Housing and Design

LEVEL 3	15 TCE CREDIT POINTS
COURSE CODE	HDS315118
COURSE SPAN	2018 — 2024
READING AND WRITING STANDARD	NO
MATHEMATICS STANDARD	NO
COMPUTERS AND INTERNET STANDARD	YES

This course was delivered in 2021. Use A-Z Courses to find the current version (if available).

Housing and Design Level 3 develops learners' knowledge, skills and capabilities to respond to design problems relating to indoor and outdoor living spaces

Through an integrated Science, Technologies, Engineering and Mathematics (STEM) inquiry model using individual and collaborative learning experiences, learners will consider environmental, aesthetic, functional, social, technological and ergonomic influences and impacts.

Course Description

Housing and Design emphasises the development of design thinking through the use of imagination and creativity in making proposals and choices in the creation of innovative and enterprising solutions to problems. Learners study a variety of strategies for meeting identified needs, and addressing considerations of a design brief.

Students learn to draw from a wide spectrum of thinking, including design and systems thinking, and use creativity to plan, generate, synthesise and realise ideas. They use a diverse range of techniques to communicate this thinking, and their design proposals (e.g. graphical, oral, notational, textual, mathematical, digital, virtual or three-dimensional presentations). Learners engage with complexity, being adaptive, creative and enterprising in their work. Their outcomes reflect qualities of appropriateness of designs and sensitivity, having learned to critically challenge housing values to improve the social and environmental impacts of the built environment.

Rationale

The built environment provides the setting in which we live our lives. Lives are shaped by our experiences in spaces, places and buildings, and the design and creation of these can enhance the quality of life for individuals and support the effective functioning of communities. An understanding of design and how it works can enhance an individual's ability to connect with their environment, to learn from it, to grow within it and contribute towards it.

Housing and Design Level 3, develops learners' knowledge, skills and capabilities to respond to design problems relating to indoor and outdoor living spaces. Through an integrated Science, Technologies, Engineering and Mathematics (STEM) inquiry model using individual and collaborative learning experiences, learners will consider environmental, aesthetic, functional, social, technological and ergonomic influences and impacts. Learners develop insights into how design within the built environment is culturally, socially and ethically constructed with an environmentally sustainable approach.

STEM education integrates concepts that are usually taught as separate subjects in different classes and emphasises the application of knowledge to real-life situations. STEM learning is typically based around finding a solution to a real-world problem and tends to emphasise project based learning.

Aims

Housing and Design aims to develop learners who are design literate. Learners who are design literate are able to draw on knowledge and understanding of design thinking, external influences and human need to develop design possibilities through an iterative approach and the communication of designed solutions.

Housing and Design aims to develop these skills in learners through the creation and refinement of design briefs focusing on the built environment.

Learning Outcomes

On successful completion of this course, learners will be able to:

1. identify, analyse and apply features that contribute to environmentally sustainable design and support human comfort
2. investigate, analyse and integrate information about site, precedents, client needs and other relevant influences into the design response through application of the design process
3. provide active and constructive contributions to individual and collaborative design projects
4. use architectural principles relating to aesthetics in creating designed solutions
5. apply research, analysis and evaluation skills to inform a range of design projects
6. use architectural principles relating to use of space and key structure in creating designed solutions
7. accurately apply a range of numeracy skills related to planning, including use of measurement and scale, proportion and graphically represented data, calculation of area, ratios and gradients, and application of solar geometry
8. generate and communicate ideas, concepts and design solutions using a range of communication strategies and conventions
9. manage design projects by applying appropriate planning, time management and reflective thinking strategies.

Pathways

Learners who have completed prior study in the area of Australian Curriculum Design and Technology band 9-10, Design and Production Level 2 or other design based courses will be well placed to engage in Housing and Design, however there are no mandatory entry requirements to this course.

Vocational learning and insights into Personal Pathways are gained by working in design teams and by simulating the roles played by practitioners in the area, site visits and guest speakers. Opportunities to gain insights into the needs and values of a range of clients within the community are developed through rich design briefs which take students beyond their current experience.

This course is a pathway for students intending to proceed to training and tertiary study in Environmental Design and Architecture, Interior Design, Building Design or Urban Planning. It is also relevant for students pursuing pathways in Design Teaching, Spatial Design, Landscape Design or Furniture Design.

Housing and Design has links with the Science, Technologies and Arts learning areas. It complements senior secondary courses in art, graphics (including computer graphics) and environmental science.

Resource Requirements

This course requires space and resources to allow scale drawing and model making including:

- access to space to draw that may include T-squares and drawing tables and/or drawing boards
- set squares, compasses, scale rulers and drawing pencils, drawing pens and associated stationary such as graph and tracing paper
- access to ICT, the internet, A3 scanner and printer.

Course Size And Complexity

This course has a complexity level of 3.

At Level 3, the learner is expected to acquire a combination of theoretical and/or technical and factual knowledge and skills and use judgement when varying procedures to deal with unusual or unexpected aspects that may arise. Some skills in organising self and others are expected. Level 3 is a standard suitable to prepare learners for further study at tertiary level. VET competencies at this level are often those characteristic of an AQF Certificate III.

This course has a size value of 15.

Relationship To Other TASC Accredited And Recognised Senior Secondary Course

Housing and Design Level 3 is based on design thinking which appears in other TASC Design and Technology courses. While learners who are studying more than one Design and Technology course either sequentially or concurrently may have some advantages in dealing with familiar terms and integrating broad concepts, the depth, contextualisation of content and application all vary significantly between courses.

