

Criteria	A	B	C	D	E
<b>Folio</b> Define the problem, identify constraints, brainstorm solutions  <b>TE4-1DP, TE4-2DP</b>	Explicitly communicates synthesised, accurate and relevant constraints, success criteria, ideas and solutions.	Communicates clear and accurate constraints, success criteria, ideas and possible solutions.	Communicates constraints, success criteria, ideas and possible solutions.	Defines part of the problem, identifies one constraint, records ideas for one part of the task.	Identifies a part of the problem.
<b>Folio</b> Fire-Ed Up context - Australian Fire Danger Rating System (AFDRS) and Fire Behaviour Index (FBI)  <b>TE4-1DP, TE4-2DP</b>	Expertly applies the contextual knowledge of the AFDRS and FBI into the design solutions that could produce more accurate fire danger predictions.	Competently applies the contextual knowledge of the AFDRS and FBI into the design solutions that could produce more accurate fire danger predictions.	Applies the contextual knowledge of the AFDRS and FBI into the design solutions that could produce more accurate fire danger predictions.	Applies the contextual knowledge to either AFDRS or FBI into the design solutions.	Can identify aspects of AFDRS or FBI in design solutions.
<b>Folio</b> Sketching design solutions  <b>TE4-1DP, TE4-2DP</b>	Annotates multiple labelled design solution sketches that demonstrate methodical progression of the planned solution.	Annotates multiple labelled design solution sketches that are appropriate for the planned solution.	Design solution sketches are labelled.	Design solution sketches are missing labels and annotations.	Sketches are incomplete.
<b>Prototype</b> Micro Python Coding  <b>TE4-4DP</b>	Creates and uploads micro-python code into the Fire-Ed Up Raspberry Pi units.  Demonstrates desk-checking or other strategies to test logic of algorithms.	Modifies and uploads micro-python code into the Fire-Ed Up Raspberry Pi units.  Demonstrates desk-checking or other strategies to test logic of algorithms.	Uses and refines functional micro-python code.  Demonstrates some understanding of algorithms.	Uses micro-python code.  Can identify an algorithm.	Uses micro-python code.

<p><b>Prototype</b> Design and construction</p> <p><b>TE4-2DP</b></p>	<p>Design meets prototype criteria with additional functions in insightful ways.</p> <p>Extensive evidence of how prototype was created, discussing lessons learned from previous stages.</p>	<p>Design meets prototype criteria with an additional function.</p> <p>Prototype is well constructed.</p> <p>Detailed evidence of how prototype was created, explaining lessons learned from previous stages.</p>	<p>Design meets prototype criteria.</p> <p>Prototype is constructed with care but may be missing details.</p> <p>Satisfactory evidence of how prototype was created, describing a lesson learned from a previous stage.</p>	<p>Design meets some prototype criteria.</p> <p>The prototype is poorly finished or missing details.</p> <p>Limited evidence of how prototype was created.</p>	<p>The prototype is incomplete.</p>
<p>Evaluates and communicates design solution</p> <p><b>TE4-1DP, TE4-2DP, TE4-4DP</b></p>	<p>Documents the use of a systematic evaluation process and explains the significance of observations.</p> <p>Final design solution meeting all set success criteria.</p>	<p>Documents the use of a criteria-based evaluation process.</p> <p>Final design solution meeting most set success criteria.</p>	<p>Demonstrates use of an evaluation process.</p> <p>Final design solution meeting some set success criteria.</p>	<p>Documents some of the evaluation criteria and shows the final design solution.</p>	<p>Draws a final design solution but no clear documentation of evaluation.</p>
<p>Demonstrates understanding of Fire related careers and pathways</p> <p><b>TE4-10TS</b></p>	<p>Explains how people in fire-based industries can use STEM and contribute to making society safer.</p> <p>Can identify a number of fire-based roles, skills needed and training and courses available.</p>	<p>Identify how people in fire-based industries can use STEM and contribute to making society safer.</p> <p>Can identify some fire-based roles, skills needed and training and courses available.</p>	<p>Identify how people in fire-based industries can use STEM.</p> <p>Can identify a fire-based role, skills needed and training and courses available.</p>	<p>Can identify a fire-based role, skills needed and training and courses available.</p>	<p>Can identify a fire-based role.</p>