This sub-discipline is concerned with the competencies involved with the design of processes and information technology systems so that they are adopted and used correctly by humans. In order for information technology systems to be successful and allow the maximisation of their potential benefits, user interaction and the interfaces enabling it must be attractive to all users of the systems.

**Level 2 competencies**

**Follow, under supervision, organisational policies for human interaction and interface (HCI) design activities** 4062.01

**Performance Criteria** 4062.01C

a) Correctly follow the processes tools and techniques to conduct human interaction and interface (HCI) design activities

b) Fully comply with all organisational strategy policies and standards in human interaction and interface (HCI) design activities

c) Accurately gather and collate information relating to available interfaces equipment and environments of use under direction

d) Design effective elements for any HCI design delegated by superiors assuming full accountability for the quality and effectiveness of the design deliverables

**Knowledge** 4062.01K

a) comply with any relevant legislation regulations and external standards in human interaction and interface (HCI) design activities

b) use the processes tools and techniques for undertaking human interaction and interface (HCI) design

c) operate with
   - reference to organisational strategy policies and standards in human interaction and interface (HCI) design activities
   - reference to professional and ethical standards in human interaction and interface (HCI) design activities
   - integrity and confidentiality during human interaction and interface (HCI) design activities

d) collate information relating to available interfaces equipment and environments of use

e) develop elements of HCI designs

f) be accountable for own HCI designs

**Understanding** 4062.01U

a) the processes tools and techniques that can be used to undertake human interaction and interface HCI design activities

b) what is meant by
   - the term user experience
   - an human interaction and interface HCI
   - a graphical user interface (GUI)
   - a web user interface (WUI)
   - what is the range of input/output devices that users can use to interact with IT/technology systems services and assets

c) what are the industry and vendor standards conventions and ‘norms’ associated with particular user interfaces on commonly used devices and platforms

d) the fact that
   - different types of HCI exist
   - HCI design activities and their deliverables must support the identified business requirements
   - a range of different input/output devices and/or IT/technology platforms may need to be considered as part of the design of the user experience with
IT/technology systems services and assets in order to meet the business and user needs

- the designed HCI associated with any IT/technology should be easy to use/intuitive
- there are industry and vendor standards conventions and ‘norms’ associated with user interfaces that are readily understandable by and familiar to a wide range of individuals

e) why
- different types of HCI exist
- a range of different devices may need to be considered as part of the design of the user experience with IT/technology systems services and assets

f) the importance of incorporating the desired user experience into any system/solution/service design

**Document specified information relating to human interaction and interface (HCI) design**  

**Performance Criteria 4062.02C**

a) Accurately document elements of HCI designs under direction

b) Accurately document all naming conventions and standards used during HCI design activities under direction

c) Accurately document and collate feedback from sample target users on any human interaction and interface (HCI) design under direction

**Knowledge 4062.02K**

a) document and collate
  - elements of HCI designs
  - naming conventions and standards used during HCI design activities
  - feedback from sample target users on any human interaction and interface (HCI) design

**Understanding 4062.02U**

a) the importance of documenting the deliverables from human interaction and interface (HCI) design activities

**Assist others with human interaction and interface (HCI) designs**  

**Performance Criteria 4062.03C**

a) Assist others in soliciting feedback on human interaction and interface (HCI) designs from sample target users under direction

b) Assist others in sourcing and gathering information gained from analysis activities during human interaction and interface (HCI) design activities under direction

c) Assist others in identifying the information gained from analysis activities during human interaction and interface (HCI) design activities under direction

**Knowledge 4062.03K**

a) provide elements for an HCI design

**Understanding 4062.03U**

a) the fact that different individuals respond differently to particular interfaces

**Level 3 competencies**

**Contribute to human interaction and interface (HCI) design activities**  

4063.01
Performance Criteria 4063.01C

a) Correctly source all relevant information relating to IT/technology architectures in order to inform human interaction and interface (HCI) design activities
b) Correctly gather and collate all relevant information gained from analysis activities during human interaction and interface (HCI) design activities
c) Use effective prototype human interaction and interface (HCI) designs in order to validate the acceptability of any IT/technology system to users
d) Assist others in identifying the IT/technology infrastructure that is to be used to support the IT/technology system service and/or asset as it applies to HCI design
e) Correctly apply naming conventions and standards where relevant in human interaction and interface (HCI) design activities under direction