Course Delivery

In this course learners will study all 5 compulsory content areas:

1. Design Communication
2. Design and Systems Thinking
3. Form and Function
4. Passive Solar Design and Sustainability
5. Project Management.

Design Communication will be covered first. Project Management and Design Thinking will be integrated in their delivery throughout the course.

The learner will develop design and generic capabilities through design briefs. These will contain challenges and constraints through the application of design principles and information, including:

- architectural and spatial design principles
- environmentally sustainable practices
- information about needs, precedents and influences.

The design briefs provide a foundation for completing an externally assessed individual design folio on a topic of their choice. Learners must complete work requirements which involve both individual and collaborative design work.

THE DESIGN PROCESS WITHIN HOUSING AND DESIGN

Learners will respond to design scenarios by applying the design process. This process is an iterative process which uses a design brief, is informed by research and impacting factors and documents the development and presentation of a designed solution. The application of the design process within a Housing and Design project is expressed below. Depending on the particular project, the design process often contains further refinement and circulating between the ideations, investigations and challenges. Evaluation occurs along the way, especially during refinement and final evaluation of the project.

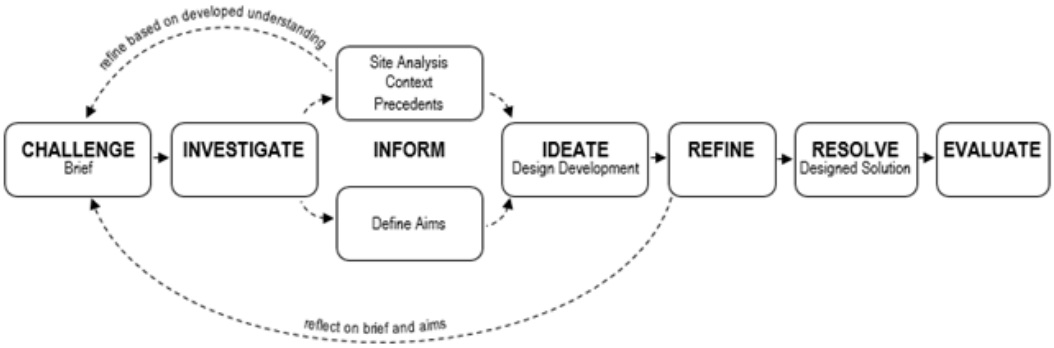


Diagram derived from Design Thinking: a non-linear process, Teo Yu Siang and Interaction Design Foundation used under CC BY NC SA 3.00

A DESIGN BRIEF RESPONSE IN HOUSING AND DESIGN

It is common for design brief responses to follow the structure provided below. This is based on the process and expectations of the final Design Folio. Providers may scaffold initial design challenges more heavily and provide more significant support in sections for learners as they develop their knowledge and skills of working through the design process.

BRIEF AND AIMS

The brief is a succinct statement of the project's purpose. This details the requirements of the project. The aims unpack the brief further by detailing other priorities of the designed solution. Together the brief and aims form the criteria by which the final design solution is evaluated.

CONTEXT

An analysis of the factors around the site which may impact on the design or present opportunities for the design to respond to.

SITE ANALYSIS

An analysis of the factors on the site which inform or may impact on the design.

PRECEDENTS

Investigation and documentation of related existing exemplary design, including relevant typologies, and historical factors which provide inspiration for the current design.

DESIGN DEVELOPMENT

Learners start with preliminary sketch designs and concept designs. These are then worked up further as sketches with annotations which relate back to the brief and aims. This documents the learner's design progression, reflection and refinement as well as application of size, scale and proportion.

FINAL DESIGN

This showcases the final design and will be presented in a format appropriate to the brief. Use of scale and appropriate measurements must be apparent. There needs to be evidence of critical and analytical decision making which justify final design decisions. Justification of decisions, relating to the brief and aims should be shown through succinct annotations.

EVALUATION

An evaluation reflecting on how well the brief and aims have been met by the final design, discussing and justifying any aims which have not been fully resolved.

REFERENCES

Learners must reference all images, information, ideas and words which they use that are not their own creation. Images include, but are not limited to: pictures; tables; graphs; charts; and graphics. When using CAD programs to present work, reference should be made to the program used and, if assets have been used which are not part of the program but have been created by others, these need to be referenced individually (e.g. furniture). Particular care needs to be taken to ensure in-text and reference lists are completed accurately. It is recommended that the Harvard style of referencing be used.

Course Requirements

Work submitted must be unique to this course and not submitted for assessment in any other course. Learners must complete the work requirements as listed.

Course Content

Unit 1. Design Communication – 20 hours

UNIT OUTLINE	In this Unit learners develop the necessary communication skills to undertake the design process and communicate underpinning research, design thinking and proposed solutions. Learners will investigate communication models relevant to particular design briefs and develop an understanding of techniques used to communicate all phases of the design process.

KEY KNOWLEDGE AND SKILLS	**Verbal:**
	• how to participate constructively in class discussions
	• presenting a design concept to an audience (small and class group).
	
	Visual:
	• how to document research and the design process
	• drawing methods to visualise ideas and concepts, including;
	  ○ confident freehand sketches and scale sketches
	  ○ floor plans, sections, elevations, site plans and set back diagrams
	• semiotics
	• sun angles and shadow diagrams
	• architectural graphic conventions for developmental and final plans
	• sample boards, 2D and 3D modelling and perspective images.
	
	Numerical:
	• measurement, area, scale (1:20, 1:50, 1:100, 1:200), proportion, ratio, gradients, solar geometry (for the purpose of sun angles and shadow diagrams) and graphically represented data.
	
	ICT:
	Including scanning, photo imaging, word processing, layout and formatting, digital presentations, email and internet searches.
	
