length of your response. Plan out your answer and key points before you commence writing

Question 1

Explain the benefits of effective teamwork. (4 marks)

Question 2

Outline the difference between direct and indirect discrimination in a workplace. Provide an example of each. (6 marks)

Question 3

A company is planning to start a new initiative to reduce its use of energy and resources.

* 1. Identify TWO workplace practices that can be used to support this initiative.
	(2 marks)

* 1. Outline TWO types of communication that could be used in the workplace to promote this initiative. (3 marks)

Question 4

Explain the skills that an employee needs to be an effective team member. (4 marks)

## Questions from Section III

In the HSC -

* there will be one structured extended response question **based on the stream focus area** and **can also draw from the mandatory focus areas** (15 marks).
* the question will have two or three parts, with one part worth at least 8 marks.
* the question will have an expected length of response of around four pages of an examination writing booklet (approximately 600 words) in total.

## Questions from Section IV

In the HSC -

* there will be one extended response question based on the **mandatory focus areas**
* the expected length of response is around four pages of an examination writing booklet (approximately 600 words).
* your answer will be assessed on how well you:
* demonstrate knowledge and understanding relevant to the question
* communicate ideas and information using relevant workplace examples and industry terminology
* present a logical and cohesive response

You should allow about 25 minutes for a question in Section IV in the exam.

You will note that the questions from Section IV usually require you to bring together knowledge from several areas of study/competencies to do justice to the answer.

In each of the following, map out your answer using post-it notes or a sheet of paper.

Pay particular attention to incorporating a variety of aspects of your IDT curriculum into the plan. Consider why we have included this question within this module and what other areas of study you would need to draw upon.

Question 1 (15 marks)

An online university, with staff and students physically located in different parts of Australia, requires communication resources for its staff and students to interact at any time. Recommend and justify electronic communication methods and tools that could be used by the staff and students to communicate, collaborate within teams, access resources and submit work.

Question 2 (15 marks)

A large manufacturer of ICT components employs people from diverse cultural backgrounds well as people with disabilities. The company operates 24 hours a day, six days a week, requiring staff to undertake shift work.

A recent evacuation drill highlighted a number of serious concerns at this workplace. It noted that a large number of staff members were unaware of their responsibilities. People including managers and visitors, were unaccounted for. People with disabilities had difficulty evacuating.

Recommend and justify ways in which this organisation can raise awareness among its entire staff on the importance of consultation and participation in work health and safety processes.

Question 3 (15 marks)

A business has assigned a crucial nine-month ICT project to a small team of three employees. Due to the tight timeline and limited resources, it is concerned that the project could be affected by illness or injuries of its team members.

Recommend strategies that can be implemented by the business to minimise human, economic and organisational costs to the business if a team member is unable to work due to prolonged illness or injury.

Question 4 (15 marks)

A web design company has 20 identical networked desktop computers. It wishes to install a new version of the operating system on these computers. The business operates between 8.30 am and 5.00 pm Monday to Friday.

You have been asked by the management to recommend an installation plan that would allow the installation to be completed with minimal disruption to the company.

In your recommendation, compare the different installation options available and outline an installation plan based on the most suitable option.

# HSC Focus Areas

For the purposes of the HSC, all students undertaking the 240 HSC indicative hours course in Information and Digital Technology must address **all of the mandatory focus area** **content** plus **one** **stream** **focus area.**

IDT **Mandatory** focus areas

* **Working in the industry**
* Operating system software
* Diagnostic testing
* Safety

IDT **Stream** focus areas (know which **one** of the stream focus areas you are studying)

* Web and software applications
* Networking and hardware
* Digital animation

The scope of learning describes the breadth and depth of the HSC Content and has been grouped together into key ideas/areas. The scope of learning describes the minimum content that must be addressed, and the underpinning knowledge drawn from the associated unit(s) of competency.

The scope of learning for the HSC must be read and delivered in conjunction with the following associated unit of competency:

[ICTICT202 Work and communicate effectively in an ICT environment](https://training.gov.au/Training/Details/ICTICT202)

How to use the scope of learning for ‘Working in the industry’ (which follows over).

* draw up your own mind map showing the connection between the various concepts listed; examples appear on the last page of this module
* use the key terms and concepts to add to your mind map
* add examples or case study prompts to show how the concept is applied in the information technology working environment