Knowledge 4063.01K

a) source and collate
   ◆ information relating to IT/technology architectures in order to inform human interaction and interface (HCI) design activities and their deliverables
   ◆ information gained from analysis activities during human interaction and interface (HCI) design activities
b) apply
   ◆ validity and accuracy requirements for human interaction and interface (HCI) design
   ◆ prototype human interaction and interface (HCI) designs where relevant
   ◆ naming conventions and standards where relevant in human interaction and interface (HCI) design activities
c) operate with reference to external best practice and standards such as ergonomics and prevailing behavioural ‘norms’ in human interaction and interface (HCI) design activities

Understanding 4063.01U

a) the role and value of human interaction and interface (HCI) design in improving the quality and effectiveness of human interaction in processes and IT/technology systems
b) what is meant by
   ◆ human interaction and human interface (HCI) design activities and the stages of activity that constitute them
   ◆ the term ergonomics
   ◆ the term personalisation in the context of user interfaces
c) what are the
   ◆ standards and naming conventions that can be used in human interaction and interface (HCI) design work
   ◆ potential implications to an organisation of human interaction and interface (HCI) design deliverables being incorrect incomplete inadequate and/or inappropriate
d) the fact that
   ◆ different types of HCI standards and norms apply to a range of differing input/output devices and/or IT/technology platforms
   ◆ HCI design activities need to align with the deliverables from HCI analysis activities
   ◆ HCI designs need to consider data and information integrity privacy and security issues
e) why
   ◆ the desired user experience needs to be incorporated into any system/solution/service design
   ◆ ergonomic needs must be considered within any HCI design
   ◆ HCI design activities and their deliverables must support the identified business requirements
   ◆ human interaction and interface (HCI) designs need to be tested with sample target users to validate their appropriateness
f) who are the target users for any human interaction and interface (HCI) design activities
g) the importance of
   ◆ the systems development lifecycle as it relates to human interaction and interface (HCI) design activities
   ◆ using naming conventions and standards where appropriate in human interaction and interface (HCI) design activities
   ◆ considering opportunities for personalisation in human interaction and interface (HCI) designs
Validating human interaction and interface (HCI) designs with sample target users using a range of techniques

Considering the integrity, security, and privacy/confidentiality of data in human interaction and interface (HCI) design

**Assist, under supervision, with the progress of human interaction and interface (HCI) design assignments 4063.02**

**Performance Criteria 4063.02C**

a) Solicit timely and specific feedback on human interaction and interface (HCI) designs from sample target users

b) Critically analyse all relevant data and information gathered as a result of the verification of human interaction and interface (HCI) design

c) Assist others in analysing existing information and data contained within IT/technology architectures and analysis deliverables in order to inform human interaction and interface (HCI) design activities

d) Clearly document the progress of any particular HCI design assignment

e) Assist others in documenting design options for individual HCI design assignments

**Knowledge 4063.02K**

a) Provide prototype human interaction and interface (HCI) designs where appropriate to sample target users

b) Analyse data and information gathered as a result of the verification of human interaction and interface (HCI) design

c) Take action to
   - Solicit feedback on human interaction and interface (HCI) designs from sample target users
   - Use prototype human interaction and interface (HCI) designs in order to validate the acceptability of any IT/technology system to users
   - Conduct human interaction and interface (HCI) design to an appropriate standard

d) Document
   - Deliverables and outcomes relevant to each stage of human interaction and interface (HCI) design
   - The progress of any particular human interaction and interface (HCI) design

**Understanding 4063.02U**

a) The need for monitoring
   - The progress of human interaction and interface (HCI) design assignment
   - The accuracy, currency, completeness, and appropriateness of any HCI design deliverables
   - The alignment of human interaction and interface (HCI) design deliverables with the business requirements

b) The processes, tools, and techniques which can be used to monitor the
   - Progress of any particular HCI design assignment
   - Accuracy, currency, completeness, and appropriateness of any HCI design deliverables
   - Alignment of HCI design deliverables with the business requirements

**Level 4 competencies**

**Prepare for human interaction and interface (HCI) design activities 4064.01**

**Performance Criteria 4064.01C**

a) Correctly follow all standards for undertaking human interaction and interface (HCI) design activities under direction

b) Accurately document all of the processes, tools, and techniques for undertaking and monitoring human interaction and interface (HCI) design activities