	Research, analysis and synthesis:
	• critical information literacy skills
	• sourcing information from primary sources, e.g. client, expert, practitioner
	• locating local and Australian sources (and international sources where appropriate)
	• referencing of sources.

WORK REQUIREMENTS	1. **One** sketching development activity demonstrating scale sketching and development sketching to communicated concepts of elevations and sections, not to scale. 2. **One** electronic presentation communicating research information related to a content area from this course (e.g. elements and principles of design, passive solar design, interior design). **5-8 minutes** Learning from this Unit will also be integrated and assessed through responses to design briefs required in other Units.

Unit 2. Design and Systems Thinking - 20 hours	
UNIT OUTLINE	Learners become creative and critical thinkers by developing design thinking skills. In this Unit learners develop knowledge and confidence to critically analyse and creatively respond to challenges. Systems thinking involves the use of various techniques to study systems of many kinds. Learners develop an awareness of the systems within a design scenario, and the impact individual components can have on the functioning of these. Learners respond to design briefs, and critique needs or opportunities to develop their own design briefs. They will develop practical and analytical skills to visualise, generate and evaluate practical and creative solutions.

KEY KNOWLEDGE AND SKILLS	**Systems thinking**
	• systems thinking concepts
	• identification of related systems
	• relationship between systems and design thinking.
	
	Design briefs
	• unpacking and understanding given briefs
	• developing learner-initiated design briefs.
	
	Investigation of needs, precedents, context and other influences
	Analysis of site, users and community needs to integrate and respond to:
	• users current and projected needs:
	  ○ practical, psychological and sociological needs during lifecycle.
	• precedents
	  ○ historical and exemplary contemporary architectural responses.
	• social and economic influences
	• regulations pertaining to the site such as planning and building regulations.
	
	Formulation of aims
	• identification and wording of aims.
	
	Generation of ideas

	• using drawing methods suitable for the purposes of applying design thinking techniques to generate alternative ideas. This can include techniques such as brainstorming, concept sketches, bubble diagrams, mind maps • ideation indicating critical threads in process • integrating design information using 2D or 3D testing and analysis • ongoing reflection on problem, in relation to brief and aims. **Response to the brief** • production of a designed solution which addresses the brief, aims and needs. **Evaluation of designed solution** • evaluation of the solution against the stated brief, aims and needs. **Numerical:** • interpreting and applying graphically represented data in relation to the site analysis.
WORK REQUIREMENTS	**One** supported introductory design brief. This can focus on any aspect of Housing and Design content, but must introduce learners to the application of the design process as detailed in this course document. Being an introductory piece of work learners may be given significant support in the way of being given a starting brief, being assisted to research and integrate needs, aims, precedents and context within the work. Developing understanding of the design process, completing the design development work and final design presentation is to be the focus of the learners work. Learning from this Unit will also be integrated and assessed through responses to design briefs required in other Units.

Unit 3. Form and Function - 40 hours	
UNIT OUTLINE	In this Unit learners will learn to understand, select and apply the architectural design principles relating to both aesthetics and functional use of space. Aesthetics and functionality are key factors that contribute to the success of a design solution in meeting identified needs. Learners will learn to make informed decisions when designing spaces for both general and specific uses. Learners will develop an understanding of the specific design requirements for particular groups of people such as those with young children and those with universal access requirements.

KEY KNOWLEDGE AND SKILLS	**Aesthetics**
	• elements and principles of design
	  ○ elements: colour, form, tone, texture, shape, space, line, direction, size
	  ○ principles: contrast, scale/proportion, space, mass, balance, rhythm, unity/harmony, dominance, pattern.
	• aesthetics in contemporary Australian architecture
	• rationale of aesthetics.
	
	Structure
	• basic construction methods and structure of a building
	• functional, environmental and comfort factors of exterior, interior and related construction materials.Functional use of space
	• layout, flow, circulation and zoning
	• ergonomics and anthropometric data, including standard measurements
	• design of spaces for specific purposes including kitchens, bathrooms, home office/study spaces and outdoor living
	• design for groups with specific needs including children and universal design.
	
	Numerical:
	• application of measurement and area, ratio and gradients when applied to universal design.

WORK REQUIREMENTS	1. **One** design brief, following the design process as specified in this course document and focusing on interior design 2. **One** design brief following the design process as specified in this course document and focusing on universal design, including wheelchair accessibility.

Unit 4. Passive Solar Design and Sustainability 25 hours	
UNIT OUTLINE	This Unit focuses on the achievement of human comfort through the use of passive solar design principles. Learners will develop an understanding of the influence of climate on comfort and the impact design and material choices can have on energy consumption. This Unit also explores the broader considerations of sustainability related to housing, including energy generation, water use and material production.

KEY KNOWLEDGE AND SKILLS	• sources of energy for housing
	• active and passive energy sources for housing, including solar energy
	• passive solar design for cool temperate and hot humid tropical climates including a focus on the impact of:
	  ○ orientation
	  ▪ including the drawing of sun angles to show solar penetration.
	  ○ ventilation
	  ○ thermal mass
	  ○ insulation
	  ○ window placement and coverings
	  ▪ including calculation of window percentages in temperate regions.
	  ○ vegetation/landscaping.

