## **EXCEL FUNCTIONS**

	FUNCTION	MEANING	SYNTAX
	SUM	Adds the arguments	= <b>SUM</b> (range1, [range2,])
	COUNT	Counts the cells with numbers in the arguments	=COUNT(range1, [range2,])
	AVERAGE	Returns the average (mean) of the arguments	=AVERAGE(range1, [range2,])
	MEDIAN	Returns the median (middle) of the arguments	=MEDIAN(range1, [range2,])
	MODE.MULT	Returns the most frequently occurring value(s) in the list of arguments	=MODE.MULT(range1, [range2,])
S	MIN	Returns the minimum value in the list of arguments	=MIN(range1, [range2,])
ISTI	MAX	Returns the maximum value in the list of arguments	=MAX(range1, [range2,])
STATISTICS	STDEV.P	Returns the standard deviation of the arguments	=STDEV.P(range1, [range2,])
ST	QUARTILE.INC	Returns the designated quartile of the arguments (quartile argument options: 0, 1, 2, 3, 4)	=QUARTILE.INC(range, quartile)
	PERCENTILE.INC	Returns the designated percentile of the arguments (enter percent argument as a decimal)	= <b>PERCENTILE.INC</b> (range, percent)
	ABS	Returns the absolute value of the argument(s)	=ABS(range)
	SQRT	Returns the square root of the argument(s)	=SQRT(range)
	UPPER	Converts text to uppercase	=UPPER(range)
	LOWER	Converts text to lowercase	=LOWER(range)
	PROPER	Capitalizes the first letter of every word in the text of the argument(s)	=PROPER(range)
TEXT	CONCAT	Concatenates (combines) the text of the arguments in order (no delimiter unless manually added)	=CONCAT(range1, [range2,])
 	TEXTJOIN	Combines the text of the arguments in order with designated delimiter (with option to ignore or include blank cells)	= <b>TEXTJOIN</b> (delimiter, ignore_empty, range1, [range2,])
	LEN	Returns the number of characters in the argument(s)	=LEN(range)
	TRIM	Removes excess spaces from the text	=TRIM(range)
	SEARCH	Finds one text value within another	=SEARCH(find_text, within_text)
	AND	Tests for a TRUE value in all of its arguments	=AND(logical1, [logical2,])
بِ ا	OR	Tests for a TRUE value in any of its arguments	=OR(logical1, [logical2,])
ICAL	IF	Tests for a specific condition and returns designated values	=IF(logical, value_if_true, value_if_false)
LOGIC	NOT	Reverses the TRUE/FALSE value of an argument or result	=NOT(logical)
_	ISBLANK	Tests for blank values in the argument(s)	=ISBLANK(range)
	ISERROR	Tests for any error in the argument(s)	=ISERROR(range)
UP	MATCH	Looks up a value in the designated range	=MATCH(lookup_value, range, [match_type])
LOOKUP	VLOOKUP	Looks up a value and returns the corresponding value in the designated column of the range (with exact or approximate match)	= <b>VLOOKUP</b> (lookup_value, range, column_number, [exact_match])

## **EXCEL KEYBOARD SHORTCUTS**

	SHORTCUT	ACTION
	Ctrl + F	Find (search for text in the worksheet)
	Ctrl + H	Find and replace
	Ctrl + N	New workbook
9	Ctrl + O	Open a workbook
EDITING	Ctrl + S	Save workbook
	F12	Save As
Ι×	Ctrl + P	Print
DOCUMENT	Ctrl + W	Close the current workbook
2	Alt + F4	Close Excel (all workbooks)
ă	Ctrl + Y	Redo
	Ctrl + Z	Undo
	Ctrl + Shift + L	Activate/deactivate filters
	Shift + F11	Insert new worksheet

	SHORTCUT	ACTION
	Arrow Keys	Move one cell in any direction
	Home	Jump to the first cell in the row
_	Ctrl + Home	Jump to the beginning of the worksheet
NO	Ctrl + End	Jump to the end of the worksheet
NAVIGATION	Ctrl + Up Arrow	Jump up
N	Ctrl + Down Arrow	Jump down
NA	Ctrl + Left Arrow	Jump left
	Ctrl + Right Arrow	Jump right
	Ctrl + Page Down	Move to the next worksheet to the right
	Ctrl + Page Up	Move to the next worksheet to the left

Add **Shift** to any navigation shortcut to select all cells between the current cell and the destination cell. Example:

Ctrl + Shift + Home	Select all cells from current cell to the
Cui - Siliit - Home	beginning of the worksheet

	I	
	SHORTCUT	ACTION
	Ctrl + A	Select all
	Ctrl + C	Сору
	Ctrl + X	Cut
	Ctrl + V	Paste
	Ctrl + B	Bold
	Ctrl + I	Italics
	Ctrl + U	Underline
9	F2	Edit the active cell
EDITIN	Enter	Finish editing the active cell and move to the cell below
& FORMULA EDITING	Tab	Finish editing the active cell and move to the cell to the right
& FOR	Shift + Enter	Finish editing the active cell and move to the cell above
TEXT	Shift + Tab	Finish editing the active cell and move to the cell to the left
	Esc	Cancel the entry in the active cell
	Ctrl + Shift + =	Insert cell(s)
	Ctrl + -	Delete cell(s)
	Ctrl + Spacebar	Select entire column
	Shift + Spacebar	Select entire row
	Ctrl + Shift + ,	Decrease font size
	Ctrl + Shift + .	Increase font size

Shortcuts are for Excel on Windows. On Mac, try using **Command**  $\mathbb{H}$  instead of **Ctrl** in these shortcuts, or search Google for any shortcuts that do not translate directly.