Correctly select all of the relevant information contained within HCI analysis deliverables in order to inform human interaction and interface (HCI) design activities
c) under direction

d) Critically analyse all the deliverables from human needs analysis and ensure that these guide the human interaction and interface (HCI) design assignment under direction

e) Develop effective design options for individual HCI design assignments and document them clearly and provide to sponsors stakeholders and other individuals for review

Knowledge 4064.01K

a) IDENTIFY/SELECT

- the deliverables from human needs analysis and ensure that these guide the human interaction and interface (HCI) design assignment
- information contained within HCI analysis deliverables in order to inform human interaction and interface (HCI) design activities
- naming conventions and standards where relevant for human interaction and interface (HCI) design activities
- appropriate interaction and interfaces for different users including employees customers partners and suppliers who have different requirements from an IT/technology system service and/or asset
- the processes tools and techniques for undertaking human interaction and interface (HCI) design
- information contained within IT/technology architecture deliverables

b) SOURCE/GATHER/COLLATE

- information from a range of individuals and other internal and external sources as appropriate in order to verify human interaction and interface (HCI) designs

c) ANALYSE/INTERPRET

- existing information and data contained within IT/technology architectures and analysis deliverables in order to inform human interaction and interface (HCI) design activities
- the deliverables from human needs analysis and ensure that these guide the human interaction and interface (HCI) design assignment

d) DOCUMENT/COMPLETE/STORE

- prototype human interaction and interface (HCI) designs where appropriate
- design options for individual HCI design assignments
- decisions made during human interaction and interface (HCI) design activities
- the processes tools and techniques to monitor the accuracy currency completeness and appropriateness of any HCI design deliverables
- the processes tools and techniques to monitor the alignment of HCI design deliverables with the business requirements
- the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design work with other related analysis and design activities and their deliverables
- the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design work with other related analysis and design activities and their deliverables
- the processes tools and techniques to monitor the quality and effectiveness of human interaction and interface (HCI) design activities and their deliverables
- changes to business requirements through change control mechanisms during HCI design activities
- best practice in human interaction and interface (HCI) design
- lessons learned from previous human interaction and interface (HCI) design assignments and/or from other contexts
- the processes tools and techniques to monitor the quality and effectiveness of human interaction and interface (HCI) design activities

e) develop

- prototype human interaction and interface (HCI) designs where appropriate
- design options for individual human interaction and interface (HCI) design assignments

Understanding 4064.01U
a) the role of political awareness 'people' and negotiation skills in effective human interaction and interface design

b) what

- is the range of typical/most commonly used interfaces that can be used in human interaction and interface (HCI) design and their appropriateness in a range of business contexts
- is the relationship between human interaction and interface (HCI) design and systems/solution/service design activities
- is the relevance of human interaction and interface (HCI) design activities and their deliverables to systems development activities associated with the production of an IT/technology system/solutions/service
- is the relevance and role of ergonomics in HCI design considerations

c) what are the

- processes tools and techniques that can be used to undertake human interaction and interface (HCI) design
- inputs to any human interaction and interface (HCI) design activities and the expected deliverables from them
- range of methods tools and techniques that can be used to undertake human interaction and interface (HCI) designs
- advantages and disadvantages of differing types of interfaces that may be used on any IT/technology system service and/or asset
- potential implications of HCI design deliverables being incorrectly or inadequately specified
- potential implications of failings of integrity confidentiality and information security during HCI design activities
- professional and ethical standards relating HCI design work within an organisation

d) the fact that

- human interaction and interface (HCI) design deliverables need to align with any relevant existing IT/technology designs where appropriate
- the effectiveness of any IT/technology system depends on the human interaction and interface (HCI) designs incorporating features that will secure the adoption of the system by users
- ergonomics are a critical consideration in any human interaction and interface (HCI) design activities
- sometimes it may be necessary or desirable to provide interaction and interface designs that can be personalised for the needs and/or preferences of individual users
- specialised HCI design deliverables are frequently required to meet the needs of the disabled
- the ease of use of any IT/technology system service and/or asset can a direct impact on the cost of its operation

e) why

- integrity security and privacy of data need to be considered in human interaction and interface (HCI) design
- standards and naming conventions where relevant are used in human interaction and interface (HCI) design work
- the target social operational and environmental conditions in which any IT/technology system will be used needs to be considered during HCI design activities