	• impact of choice of housing materials, services, construction and design techniques on sustainability, energy consumption levels and the environment • embodied energy of building materials • comparative costs of domestic heating methods in Tasmania • social sustainability considerations. **Numerical:** • measurement, area, scale, solar geometry (for the purpose of drawing sun angles and shadow diagrams), percentages for the purpose of calculating window percentages in temperate design and graphically represented data.
WORK REQUIREMENTS	1. **One** design brief focusing on Hot Humid Design. It is suggested that the response takes a scale sketch and annotate approach, however this could follow the full design process as specified in this course document. 2. **One** design brief focusing on Cool Temperate Design. It is suggested that the response takes a scale sketch and annotate approach, however this could follow the full design process as specified in this course document. 3. **One** poster focusing on thermal performance of building materials. This can focus on specific building materials and explain relative thermal performance or take the form of a thermal analysis of a particular building or room. Either way, thermal performance needs to be explained and substantiated through the use of researched and presented figures.

Unit 5. Project Management 45 hours	
UNIT OUTLINE	Project management is the application of processes, methods, knowledge, skills and experience to achieve the project objectives. In this Unit, learners work collaboratively and as individuals to manage design projects. Learners take projects through to successful completion through planning, organising and managing time and resources effectively to create designed solutions.
KEY KNOWLEDGE AND SKILLS	**Individual** • project management techniques • planning and organising tools (e.g. graphic organisers such as timelines, Gantt charts as applied to a design process) • goal setting and action planning • self-management techniques • reviewing and critical evaluation. **Collaborative** • project management techniques • planning and organising tools (e.g. graphic organisers such as timelines, Gantt charts) • goal setting and action planning • self-management techniques • reviewing and critical evaluation • roles, responsibility and leadership • problem solving and negotiating skills to allow discussion, respect and appreciation for the ideas and opinions of others and formulation of a way forward to fulfil a design project.
WORK REQUIREMENTS	The majority of the work requirements for this Unit are integrated and assessed through responses to design briefs required in other units. Learners must complete work requirements which involve both individual and collaborative design work. 1. Externally assessed design folio. This Unit of study culminates in the project management of a design folio which is externally assessed. The design folio must be allocated 30 hours of in class time from this Unit and the requirements for this are available from the TASC website.

Work Requirements

Unit 1	Design Communication	**One** sketching development activity **One** electronic presentation
Unit 2	Design and Systems Thinking	**One** supported introductory design brief
Unit 3	Function and Aesthetics	Design Brief focusing on interior design Design Brief focusing on accessible design
Unit 4	Passive Solar Design and Sustainability	Design brief focusing on Tropical Design Design brief focusing on Temperate Design Poster focusing on thermal performance
Unit 5	Project Management	Externally assessed Design Folio

Assessment

Criterion-based assessment is a form of outcomes assessment that identifies the extent of learner achievement at an appropriate end-point of study. Although assessment – as part of the learning program – is continuous, much of it is formative, and is done to help learners identify what they need to do to attain the maximum benefit from their study of the course. Therefore, assessment for summative reporting to TASC will focus on what both teacher and learner understand to reflect end-point achievement.

The standard of achievement each learner attains on each criterion is recorded as a rating 'A', 'B', or 'C', according to the outcomes specified in the standards section of the course.

A 't' notation must be used where a learner demonstrates any achievement against a criterion less than the standard specified for the 'C' rating.

A 'z' notation is to be used where a learner provides no evidence of achievement at all.
Providers offering this course must participate in quality assurance processes specified by TASC to ensure provider validity and comparability of standards across all awards. For further details, see TASC's information on quality assurance processes, as well as on assessment.

Internal assessment of all criteria will be made by the provider. Providers will report the learner's rating for each criterion to TASC.

TASC will supervise the external assessment of designated criteria which will be indicated by an asterisk (*). The ratings obtained from the external assessments will be used in addition to internal ratings from the provider to determine the final award.

Quality Assurance Process

The following processes will be facilitated by TASC to ensure there is:

- a match between the standards of achievement specified in the course and the skills and knowledge demonstrated by learners
- community confidence in the integrity and meaning of the qualification.

TASC gives course providers feedback about any systematic differences in the relationship of their internal and external assessments and, where appropriate, seeks further evidence through audit and requires corrective action in the future.

External Assessment Requirements

The external assessment for this course will comprise:

- a two hour written examination assessing criteria: 3 and 4
- the presentation of a design folio assessing criteria: 6, 7 and 8

For further information see the current external assessment specifications and guidelines for this course available in the Supporting Documents below.

Criteria

The assessment for Housing and Design Level 3, will be based on the degree to which the learner can:

1. Communicate ideas and information using a range of techniques
2. Implement self-management strategies to complete individual and team projects
3. Analyse and apply features and principles which contribute to environmental sustainability within design decisions*
4. Apply architectural design principles relating to functional use of space*
5. Apply architectural design principles relating to aesthetics
6. Locate and analyse information about user needs and influences in design projects*
7. Use and document the design process*
8. Generate design solutions which respond to the brief and identified aims.*

* = denotes criteria that are both internally and externally assessed

Standards

Criterion 1: Communicate ideas and information using a range of techniques

The learner:

Rating A	Rating B	Rating C
clearly synthesises and communicates ideas and information using an appropriate and diverse range of techniques	synthesises and communicates ideas and information using an appropriate range of techniques	structures and communicate ideas and information using a limited range of techniques
competently selects and combines appropriate forms, styles and conventions which are appropriate in relation to the context and purpose	selects and combines forms, styles and conventions which are appropriate in relation to the context and purpose	selects forms, styles and conventions which are appropriate in relation to the purpose of the communication
creates appropriate and clear graphs and tables to communicate detailed housing data/ information	creates appropriate and clear graphs and tables to communicate housing data/information	creates simple graphs and tables to communicate housing data/information
revises and reflects upon communication to check for clarity, detail, accuracy and effectiveness, and makes adjustments.	revises communication and checks for clarity, detail, accuracy and effectiveness, and makes adjustments.	checks communication for clarity, detail and accuracy, and makes adjustments based on feedback.