The following information is taken directly from page 25 ff of [Information and Digital Technology Curriculum Framework Stage 6 Syllabus (NSW Education Standards Authority) for implementation from 2020.](https://educationstandards.nsw.edu.au/wps/wcm/connect/852daa22-4180-4a58-b57f-c2a09540e5e7/vet-information-digital-technology-11-12-syllabus-based-on-V.5.0-jan-2020.pdf?MOD=AJPERES&CVID=) © [2019 NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales.](https://educationstandards.nsw.edu.au/wps/portal/nesa/mini-footer/copyright)

|  |
| --- |
| nature of the industry |
| * general features of the information and communications technology (ICT) industry:
* in ICT-specific workplaces
* across diverse industries that use ICT
 |
| * service areas within the ICT industry:
* primary role/function(s)
* product(s) and/or service(s) provided
* examples of organisations and/or businesses
 |
| * interrelationships between service areas and the effect on an individual’s work and client outcomes
 |
| * working knowledge of current industry standard hardware and software common to workplaces utilizing ICT:
* general features and capabilities
* product directions
* related technical terminology, icons and symbols
 |
| * impact of emerging technology and the convergence of technologies on the ICT industry
 |
| * career pathways across the ICT industry and the knowledge, skills and training (qualifications, vendor certifications and vendor-neutral certifications) required for different job roles
 |
| * industry currency:
* importance of maintaining currency
* individual and workplace strategies to maintain currency, including training and professional development
 |
| * concept of how ICT services contribute to the success of an organisation/business
 |
| * difference between individual and workplace goals and plans
 |
| employment |
| * types of employment in the ICT industry:
* full-time
* part-time
* casual
* contract
 |
| * the difference between an award, agreement and contract and how they apply to workers in the ICT industry
 |
| * investigate the employment terms and conditions for a specific ICT job role
 |
| employment cont/d |
| * employer and employee rights and responsibilities in relation to employment
 |
| * purpose and value of a code for the client, the worker and the industry
 |
| * equal employment opportunity (EEO):
* principles
* intent of EEO legislation
* reciprocal rights and responsibilities of employers and employees
* workplace policy and procedures relating to EEO
 |
| anti-discrimination |
| * bullying and harassment in the workplace:
* indirect
* direct
* types:
* verbal
* physical
* psychological
* sexual
 |
| * principles of anti-discrimination
 |
| * intent of anti-discrimination legislation
 |
| * rights and responsibilities of employers and employees in relation to anti-discrimination
 |
| * strategies to eliminate bias and harassment in the workplace
 |
| * consequences, including legal ramifications, of inappropriate workplace behaviour
 |
| ICT worker |
| * scope of ICT work tasks and services provided within a workplace, including knowledge of the operational environment:
* customer base
* company products and services
 |
| * personal attributes, work ethic and employability skills valued by the ICT industry
 |
| * interpersonal skills beneficial to an individual working in an ICT workplace
 |
| * personal presentation standards for a specific ICT workplace and job role
 |
| * duties and responsibilities for a specific ICT job role within a workplace
 |
| ICT worker cont/d |
| * access and use a range of information courses relating to ICT work tasks and services, including:
* job description
* role/duty statement
* organisational chart
* instruction and/or product manual
* internet and/or intranet
* manager/supervisor/team leader
* colleagues
 |
| work practices |
| * how work practices are implemented and maintained in accordance with:
* industry standards
* workplace policy and procedures
* workplace documentation
* legal and ethical requirements
 |
| * effect of poor work practices on colleagues, clients and the workplace
 |
| * time and task management:
* principles
* techniques
* prioritising
 |
| * environmentally sustainable work practices:
* energy and resource conservation
* e-waste disposal
* recycling
 |
| * feedback:
* value of feedback to an individual worker and the workplace
* types of feedback:
* formal and informal
* direct and indirect
* strategies for obtaining and interpreting feedback from supervisor(s), colleagues and clients
* dealing with positive and negative feedback
* responsibility of a worker to use personal reflection, seek and provide feedback and improve
 |
| * customer service:
* characteristics
* strategies for establishing quality service
 |
| working with others |
| * importance of teamwork in an ICT work environment:
* definition of ‘team’ and ‘teamwork’
 |
| * characteristics of effective teamwork
* benefits of teamwork
* examples of ICT teams or work groups in a workplace and their area(s) of responsibility
 |
| * concepts of cultural diversity, cultural awareness and inclusivity
 |
| * proactive strategies for promoting workplace diversity and accommodating individual differences
 |
| * determine key players in ICT in a workplace, their role and importance
 |
| * relationship between individual roles and the role of the team or work group
 |
| communication |
| * communication in the workplace with colleagues and clients:
* communication process/cycle
* workplace examples of types of communication:
* verbal
* non-verbal
* written
* effective verbal, non-verbal and written communication
* effective questioning and listening techniques
* barriers to effective communication and strategies to overcome them
* a range of communication methods/equipment used in an ICT workplace:
* general features
* benefits
* selection
* use
* workplace protocols and procedures in relation to lines of communication and referral of client requests.
 |

Creating a mind map is a great way to organise your knowledge and understanding of the content of a topic.

You could use software such as a hierarchy chart, download ‘MindNode’ or similar or use a large sheet of paper (or several A4 sheets taped together)!

It is important to try to include all the detail you can, so add definitions, case studies or examples to prompt your memory. Include the information downloaded from the [unit of competency](#competency) and also from the [Scope of Learning](#Scope) and [Key Terms and Concepts](#terms).

Mind map being developed

Example of mind map