f) who

- needs to validate any HCI design
- needs to approve/sign off any HCI design

g) the importance of

- being able to interpret existing information contained within IT/technology architectures in order to inform human interaction and interface (HCI) design activities
- human interaction and interface (HCI) design deliverables being used to update IT/technology architectures as appropriate during human interaction and interface (HCI) design activities
- undertaking human interaction and interface (HCI) design
- integrating the human interaction and interface (HCI) design within all relevant analysis and design activities
- securing sign off to the HCI design from appropriately authorised individuals
- designing effective and efficient user interfaces that will encourage the adoption and use of IT/technology systems services and/or assets
- producing HCI designs which can be maintained and operated using existing skills and expertise
- managing changes to business requirements through change control mechanisms during human interaction and interface (HCI) design activities
- using the deliverables from human needs analysis to inform human interaction and interface (HCI) design activities
- considering the integrity security privacy of data in human interaction and interface (HCI) design
- applying lessons learned from previous HCI design assignments
- taking account of internal and external factors during HCI design activities and their deliverables
- maintaining the integrity and confidentiality of information during data design activities
- ensuring that sensitive information is not disclosed inappropriately during HCI design activities
- accurately and completely representing the business requirements for the user experience in the HCI design

**Implement, under supervision, human interaction and interface (HCI) design activities** 4064.02

**Performance Criteria** 4064.02C

a) Verify the acceptability and appropriateness of all human interaction and interface (HCI) designs using a range of techniques such as prototype designs and sample user feedback

b) Accurately identify all of the IT/technology infrastructure that is to be used to support the IT/technology system service and/or asset as it applies to HCI design

c) Effectively manage the progress of HCI design assignments against plans and present findings clearly and in a timely manner to sponsors stakeholders and superiors under direction

**Knowledge** 4064.02K

a) verify the acceptability of human interaction and interface (HCI) designs using a range of techniques such as prototype designs and sample user feedback

b) identify the IT/technology infrastructure that is to be used to support the IT/technology system service and/or asset as it applies to HCI design

c) implement and maintain plans and standards relating to human interaction and interface (HCI) design assignments

d) present the progress of HCI design assignments against plans

e) report
   - the progress of any HCI design assignment
   - any issues arising as a result of any HCI design assignment

f) manage
   - the progress of HCI design assignments against plans
   - relationships with any sample target users providing feedback on human interaction and interface (HCI) designs
   - any issues arising in HCI design assignments as a result of internal or external factors

**Understanding** 4064.02U

a) the need for monitoring
   - the alignment of human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards
   - the alignment of human interaction and interface (HCI) design work with other related analysis activities and their deliverables
   - the alignment of human interaction and interface (HCI) design work with other related design activities and their deliverables
   - the quality and effectiveness of HCI design activities and their deliverables
   - changes to business requirements through change control mechanisms during HCI design activities

b) the processes tools and techniques that can be used to monitor
   - the alignment of human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards
   - the alignment of human interaction and interface (HCI) design work with other related analysis design activities and their deliverables
   - the quality and effectiveness of HCI design activities and their deliverables
   - changes to business requirements through change control mechanisms during HCI design activities

**Manage the needs of different users of HCI design activities** 4064.03
**Performance Criteria 4064.03C**

a) Take account of all the needs of different users including employees customers partners and suppliers who have different requirements from an IT/technology system in HCI design activities

b) Effectively manage the relationships with any sample target users negotiating with them on elements of any proposed design and changes required to it under the direction of superiors

c) Correctly identify and accurately document the most appropriate interaction and interfaces for different users including employees customers partners and suppliers who have different requirements from an IT/technology system service and/or asset

d) Apply all of the human interaction and interface (HCI) design requirements appropriately to support the IT/technology literacy levels and skills of the target users

**Knowledge 4064.03K**

a) take action to take account of
   - any particular individual's or groups of individuals influence on human interaction and interface (HCI) design assignments
   - all the needs of different users including employees customers partners and suppliers who have different requirements from an IT/technology system in HCI design activities

b) communicate with
   - internal and external individuals and groups concerned with the development of HCI designs into target systems services and assets
   - sample target users

c) provide design options for any HCI design assignment

d) apply
   - the human interaction and interface (HCI) design requirements to support the IT/technology literacy levels and skills of the target users
   - feedback from sample target users on any human interaction and interface (HCI) design
   - information gathered as a result of the verification of human interaction and interface (HCI) designs
   - standards relating to human interaction and interface (HCI) design
   - the IT/technology infrastructure that is to be used to support the IT/technology system service and/or asset as it applies to HCI design

e) negotiate with sample target users regarding elements of any proposed design and changes required to it