*Techniques may include sketching, annotating, drawing to scale, writing, graphically, presenting orally or electronically

Criterion 2: Implement self-management strategies to complete individual and team projects

The learner:

Rating A	Rating B	Rating C
efficiently and effectively communicates within teams, collaboratively formulates team goals and can clearly articulate their role in achieving them	effectively communicates within teams, contributes to the formulation of team goals and can clearly articulate their role in achieving them	communicates within teams, identifies team goals and can articulate their role in achieving them
effectively applies individual and collective responsibility when working in teams through ongoing monitoring, reviewing and recording progress	effectively applies individual and collective responsibility when working in teams by monitoring, reviewing and recording progress	applies individual and collective responsibility when working in teams by monitoring, reviewing and recording progress
uses a wide range of planning and self-management strategies which consistently enables the effective completion of tasks within agreed time frames	uses a range of planning and self-management strategies which enables the effective completion of tasks within agreed time frames	uses limited planning and self-management strategies to facilitate successful completion of key elements of tasks within agreed time frames
reflects, orally and in writing, upon planning timelines and makes detailed modifications	reflects, orally and in writing, upon planning timelines and makes modifications	reflects, orally and in writing, upon planning timelines and makes minor modifications
utilises appropriate resources and effectively addresses barriers to achieve individual or team goals	utilises appropriate resources to address barriers to achieve individual or team goals	utilises appropriate resources and addresses key barriers to achieve individual or team goals
identifies and addresses issues which affect achievement of team goals, and effectively adopts appropriate leadership roles when required.	identifies and addresses issues which affect achievement of team goals, and adopts appropriate leadership roles when required.	identifies and addresses issues which affect achievement of team goals.

Criterion 3: Analyse and apply features and principles which contribute to environmental sustainability within design decisions

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
develops designs that successfully contribute to environmental sustainability and applies, describes and justifies appropriate features and principles in a detailed and informed manner	develops designs that successfully contribute to environmental sustainability and applies, describes and justifies most of the appropriate features and principles in a detailed and informed manner	develops designs which includes key features and principles*that contribute to environmental sustainability and applies, describes and justifies them
evaluates the environmental impact of particular housing and design decisions	analyses the environmental impact of particular housing and design decisions	identifies and discusses the environmental impacts of particular housing and design decisions
identifies, analyses and, where possible, resolves competing factors which impact on the environment when designing solutions.	identifies and analyses competing factors which impact on the environment and addresses these factors when designing solutions.	identifies competing factors which impact on the environment and address a limited

		range of these factors when designing solutions.

*key features and principles must include orientation (including drawing sun angle diagrams), window type and placement (including window area percentage calculation), thermal mass, insulation, ventilation and landscaping

Criterion 4: Apply architectural design principles relating to functional use of space

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
develops design solutions that effectively enable functional use of space and relates directly to the range of identified needs of user	develops design solutions that effectively enable functional use of space and relates to the identified needs of users	develops design solutions that enable functional use of space and relates to the key identified needs of users
– when developing design solutions – identifies and comprehensively justifies all critical design decisions relating to functional use of space considerations	– when developing design solutions – identifies and justifies critical design decisions relating to functional use of space considerations	– when developing design solutions – identifies and gives limited justification of design decisions relating to key functional use of space considerations
evaluates and refines a wide range of designs to appropriately respond to ergonomic, circulation and spatial relationships, including zoning.	analyses and refines a range of designs to appropriately respond to ergonomic, circulation and spatial relationships, including zoning.	refines designs to respond to the identified key ergonomic, circulation and spatial relationships, including zoning.

*this must include a range of users, and must include universal design (incorporating wheelchair accessibility) and application of appropriate measurements, including accessible ramp gradients and calculations of ramp length based on these.

Criterion 5: Apply architectural design principles relating to aesthetics

The learner:

Rating A	Rating B	Rating C
provides clear annotations which reflect a broad and accurate understanding of the elements and principles of design by providing sound justification of all aesthetic design decisions	provides annotations which reflect a sound understanding of the elements and some principles of design by providing clear justification of key aesthetic design decisions	provides annotations which reflect an understanding of the elements and some principles of design by justifying key aesthetic design decisions
evaluates the use and effect of elements and principles in a range of architectural settings, identifying interrelationships between individual elements and principles	analyses the use and effect of elements and principles of design in a range of architectural settings	identifies and discusses the use of elements and principles of design in architectural settings
explores, analyses and selectively uses an appropriate range of aesthetic elements and principles of design to create the specified visual impact.	explores, analyses and uses aesthetic elements and principles of design to create a specific visual impact.	explores and uses a range of aesthetic elements and principles of design to create a specific visual impact.

Criterion 6: Locate and analyse information about user needs and influences in design projects

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
identifies, locates and selects relevant, current information about briefs from a broad range of sources and appropriately uses this to inform effective design decisions which are reflected in the design solution	identifies, locates and selects relevant, current information relating to briefs from a broad range of sources and uses this to inform design decisions which are reflected in the design solution	locates and selects relevant, current information relating to briefs from a range of sources, and uses this to inform design decisions which are reflected in the design solution
evaluates impact of • user needs • precedents • site analysis • context on design projects	analyses impact of • user needs • precedents • site analysis • context on design projects	outlines impact of • user needs • precedents • site analysis • context on design projects
clearly and insightfully shows the links between research	clearly shows the links between research and the	shows the link between research and the

and the design through appropriate and effective documentation and communication strategies	design through appropriate documentation and communication strategies	design through documentation and communication strategies
clearly differentiates the information, images, ideas and words of others from the learner's own	clearly differentiates the information, images, ideas and words of others from the learner's own	differentiates the information, images, ideas and words of others from the learner's own
referencing conventions and methodologies are followed with a high degree of accuracy	referencing conventions and methodologies are followed correctly	referencing conventions and methodologies are generally followed correctly
creates appropriate, well structured reference lists/bibliographies.	creates appropriate, structured reference lists/bibliographies.	creates appropriate reference lists/bibliographies.

