

COURSE NAME / CODE	BTEC National Subsidiary / Diploma / Extended Diploma in IT
UNIT(s) No / Name	42 – Spreadsheet Modelling
LEVEL	3
ASSIGNMENT NUMBER & TITLE	Assignment 2 - Enhance, test and evaluate a complex spreadsheet model
LECTURER/ASSESSOR	Sandra Taylor / Gargi Gupta
ISSUE DATE	24 th February 2017
DEADLINE DATE	10 th March 2017
SUBMISSION DATE	
RESUBMISSION DATE**	
RESUBMISSION AUTHORISATION BY LEAD	
INTERNAL VERIFIER*	
AUTHORISATION DATE	

*All resubmissions must be authorised by the Lead Internal Verifier. Only one resubmission is possible per assignment, providing:

- The learner has met the initial deadlines set in the assignment, or ha met an agreed deadline extension
- The tutor considers that the learner will be able to provide improved evidence without further guidance
- Evidence submitted for assessment has been authenticated and accompanied by a signed and dated declaration of authenticity by the learner

Student declaration

I declare that this assignment is all my own work and the sources of information and material I have used (including the internet) have been fully identified and properly acknowledged as required.

STUDENT NAME	SIGNATURE

ASSESSMENT DETAILS & GRADING CRITERIA

(NB: Columns 1 &2 of the table below will be completed once the assignment has been submitted) Please note that criteria & evidence should be aimed to give the learner the maximum grade available within their qualification (i.e. A, Pass, Distinction)

Lear	ning Aims Covered								
LO3		Be able to automate and custo	omise sprea	dsheet r	nodels				
LO4		Be able to test and document spreadsheet models.							
GRA	DING CRITERIA FOR TASK	EVIDENCE		1) EVID SEEN	ENCE	2) CR	ITERIA	MET	
				Y	N	Y	I	N	IV
P6	use automated features in the spreadsheet model to meet a given requirement								
P7	test a spreadsheet model to ensure that it is fit for purpose								
P8	export the contents of the spreadsheet model to an alternative format								
P9	produce user documentation for a spreadsheet model.								
М3	compare different automation methods								
M4	produce technical documentation for a spreadsheet model.								
D2	evaluate a spreadsheet model incorporating feedback from others and make recommendations for improvements.								

KEY: Y = Yes, I = Incomplete, N = No BREAKDOWN OF HOW GRADES WILL BE AWARDED:

^{**}Any resubmission evidence **must** be submitted within 10 working days of receipt of assessment

(NB: Please tick as appropriate)



TYPE OF QUALIFICATION	TICK	DESCRIPTION
BTECS / WORKSKILLS	√	Pass / Merit / Distinction / Fail
A LEVELS / A2		A-U

Internal Verification of Assignment Brief

IV Full Name	Sign	Date:	
LIV Full Name	Sign	Date:	

UTC READING

Please note that your assignment **MUST** have the following (unless otherwise stated):

- 1. Cover page
- 2. Contents page
- 3. Introduction
- 4. Conclusion
- 5. Bibliography

SCENARIO

The Reading Academy of Technology is a large college offering a full range of academic courses, together with vocational courses such as plumbing, carpentry and so on. It also offers evening and weekend courses as part of its adult education programmes.

The administration team at The Reading Academy of Technology want to use spreadsheet software to keep track of student enrolments and course funding for the Year 2015.

TASK 1 Evidence you must produce for this task.

(<u>Evidence</u>: Print screens of the spreadsheet showing the Welcome Sheet including Exit button with message, VBA code and brief explanation)

To achieve the criteria you must show that you are able to:	Unit	Criterion Reference
The Staff at The Reading Academy of Technology would benefit from a menu/switchboard function that will enable them to navigate to each sheet from one main menu. Using the following automation methods:		
• Create another worksheet called Welcome Sheet. This should be user friendly, with four buttons named Students, Courses, Enrolment and Funding. Record the event of opening each sheet individually using a macro and assign the macro to its appropriate button on your Welcome Sheet.	42	P6
Add an Exit button on the Welcome Sheet, you should write <u>VBA</u> code within the click event of this button to display a Message box to ask the user if they are sure that they want to exit the Spreadsheet. If the user selects yes the workbook should close, otherwise it should remain open.		

TASK 2 Evidence you must produce for this task.