**Understanding 4064.03U**

a) The fact that there is a need to design appropriate interaction and interfaces for different users including employees customers partners and suppliers who have different requirements from an IT/technology system

b) The importance of considering the IT/technology literacy levels and skills of the target users when undertaking human interaction and interface (HCI) design activities

**Level 5 competencies**

**Plan human interaction and interface (HCI) design activities 4065.01**

**Performance Criteria 4065.01C**

a) Correctly select all relevant standards relating to human interaction and interface (HCI) design activities

b) Design effective plans and standards for undertaking human interaction and interface (HCI) design

c) Correctly identify and appropriately apply all relevant service level and operational environment and infrastructure requirements within human interaction and interface (HCI) design activities

d) Correctly identify when and how to optimise human interaction and interface (HCI) analysis deliverables based on feedback from sample target users

**Knowledge 4065.01K**
a) identify and select
- standards relating to human interaction and interface (HCI) design
- the human interaction and interface (HCI) design requirements to support the IT/technology literacy levels and skills of the target users
- any relevant legislation regulations and external standards in human interaction and interface (HCI) design activities and their deliverables
- internal and external factors on human interaction and interface (HCI) design activities and their deliverables
- internal and external sponsors of and stakeholders for human interaction and interface (HCI) design activities
- design options to meet the human needs as identified in the deliverables from human needs analysis
- strategy and policies to ensure the compliance of human interaction and interface (HCI) design and its outcomes with any relevant legislation regulations and external standards
- the processes tools and techniques to monitor the quality and effectiveness of human interaction and interface (HCI) design activities
- any particular individual's or groups of individuals influence on human interaction and interface (HCI) design assignments
- lessons learned from previous human interaction and interface (HCI) design assignments and/or from other contexts
- where there is a need for integrity security and privacy/confidentiality of data and information in human interaction and interface (HCI) design
- when and how to optimise HCI analysis deliverables based on feedback from sample target users
- service level and operational environment and infrastructure requirements during human interaction and interface (HCI) design activities

b) design
- plans and standards relating to human interaction and interface (HCI) design
- the processes tools and techniques for undertaking human interaction and interface (HCI) design
- the processes tools and techniques to monitor human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards
- the processes tools and techniques to monitor the accuracy currency completeness and appropriateness of any HCI design deliverables
- the processes tools and techniques to monitor the alignment of HCI design deliverables with the business requirements
- the processes tools and techniques to monitor that the (HCI) design requirements support the IT/technology literacy levels and skills of the target users
- the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design work with other related analysis and design activities and their deliverables

c) analyse
- how effectively the human interaction and interface (HCI) design supports the IT/technology literacy levels and skills of the target users

d) liaise
- with internal and external sponsors and stakeholders on all aspects of human interaction and interface (HCI) design assignments and their outcomes
- with external suppliers of human interaction and interface (HCI) design services

Understanding 4065.01U
a) the influence that particular individuals or groups thereof can have on human interaction and interface (HCI) design
b) what legislation regulations and external standards are relevant to human interaction and interface (HCI) design and its outcomes
c) what are the
- strategy policies plans and standards relating to HCI design activities and their deliverables
- range of issues associated with undertaking human interaction and interface (HCI) design
- processes tools and techniques to measure the effectiveness and quality of human interaction and interface (HCI) design
- techniques that can be used to avoid conflict when verifying human interaction and interface (HCI) designs
- implications of internal and external factors on all stages of human interaction and interface (HCI) design activities and their deliverables
- implications of any legislation regulations and external standards as they relate to human interaction and interface (HCI) design and its outcomes and how to comply with them
- target social operational and environmental conditions in which any IT/technology system will be used
d) the fact that
   - service level and operational requirements must be considered within human interaction and interface (HCI) design activities
   - the target operational delivery capabilities such as bandwidth screen size/resolution input devices size/type and other factors need to be considered in any HCI design activities
   - in certain specific scenarios which typically support specialised business functions there are controlled and standardised HCIs and devices that are used
   - in many scenarios the HCI design needs to cater for a wide range of user input/output devices and IT/technology platforms
   - the impact of any relevant legislation regulations and external standards needs to be reflected in human interaction and interface (HCI) design activities and their deliverables
   - the deliverables of human interaction and interface (HCI) design activities must be accurately represented in the 'end to end' systems design deliverables
   - external providers of human interaction and interface (HCI) design services exist and there are disadvantages and benefits of using these services

e) who are the sponsors of and stakeholders for any human interaction and interface (HCI) design activities