Criterion 7: Use and document the design process

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
explores a progression of ideas and evaluates them by reflecting, verbally and in writing, on the design brief, aims and related design considerations	explores a progression of ideas and analyses them by reflecting, verbally and in writing, on the design brief, aims and related design considerations	explores a progression of ideas and assesses them by reflecting, verbally and in writing, on the design brief, aims and most related design considerations
sequences and clearly presents graphics and annotations to clearly show the problem solving process and all pivotal points in design decisions	sequences and presents graphics and annotations to clearly show the problem solving process and some pivotal points in design decisions	sequences and presents graphics and annotations to clearly show the problem solving process used
uses scale accurately, appropriately and effectively to test and refine design ideas	uses scale accurately and appropriately to test and refine design ideas	uses scale accurately to test and improve design ideas
provides clear evidence within the design process that the design has been consistently and effectively refined to address issues identified via feedback and ongoing reflective thinking.	provides clear evidence within the design process that the design has been refined to address issues identified via feedback and ongoing reflective thinking.	provides evidence within the design process that the design has included refinements based on feedback and reflective thinking.

Criterion 8: Generate design solutions which respond to the brief and identified aims.

This criterion is both internally and externally assessed.

The learner:

Rating A	Rating B	Rating C
addresses all aspects of the brief and aims within the final designs in an effective manner and with a high degree of resolution	effectively addresses all aspects of the brief and aims within the final designs	appropriately addresses key aspects of the brief and aims within the final designs
integrates all relevant design information into the final design	integrates relevant design information into the final design	integrates design information into the final design
fully and effectively annotates final design to justify all design decisions	annotates final design to justify all design decisions	annotates final design to justify key design decisions
selects and accurately uses a broad range of communication conventions and styles to present an effective final design.	selects and accurately uses an appropriate range of communication conventions and styles to present the final design.	selects from range of appropriate communication conventions and styles, and uses these to present the final design.

Qualifications Available

Housing and Design Level 3 (with the award of):

EXCEPTIONAL ACHIEVEMENT
HIGH ACHIEVEMENT
COMMENDABLE ACHIEVEMENT
SATISFACTORY ACHIEVEMENT
PRELIMINARY ACHIEVEMENT

Award Requirements

The final award will be determined by the Office of Tasmanian Assessment, Standards and Certification from 13 ratings (8 from the internal assessment, 5 from external assessment).

The minimum requirements for an award in Housing and Design Level 3 are as follows:

EXCEPTIONAL ACHIEVEMENT (EA)
10 'A', 3 'B' ratings (4 'A', 1 'B' from external assessment).

HIGH ACHIEVEMENT (HA)
5 'A', 5 'B', 3 'C' ratings (2 'A', 2 'B', 1 'C' from external assessment).

COMMENDABLE ACHIEVEMENT (CA)
7 'B', 5 'C' ratings (2 'B', 2 'C' from external assessment).

SATISFACTORY ACHIEVEMENT (SA)
11 'C' ratings (3 'C' from external assessment).

PRELIMINARY ACHIEVEMENT (PA)
6 'C' ratings.

A learner who otherwise achieves the ratings for a CA (Commendable Achievement) or SA (Satisfactory Achievement) award but who fails to show any evidence of achievement in one or more criteria ('z' notation) will be issued with a PA (Preliminary Achievement) award.

Course Evaluation

The Department of Education's Curriculum Services will develop and regularly revise the curriculum. This evaluation will be informed by the experience of the course's implementation, delivery and assessment.In addition, stakeholders may request Curriculum Services to review a particular aspect of an accredited course.

Requests for amendments to an accredited course will be forwarded by Curriculum Services to the Office of TASC for formal consideration.

Such requests for amendment will be considered in terms of the likely improvements to the outcomes for learners, possible consequences for delivery and assessment of the course, and alignment with Australian Curriculum materials.

A course is formally analysed prior to the expiry of its accreditation as part of the process to develop specifications to guide the development of any replacement course.

Course Developer

The Department of Education acknowledges the significant leadership of Melinda Williams in the development of this course.

Expectations Defined By National Standards

There are no statements of national standards relevant to this course.

Accreditation

The accreditation period for this course has been renewed from 1 January 2022 until 31 December 2024.

During the accreditation period required amendments can be considered via established processes.

Should outcomes of the Years 9-12 Review process find this course unsuitable for inclusion in the Tasmanian senior secondary curriculum, its accreditation may be cancelled. Any such cancellation would not occur during an academic year.

Version History

Version 1 – Accredited on 19 May 2017 for use from 1 January 2018. This course replaces Housing and Design (HDS315113) that expired on 31 December 2017.

Accreditation renewed on 22 November 2018 for the period 1 January 2019 until 31 December 2021.

Version 1.a - Renewal of Accreditation on 14 July 2021 for the period 31 December 2021 until 31 December 2024, without amendments.