(Evidence should be in the form of a test plan below)

Γο achieve the criteria you must show that you are able to:	Unit	Criterion Reference
The Managers of The Reading Academy of Technology are a little worried about accuracy of the data and that it has been correctly tested. In order to ease their worries you are required to:		
2.1 Carry out a cross-cast check (on the funding worksheet –Total Funding) that uses secondary columns to perform the same calculation but in a different way to ensure your spreadsheet shows it is accurate.		
Evidence: Print screens of the spreadsheet showing that you have made use of a cross-cast check with an explanation of this technique and the benefit of using this technique in comparison to manually checking the spreadsheet)	42	Р7
2.2 Produce a test plan to ensure the spreadsheet is error free. Carry out and document further tests to check your spreadsheet model in terms of required functionality, accuracy of data, data validation, and has the appropriate levels of detail (columns for example to two decimal places).		



Test Plan Tester:			Date:		
Test No	Purpose of test	Test Data	Expected Result	Actual Result	Pass/Fail

TASK 3 Evidence you must produce for this task.

(*Evidence*: Print screens to show how you achieved the conversion with explanations)

To achieve the criteria you must show that you are able to:	Unit	Criterion Reference
The Staff at The Reading Academy of Technology need to present all of the data shown on the Funding worksheet to the college's directors. They feel that the worksheets would be more presentable and easier to access if the data was displayed as an html file opening from a web browser.	42	P8
Your task is to convert the Funding Worksheet to an html file so the directors can view it through the web browser. (Observation Sheet with printout of worksheets)		

TASK 4 Evidence you must produce for this task.

(<u>Evidence</u>: User guide / Technical guide in any format.)

To achieve the criteria you must show that you are able to:	Unit	Criterion Reference
In order to assist the Staff and Management should they require help, create user and technical documentation to accompany the spreadsheet model.	42	P9
The user guide should include details on <u>how to use the spreadsheet</u> . This guide should be aimed at novice users, therefore should incorporate annotated screenshots to make it easier to use	42	17
The technical guide should include details on <u>how to update the spreadsheet</u> . You should include the following within this guide.		
Basic installation guide		
 Screen shots of each sheet showing the Formulas (Formula Auditing Mode) 	42	M4
VBA Code for each macro		
 Brief explanation into editing Formulas (include each step i.e. unprotect worksheets) and changing chart titles and axis 		
 FAQ for Troubleshooting 		

TASK 5 Evidence you must produce for this task.

(<u>Evidence</u>: Comparisons in using VBA and creating/using Macros, include advantages and disadvantages. Your report must include an introduction, main body and a summary/conclusion. Use screen shots to assist as required)

To achieve the criteria you must show that you are able to:	Unit	Criterion Reference
Following on from P6 To conclude your spreadsheet project for The Reading Academy of Technology compile a report to include: A comparison of the <u>automation methods</u> which you used to complete your	42	М3
spreadsheet. Consider the following: ease of use, required skills, and restrictions In the same report <u>evaluate your spreadsheet model</u> , its fit for purpose and how effective it was in providing information to the meet The Reading Academy of Technology needs. Discuss your choice of colours, formatting and styles. Within this	42	D2



evaluation discuss the feedback you received from your demo in assignment 1 and make recommendations for future improvements to your spreadsheet

Sources of information	Information Technology Practitioners – Book 2
	BTEC Wiki
	Information and Communication Technology – R P Richards and P M Heathcote
	http://www.ehow.com/how-does 5244461 do-companies-use-
	spreadsheets .html



P6	P7	P8	P9
Welcome Sheet	Print screens of calculations (cross-cast check)	printed html file	User Guide
Student Courses	explanation of technique	Observation Sheet	how to use a spreadsheet
Enrolment	benefit of using the technique		aimed at novice users
Funding	comparision to manual checking		annotated screenshots
Macro assigned to each button	test plan		
Exit button (VBA)			



M3	M4	D2
Report	Technical Guide	Report
comparision of automation methods	how to update a spreadsheet	evaulation of spreadsheet model
ease of use	basic installation guide	fit for purpose
required skills	screenshots of Formulas	how it is effective
restrictions	VBA Code for each macro	choice of colours
	How to edit formulas	formatting
	FAQ	styles
		feedback from demonstration (assignment 1)
		recommendations for future improvements