Manage human interaction and interface (HCI) design activities 4065.02

Performance Criteria 4065.02C

a) Design implement and maintain effective processes tools and techniques for undertaking and monitoring human interaction and interface (HCI) design activities
b) Correctly apply all relevant data integrity privacy and security requirements within any HCI design and clearly document how they have been met under guidance
c) Apply appropriate and timely expertise from internal and external individuals and organisations as appropriate on ergonomics and other factors such as the prevailing culture of the target audience/users of any IT/technology system in order to inform human interaction and interface (HCI) design activities

Knowledge 4065.02K

a) gather recommendations as a result of the verification of human interaction and interface (HCI) design in order to inform system design activities
b) design
   - the processes tools and techniques to monitor the quality and effectiveness of human interaction and interface (HCI) design activities
   - the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design deliverables with ergonomics and other factors such prevailing behavioural 'norms' of the target audience/users
   - the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design deliverables with the target social operational and environmental conditions in which the system will be used
c) apply
   - service level and operational environment and infrastructure requirements within human interaction and interface (HCI) design activities
   - integrity security and privacy/confidentiality requirements for human interaction and interface (HCI) design
   - existing information contained within IT/technology architectures and analysis deliverables
   - strategy and policies to ensure the compliance of human interaction and interface (HCI) design and its outcomes with any relevant legislation regulations and external standards
   - the processes tools and techniques to monitor the quality and effectiveness of human interaction and interface (HCI) design activities
   - lessons learned from previous human interaction and interface (HCI) design assignments and/or from other contexts
   - expertise from internal and external individuals and organisations as appropriate on ergonomics and other factors such as the prevailing culture of the target audience/users of any IT/technology system in order to inform human interaction and interface (HCI) design activities
   - the human interaction and interface (HCI) requirements that will support the target social operational and environmental conditions in which the system will be used
   - the human interaction and interface (HCI) design requirements to support the prevailing behavioural 'norms' of the target audience/users
   - best practice in human interaction and interface (HCI) design
d) verify
   - that existing/available infrastructure can support the proposed designs for HCI interfaces/interaction
   - human interaction and interface (HCI) designs with internal and external individuals and organisations as appropriate on ergonomics and other factors such as
e) take action
   - to take account of the range of issues associated with human interaction and interface (HCI) design and its deliverables
   - to integrate human interaction and interface (HCI) design activities into projects and programmes as appropriate
   - to take account of internal and external factors in human interaction and interface (HCI) design activities and their deliverables
   - to optimise human interaction and interface (HCI) designs based on feedback from sample target users
   - to take account of organisational culture and the prevailing culture of the target audience/users in human interaction and interface (HCI) design activities
   - to evaluate and prioritise options in order to produce recommendations for human interaction and interface (HCI) designs

f) document
   - standards relating to human interaction and interface (HCI) design
   - actions taken in the event of the deliverables and outcomes of human interaction and interface (HCI) design being incorrect incomplete or inadequate
   - the quality and effectiveness of external providers of HCI design services
   - how the data integrity privacy and security considerations have been met within any HCI design

g) implement and maintain
   - the processes tools and techniques to monitor the quality and effectiveness of human interaction and interface (HCI) design activities
   - the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards
   - the processes tools and techniques to monitor the accuracy currency completeness and appropriateness of any HCI design deliverables
   - the processes tools and techniques to monitor the alignment of HCI design deliverables with the business requirements
   - the processes tools and techniques for undertaking human interaction and interface (HCI) design
   - the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards
   - the processes tools and techniques to monitor the alignment of human interaction and interface (HCI) design work with other related analysis and design activities and their deliverables
   - the processes tools and techniques to monitor the quality and effectiveness of human interaction and interface (HCI) design activities

