

Please read the instructions printed at the end of this form. **One** of these sheets, suitably completed, should be attached to the assessed work of **each** candidate.

<b>Unit Title</b>	<b>10 Numerical modeling using spreadsheets</b>	<b>Unit Code</b>	<b>G049</b>	<b>Session</b>	Jan / June	<b>Year</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>Centre Name</b>						<b>Centre Number</b>			
<b>Candidate Name</b>						<b>Candidate Number</b>			

**Evidence: Your evidence needs to include:** **a:** [AO3] a design specification that analyses a suitable problem and describes how you will solve it by numerical modelling; **b:** [AO1] evidence of implementing your solution using suitable entry aids and processing facilities; **c:** [AO3] a record of how you overcame your problems; **d:** [AO4] a specification for testing your spreadsheet, and evidence of the results of these tests; **e:** [AO2] technical documentation that explains how your spreadsheet works, and user documentation that explains how it is used; **f:** [AO4] an evaluation of the effectiveness of your solution and your personal performance.

Criteria			Teacher Comment	Page No.		
<b>a.1:</b> You produce a design specification that takes account of user requirements;  <p style="text-align: right;"><b>[0 1 2]</b></p>	<b>a.2:</b> you produce a design specification that is complete and details sources of data, numerical processing required, user aids and how output is to be presented;  <p style="text-align: right;"><b>[3 4 5]</b></p>	<b>a.3:</b> you produce a design specification that provides a clear, precise and complete description of a numerical modelling solution to a problem.  <p style="text-align: right;"><b>[6 7]</b></p>	<table border="1"> <tr><td><b>Mark</b></td></tr> <tr><td> </td></tr> </table>	<b>Mark</b>		
<b>Mark</b>						
<b>b.1:</b> You produce a numerical modelling spreadsheet solution which can be implemented and includes data entry, numerical processing and output;  <p style="text-align: right;"><b>[0 1 2 3 4 5]</b></p>	<b>b.2:</b> you produce a solution that effectively includes specialist numerical processing functions and complex spreadsheet facilities;  <p style="text-align: right;"><b>[6 7 8 9 10]</b></p>	<b>b.3:</b> you implement a complete solution to a complex problem that consistently shows effective use of complex spreadsheet facilities for data entry, numerical processing and presentation of output.  <p style="text-align: right;"><b>[11 12 13 14 15]</b></p>	<table border="1"> <tr><td><b>Mark</b></td></tr> <tr><td> </td></tr> </table>	<b>Mark</b>		
<b>Mark</b>						
<b>c.1:</b> You produce a record of the strategy used to implement the spreadsheet solution, including methods used to overcome problems;  <p style="text-align: right;"><b>[0 1 2]</b></p>	<b>c.2:</b> you show that the solutions used to overcome problems show an understanding of both the user's needs and the effective use of spreadsheet facilities;  <p style="text-align: right;"><b>[3 4]</b></p>	<b>c.3:</b> you use methodical, analytical and critical approaches to overcome problems during implementation; your methods will fully address the user's needs and make effective use of spreadsheet facilities.  <p style="text-align: right;"><b>[5]</b></p>	<table border="1"> <tr><td><b>Mark</b></td></tr> <tr><td> </td></tr> </table>	<b>Mark</b>		
<b>Mark</b>						
<b>d.1:</b> You test the spreadsheet to check that it meets the requirements of the design specification;  <p style="text-align: right;"><b>[0 1 2]</b></p>	<b>d.2:</b> you provide evidence that a testing specification is followed that adequately tests the functionality of the spreadsheet solution;  <p style="text-align: right;"><b>[3 4]</b></p>	<b>d.3:</b> you provide a detailed test specification which tests all aspects of the solution with a full range of acceptable and unacceptable input, expected output, and any associated error messages.  <p style="text-align: right;"><b>[5 6 7]</b></p>	<table border="1"> <tr><td><b>Mark</b></td></tr> <tr><td> </td></tr> </table>	<b>Mark</b>		
<b>Mark</b>						

Criteria					Teacher Comment			Page No.
<p><b>e.1:</b> You produce clear technical and user documentation that identifies numerical processing methods used, includes copies of menus and screens used and provides expected outputs;</p> <p style="text-align: right;"><b>[0 1 2 3]</b></p>	<p><b>e.2:</b> you produce technical and user documentation which makes good use of graphic images, together with explanations of technical aspects of the solution, examples of menus and data input screens, types of output available and possible error messages;</p> <p style="text-align: right;"><b>[4 5]</b></p>	<p><b>e.3:</b> you produce complete technical and user documentation which makes effective use of graphic images, together with explanations of all technical aspects of the solution, examples of menus and data input screens, types of output available and possible error messages.</p> <p style="text-align: right;"><b>[6 7 8]</b></p>						
								<b>Mark</b>
<p><b>f.1:</b> You comment on the effectiveness of the final solution, with some overall indication of how the work may be improved in the future; you evaluate aspects of your personal performance that affected the solution; your report may contain errors in spelling, punctuation and grammar;</p> <p style="text-align: right;"><b>[0 1 2]</b></p>	<p><b>f.2:</b> you provide an analysis of your final solution, identifying the strengths and weaknesses in order to identify how the work may be improved in the future; you evaluate aspects of your personal performance by identifying your strengths and weaknesses that affected the solution, with some suggestions for improvement to the overall process; your report contains few spelling, punctuation and grammar errors;</p> <p style="text-align: right;"><b>[3 4 5]</b></p>	<p><b>f.3:</b> you provide a full critical analysis of your final solution identifying how well it meets the initial brief, taking into account user feedback in order to identify how the work may be improved in the future; you evaluate aspects of your personal performance by identifying your strengths and weaknesses and how you may address these issues to be more effective in the future; your report is consistently well-structured and there will be few, if any, spelling, punctuation and grammar errors.</p> <p style="text-align: right;"><b>[6 7 8]</b></p>						
								<b>Mark</b>
<b>Total/50</b>								
If this work is a re-sit, please tick		Session and Year of previous submission	Jan / June	<b>2</b>	<b>0</b>	<b>0</b>		Please tick to indicate this work has been standardised internally

Please note: This form may be updated on an annual basis. The current version of this form will be available on the OCR website ([www.ocr.org.uk](http://www.ocr.org.uk)).

A completed Centre Authentication form CCS160 **must** accompany the MS1 when it is sent to the moderator.

### Guidance on Completion of this Form

- 1 **One** sheet should be used for each candidate.
- 2 Please ensure that the appropriate boxes at the top of the form are completed.
- 3 Please enter *specific* page numbers where evidence can be found in the portfolio, and where possible, indicate to which part of the text in the mark band the evidence relates.
- 4 Circle the mark awarded for each strand of the marking criteria in the appropriate box and also enter the circled mark in the final column.
- 5 Add the marks for the strands together to give a total out of 50. Enter this total in the relevant box.