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| **Criteria** | **A** | **B** | **C** | **D** | **E** |
| **Folio**iSTEM engineering design process**ST5-3** | Extensively utilises the iSTEM engineering design process to effectively tackle a bushfire management-related real-world problem. | Thoroughly employs the iSTEM engineering design process in addressing a real-world bushfire management problem. | Implements most aspects of the iSTEM engineering design process to solve a real-world bushfire management issue. | Partially applies the iSTEM engineering design process to a bushfire management-related problem. | Lacks significant components of the iSTEM engineering design process in addressing the problem. |
| **Folio**Ideation and sketching**ST5-2** | Exhibits strong critical thinking in ideation with detailed, labelled, and annotated sketches for each challenge. | Shows clear ideation ability with multiple labelled sketches suitable for the challenges. | Adequately ideates solutions with sketches relevant to the challenges. | Presents basic ideation with simple sketches for some challenge aspects. | Offers basic solution ideas; sketches are lacking or not fully developed. |
| **Folio**Evaluation **ST5-1** | Demonstrates in-depth reflection and critical evaluation throughout the design process, including insightful analysis of successes and areas for improvement. | Shows thorough reflection and evaluation of the design process, with clear identification of strengths and weaknesses. | Provides a solid reflection and evaluation of the design process, highlighting key aspects and some areas for improvement. | Offers basic reflection and evaluation of the design process but may lack depth or detail. | Sketches are missing or incomplete. |
| **Pitch** Organisation and structure**ST5-2** | Pitch is exceptionally organised and engaging, effectively captivating the audience with a strong, memorable argument. | Pitch is coherent, structured, and leaves a lasting impression on the audience. | Pitch maintains audience engagement throughout and is relatively well structured. | Pitch is somewhat memorable, though the core message lacks clarity. | Pitch lacks sufficient organisation and clarity, offering minimal reflection on the design process. |
| **Pitch**Design solution**ST5-6** | Demonstrates a clear and meaningful understanding of how the design solution or idea addresses the problem selected. | The link between design problem and solution is explained. The design solution structure is identified and described. | The design solution is described, and some features are identified. | The design solution is described. | The design solution is identified. |
| **Pitch**Pitch deck**ST5-6** | Expertly crafted pitch deck that creatively and effectively communicates the design solution with detailed sketches, graphics, and animations, enhancing understanding and engagement. | Well-designed pitch deck that clearly communicates the design solution with comprehensive visuals and annotations. | Competently assembled pitch deck that conveys the design solution with clear visuals and some descriptive elements. | Basic pitch deck that presents the design solution with minimal visuals and lacks detailed explanation. | Incomplete or rudimentary pitch deck with insufficient visuals and lack of clarity in presenting the design solution. |
| **Prototype** Design solution**ST5-3** | Develops an exceptionally innovative prototype that outstandingly addresses the identified needs in the design scenario, demonstrating advanced problem-solving and creativity. | Constructs a highly innovative prototype that effectively meets the identified needs in the design scenario, showing notable ingenuity and practicality. | Builds a prototype that adequately addresses the identified needs in the design scenario, displaying a good level of innovation and functionality. | Creates a basic prototype that somewhat addresses the identified needs in the design scenario but shows limited innovation. | Prototype is either incomplete or fails to innovatively address the needs identified in the design scenario. |
| **Prototype** Construction and material use**ST5-3** | Exceptionally crafted prototype demonstrating superior construction quality, with optimal and innovative use of materials and equipment. | Very well-constructed prototype showing high-quality craftsmanship, with effective and thoughtful use of materials and equipment. | Adequately constructed prototype with good use of materials and equipment, meeting most project requirements. | Prototype shows basic construction quality and standard use of materials and equipment, with some shortcomings. | Prototype is poorly constructed with minimal or inappropriate use of materials and equipment. |
| **Prototype**Effective groupwork**ST5-4** | Communicates opinions and ideas respectfully, succinctly, and logically. Encourages others to share problems and solutions and gives effective feedback. | Communicates opinions and ideas respectfully. Encourages others to share problems and solutions and gives feedback. | Respectfully expresses opinions and ideas.Asks others to share problems and solutions. | Expresses opinions and ideas. | Expresses limited opinions or ideas. |