Understanding 4065.02U

a) why
   - target operational delivery capabilities such as bandwidth screen size/resolution input devices size/type and other factors need to be considered in any HCI design activities
   - the alignment of human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards needs to be monitored
   - the alignment of human interaction and interface (HCI) design work with other related analysis activities and their deliverables needs to be monitored
   - the alignment of human interaction and interface (HCI) design work with other related design activities and their deliverables needs to be monitored

b) the importance of
   - human interaction and interface (HCI) design deliverables aligning with IT/technology architectures
   - considering the IT/technology operational environments and infrastructure relevant to the target system/solution/service when undertaking human interaction and interface (HCI) design activities
   - tact and diplomacy when verifying human interaction and interface (HCI) designs
   - applying a range of interpersonal communications skills during human interaction and interface (HCI) design activities
   - optimising any human interaction and interface (HCI) design based on feedback from sample target users of the system/solution/service
   - ensuring that operational performance and service needs are considered during HCI design activities
   - considering any relevant legislation regulations and external standards in HCI design activities and their deliverables
   - integrating human interaction and interface (HCI) design activities into projects and programmes as appropriate
Monitor and maintain effective human interaction and interface (HCI) designs 4065.03

Performance Criteria 4065.03C

a) Regularly monitor and clearly report the alignment of human interaction and interface (HCI) design deliverables with other relevant factors

b) Routinely monitor and effectively manage changes to business requirements through change control mechanisms during human interaction and interface (HCI) design activities

c) Critically evaluate and prioritise options in order to produce recommendations for human interaction and interface (HCI) designs

d) Effectively manage all actions required in the event of the deliverables and outcomes of human interaction and interface (HCI) design being incorrect incomplete or inadequate

e) Be fully accountable for all HCI design deliverables produced within own area of accountability

Knowledge 4065.03K

a) monitor
   - the progress of any HCI design assignment
   - human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards
   - the accuracy currency completeness and appropriateness of any HCI design deliverables
   - the alignment of HCI design deliverables with the business requirements
   - that the (HCI) design requirements support the IT/technology literacy levels and skills of the target users
   - the alignment of human interaction and interface (HCI) design activities and their deliverables with all relevant legislation regulations and external standards
   - the alignment of human interaction and interface (HCI) design work with other related analysis and design activities and their deliverables
   - changes to business requirements through change control mechanisms during HCI design activities
   - the quality and effectiveness of human interaction and interface (HCI) design activities

b) report
   - any discrepancies in the alignment of human interaction and interface (HCI) design work with all relevant legislation regulations and external standards
   - the alignment of human interaction and interface (HCI) design deliverables with other relevant factors

c) manage
   - changes to business requirements through change control mechanisms during human interaction and interface (HCI) design activities
   - relationships with sponsors stakeholders and external bodies on matters relating to human interaction and interface (HCI) design
   - the relationships with external providers of human interaction and interface (HCI) design services
   - actions required in the event of in the event of the deliverables and outcomes of human interaction and interface (HCI) design being incorrect incomplete or inadequate

d) present and review
   - the progress of HCI design assignments against plans
   - recommendations as a result of human interaction and interface (HCI) design in order to inform system/solution/service design activities
   - and summarise recommendations relating to human interaction and interface (HCI) design to sponsors and other internal and external stakeholders
   - the results from monitoring the alignment of HCI design activities
   - the quality and effectiveness of external providers of human interaction and interface (HCI) design activities

e) be accountable for designs produced within own area of accountability

Understanding 4065.03U
Level 6 competencies

Develop and implement the strategy for human interaction and interface (HCI) design activities 4066.01

Performance Criteria 4066.01C

a) Design implement and maintain effective strategy and policies relating to human interaction and interface (HCI) design activities
b) Correctly identify any organisational culture and the prevailing culture of the proposed audience/users so that it may inform in human interaction and interface (HCI) design activities
c) Correctly identify where there is a need for personalisation of interfaces/interaction to meet the needs of different users including employees, customers, partners, and suppliers
d) Source the most appropriate expertise from internal and external individuals and organisations as appropriate on ergonomics and other factors such as the prevailing culture of the target audience/users of any IT/technology system service and/or asset in order to inform human interaction and interface (HCI) design activities
e) Correctly use all relevant human interaction and interface (HCI) design deliverables to update IT/technology architectures as appropriate during human interaction and interface (HCI) design activities
f) Make well reasoned decisions on when and how to use external providers of human interaction and interface (HCI) design services selecting the preferred organisations and negotiating/contracting with them accordingly on behalf of the organisation