Appendix 1

Term	Explanation
abstraction	the process of taking away or removing characteristics from something in order to reduce it to a set of essential characteristics
active	when used to refer to energy generation, active means the energy must change form to be used and energy is lost in this process e.g. burning wood
aesthetic	refers to those principles governing the nature and appreciation of beauty in design
aims	the objectives or goals
analyse	identify components and the relationship between them; draw out and relate implications
annotate	to add brief notes to sketch or design giving explanation or comment
anthropometry	the measurement of the human individual, these measurements are used to inform standard measurements in design
appraise	assess the value or quality of appreciate make a judgement about the value of
apply	use or employ knowledge and skills in a particular situation
architecture	the art or practice of designing buildings
assess	make a judgement about, to rate, weigh up, to form an opinion
asymmetry	a way of organising the parts of a design so that one side differs from the other without destroying the overall balance and harmony; also called informal balance
balance	an even distribution of visual weight
basic	essential or elementary
bubble diagram	simple architectural diagrams where bubbles are used to represent different spaces
built environment	the human constructed surroundings that provide the setting for human activity
circulation	the way people move through and interact with a building or space
clear	easy to understand, fully intelligible, without ambiguity; explicit
client	a person, or group of people, for whom a design is being developed
coherent	orderly, logical and internally consistent relation of parts
collaborative	to work with another person or group in order to achieve or do
communicate	convey information about, clearly reveal or make known
compare	estimate, measure or note how things are similar or dissimilar
concept	an abstract idea, the start of a design
concept sketch	freehand drawings that are used by designers as a quick and simple way of exploring initial ideas for designs
conflict resolution	a way for two or more people to find a constructive solution to a difference of opinion
consider	formed after careful thought
context	the setting for a design, what is surrounding the site
contrast	the arrangement of opposite elements (e.g. light vs. dark colours, rough vs. smooth textures, large vs. small shapes) in a design so as to create visual interest
critically	add a degree or level of accuracy, depth, knowledge and understanding, logic, questioning, reflection and quality to analysis/evaluation
describe	recount, comment on, and provide an account of characteristics or features
design	a solution, the process of creating a solution
design brief	a written document for a design project specifying parameters
detailed	meticulous, specific, precise

develop	construct, elaborate or expand on an opinion or idea
direction	an element of design, all lines have direction - Horizontal, Vertical or Oblique
discuss	talk or write about a topic, taking into account different issues and ideas
document	to create a record of (something) through writing or record keeping
elements and principles of design	components that comprise a design, such as line, colour, shape, texture, form and space
elevation	a technical drawing of a particular side of a building
embodied energy	energy consumed by all of the processes associated with the production of a building
emphasis	a principle of design that refers to a way of combining elements to stress the differences between those elements
enterprise	a project or undertaking
environmental	relating to the natural world and the impact of human activity on its condition
ergonomic	designed for efficiency of movement and human comfort
evaluate	appraise, measure, examine and judge the merit, significance or value of something
exemplary	an outstanding example of practice
explain	provide additional information that demonstrates understanding and reasoning; present a meaning with clarity, precision, completeness, and with due regard to the order of statements in the explanation
floor plan	a technical drawing showing a visual of a room or building scaled and viewed from above
flow	this refers to the flow of foot traffic through and within a space
form	the visible shape or configuration of something
function	the purpose for which something is designed or exists
graphic	a drawing or picture used to illustrate
graphic organisers	tools to help to help people to organize ideas and communicate more effectively
harmony	harmony is the combination or adaptation of parts, elements or related things, so as to form a consistent and orderly whole
hierarchy	a principle of design which refers to the order in which the elements within a composition are viewed by the eye
identify	name, list and establish or indicate who or what something is
integrate	combine one thing with another to form a whole
interpret	explain the meaning of information or actions
innovative	introducing new ideas or being original and creative in thinking
investigate	carry out an inquiry to discover and examine facts
justify	support a conclusion or design decision
juxtaposition	to place side by side, especially for comparison or contrast
line	an element of design referring to linear marks which draw they eye along
mass	the visual weight or actual weight of an object
mind map	a diagram used to visually organize information
negotiation	communication between two or more people which is intended to reach a beneficial outcome
organise	systematically order and arrange
outline	give the main features or aspects of

passive	when used to refer to energy generation, passive means the energy is used in its' original format e.g. breezes to cool a house down
passive solar design	using passive energy to cool or warm a home
pattern	a discernible regularity in the world or in a manmade design
perspective	system of representing three-dimensional objects on a two-dimensional surface, giving the illusion of depth in space. Linear perspective deals with drawing, and atmospheric perspective attempts to use colour and value changes to get the effect of distance
precedent	using previous designs to inform another, these could be historical or exemplary designs
primary source	first hand testimony or direct evidence e.g. going to a primary source for a precedent would be visiting the design yourself
problem	a question proposed for solution
proportion	the relationship between a part in comparative relation to a whole
psychological	related to the mental wellbeing of people
range	a number of different things of the same general type; breadth
rationale	a set of reasons or a logical basis for an action
relevant	applicable and pertinent
repetition	repeating something e.g. part of a design in a pattern
research	investigation into and study of materials and sources
resolved	completed with a level of refinement and clarity of purpose/vision
rhythm	rhythm in design is created by the repetition of a design element
sample board	a board, manual or digital, used to show a style of a particular design. Often used to show interior design finishes or themes.
scaler	educing or enlarging an object whist maintain proportion and relationship of objects
scale sketch	sketching whist maintaining a representative scale. Scale sketches are often used in situations where relative size important but a full blown technical drawing is not required
section	a technical drawing which shows a building as if it has been cut through, these views show interior features
select	choose in preference to another or others
semiotics	the use of signs and symbols to make meaning
set back	the distance by which a building or part of a building is set back from the property line
shadow diagram	a drawing which shows the impact a building's shadow may have on the surroundings
site plan	a site plan is a document that precisely maps out the area of the building site to scale. This is often used to show the position of a building relative to the whole site
social	relating to society
sociological	dealing with social questions or problems, especially focusing on cultural and environmental factors
solar geometry	the position of the sun relative to the earth. Solar geometry is important in passive solar design and in creating shadow diagrams
solution	the means of solving a problem, a design solution is a proposed solution to a design brief
space	the extent of area in two or three dimensions
summarise	express, concisely, the relevant details
sustainable	able to be maintained at a certain rate or level
sun angle	the angle of the sun in relation to the earth at a particular point in time. This is used in passive solar design.
symmetry	the quality of being made up of exactly similar parts facing each other or around an axis
systems thinking	the use of various techniques to study systems of many kinds
synthesise	to combine so as to form a new, complex product