Knowledge 4066.01K

a) design
   ♦ strategy and policies relating to human interaction and interface (HCI) design
   ♦ strategy and policies to ensure the compliance of human interaction and interface (HCI) design and its outcomes with any relevant legislation, regulations, and external standards
b) implement and maintain strategy and policies relating to human interaction and interface (HCI) design

c) identify
   ♦ the human interaction and interface (HCI) requirements to support the target social operational and environmental conditions in which the system will be used
   ♦ the human interaction and interface (HCI) design requirements to support the prevailing behavioural ‘norms’ of the target audience/users
   ♦ where there is a need for personalisation of interfaces/interaction to meet the needs of different users including employees, customers, partners, and suppliers
   ♦ what actions may be taken in the event of the deliverables and outcomes of human interaction and interface (HCI) design being incorrect, incomplete, or inadequate
   ♦ what actions may be taken in the event of human interaction and interface (HCI) design activities and their deliverables not meeting the business needs
   ♦ best practice in human interaction and interface (HCI) design
   ♦ organisational culture and the prevailing culture of the proposed audience/users in human interaction and interface (HCI) design activities
   ♦ when and how to use external providers of human interaction and interface (HCI) design services
   ♦ which external providers of human interaction and interface (HCI) design services to use in any assignment
d) source expertise from internal and external individuals and organisations as appropriate on ergonomics and other factors such as the prevailing culture of the target
understand the importance of having an awareness of organisational culture and an awareness of the prevailing culture of the audience/users in human interaction and interface (HCI) design activities

g) negotiate with external suppliers of human interaction and interface (HCI) design services

h) authorise agree and contract

- external suppliers of human interaction and interface (HCI) design services
- actions
- approaches
- strategy policies plans procedures standards tools and techniques relating to human interaction and interface (HCI) design activities
- decisions

Understanding 4066.01U

a) what are the
- benefits and disadvantages of using external suppliers of HCI design services
- issues involved in outsourcing human interaction and interface (HCI) design activities
- range of approaches for undertaking human interaction and interface (HCI) design and their appropriateness in any IT/technology and business context

b) who are external providers of human interaction and interface (HCI) design services

c) the importance of having an awareness of organisational culture and an awareness of the prevailing culture of the audience/users in human interaction and interface (HCI) design activities

Control effective HCI design activities and their deliverables 4066.02

Performance Criteria 4066.02C

a) Regularly monitor the alignment of human interaction and interface (HCI) design deliverables with ergonomics and other factors such as the prevailing behavioural 'norms' of the target audience/users IT/technology literacy levels and skills of the target users and the target social operational and environmental conditions in which the system will be used

b) Critically analyse how effectively the human interaction and interface (HCI) design supports the target social operational and environmental conditions in which the system will be used and prevailing behavioural 'norms' of the target audience/users

c) Make objective and timely decisions on the appropriateness accuracy and completeness of any HCI design deliverables and any actions that may be taken in the event of human interaction and interface (HCI) design activities and their deliverables not meeting the business needs

d) Take timely and effective action in the event of the deliverables and outcomes of human interaction and interface (HCI) design activities not meeting the business needs and/or being incorrect incomplete or inadequate

e) Provide timely and objective advice and guidance to others on all aspects of HCI design activities and their deliverables including best practice
Knowledge

a) monitor
   - the alignment of human interaction and interface (HCI) design deliverables with ergonomics and other factors such as prevailing 'norms' of the target audience/users
   - the alignment of human interaction and interface (HCI) design deliverables with the target social operational and environmental conditions in which the system will be used
   - the alignment of human interaction and interface (HCI) design deliverables with IT/technology literacy levels and skills of the target users

b) review
   - recommendations as a result of human interaction and interface (HCI) design in order to inform system/solution/service design activities
   - and summarise recommendations relating to human interaction and interface (HCI) design to sponsors and other internal and external stakeholders
   - the results from monitoring the alignment of HCI design activities
   - the quality and effectiveness of external providers of human interaction and interface (HCI) design activities

c) present the quality and effectiveness of human interaction and interface (HCI) design activities

d) analyse
   - the results gained from monitoring the quality and effectiveness of human interaction and interface (HCI) design activities
   - how effectively the human interaction and interface (HCI) design supports the target social operational and environmental conditions in which the system will be used
   - how effectively the human interaction and interface (HCI) design supports prevailing 'norms' of the target audience/users

e) take action
   - in the event of the deliverables and outcomes of human interaction and interface (HCI) design being incorrect incomplete or inadequate
   - in the event of human interaction and interface (HCI) design activities and their deliverables not meeting the business needs

f) advise and guide others on
   - best practice in human interaction and interface (HCI) design
   - all aspects of human interaction and interface (HCI) design