technological	relating to or using technology
temperate	relating to or denoting a region or climate characterised by mild temperatures
temperature	a measure of warmth or coldness
texture	element of design that refers to the perceived surface quality or “feel” of an object—its roughness, smoothness, softness, etc. this can refer to the actual physical texture of a surface or the illusion of texture
time management	management and organisation of available time and tasks to be completed
tropical	relating to or denoting a region within the tropics, the climate is characterized by hot, humid temperatures
tone	the lightness or darkness of a colour (value)
typologies	classification of (usually physical) characteristics commonly found in buildings and urban places
universal design	buildings, products and environments that are inherently accessible to all, including older people, people without disabilities, and people with disabilities
zoning	the ability to separate spaces for particular purposes e.g. heating

Line Of Sight

Learning Outcome	Criteria / Elements	Units / Work Requirements (WR)
identify, analyse and apply features which contribute to environmentally sustainable design and support human comfort	C3 E1 E2 E3	Unit 4 WR 1 , 2 & 3, Unit 5 WR 1
investigate, analyse and integrate information about site, precedents, client needs and other relevant influences into the design response through application of the design process	C6 E1 E2 E3 E4 E5 E6	Unit 2 WR 1, Unit 3 WR 1 + 2, Unit 4 WR 1 + 2, Unit 5 WR 1
provide active and positive contributions to individual and collaborative design challenges	C2 E1 E2 E5, C8 E1 E2 E3 E4	Unit 2 WR1, Unit 3 WR 1, Unit 5 WR 1
apply research, analysis and evaluation skills to inform a range of design projects	C6 E1 E2 E3 E4 E5 E6	Unit 1 WR 2, Unit 2 WR 1, Unit 3 WR 1 + 2, Unit 4 WR 1 + 2, Unit 5 WR 1
use architectural principles relating to use of space and structure in creating designed solutions	C4 E1 E2 E3	Unit 3 WR 1 + 2, Unit 4 WR 1 + 2, Unit 5 WR 1
accurately apply a range of numeracy skills related to planning, including use of measurement and scale, proportion and graphically represented data, calculation of area, ratios and gradients and application of solar geometry	C1 E1 E3, C3 E1, C4 E1, C7 E3	Unit 1 WR 1, Unit 2 WR 1, Unit 3 WR 1 + 2, Unit 4 WR 1 + 2, Unit 5 WR 1
generate and communicate ideas, concepts and design solutions using a range of communication strategies and conventions	C1 E1 E2 E3, C7 E1 E2 E3 E4, C8 E1 E2 E3 E4	Unit 1 WR 1 + 2 , Unit 2 WR 1, Unit 3 WR 1 + 2, Unit 4 WR 1 , 2 + 3, Unit 5 WR 1
manage design projects by applying appropriate planning, time management and reflective thinking strategies	C2 E1 E2 E3 E4 E5 E6	Unit 3 WR 1 + 2, Unit 4 WR 1 + 2, Unit 5 WR 1
use architectural principles relating to use of aesthetics in creating designed solutions	C5 E1 E2 E3	Unit 3 WR 1

Supporting documents including external assessment material

- HDS315113 Assessment Report 2016.pdf (2018-02-07 01:24pm AEDT)
- HDS315113 Exam Paper 2016.pdf (2018-02-07 01:26pm AEDT)
- HDS315113 Exam Paper 2017.pdf (2018-02-07 01:26pm AEDT)
- HDS315113 Assessment Report 2017.pdf (2018-03-05 11:59am AEDT)
- HDS315118 Housing and Design TASC Exam Paper 2018.pdf (2018-12-09 09:53am AEDT)
- HDS315118 - Assessment Panel Report 2018.pdf (2019-02-01 11:31am AEDT)
- HDS315118 Housing and Design TASC Exam Paper 2019.pdf (2019-11-21 10:43am AEDT)
- HDS315118 Assessment Report 2019.pdf (2020-01-24 02:52pm AEDT)
- TASC Student Folio Declaration form Information Sheet.pdf (2020-09-10 07:08pm AEST)
- HDS315118 Information Sheet 2020 - 2022.pdf (2020-10-07 03:58pm AEDT)
- HDS315118 Housing and Design TASC Exam Paper and Answer Sheets 2020.pdf (2020-11-13 09:29pm AEDT)
- HDS315118 Assessment Report 2020.pdf (2021-01-13 10:34am AEDT)
- 2021 HDS315118 TASC Student Folio Declaration Form.pdf (2021-02-15 11:46am AEDT)
- HDS315118 Exeternal Assessment Specifications and Folio Guidelines .pdf (2021-02-22 02:09pm AEDT)
- HDS315118 Housing and Design TASC Exam Paper 2021.pdf (2021-11-12 08:59am AEDT)

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