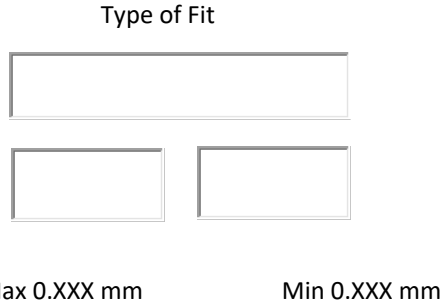
Each student is required to download and amend the Excel VBA programme (**VBA Assignment 2020 - Final version for amending by students.xlsm**) available on Brightspace according to the following requirements an upload their file as **YOUR NAME – VBA Assignment 2020**:

1. To present the user with the following information by displaying the appropriate data in the textboxes available in the programme according to the following format:
   a) Display the correct TYPE OF FIT (**Clearance or Interference**) in the top textbox.
   b) Display the MAX VALUE WITH UNITS in the left lower textbox
   c) Display the MIN VALUE WITH UNITS in the right lower textbox




2. To present the user with the following information by displaying the appropriate data in the textboxes available in the programme according to the following format:
   a) Display the VALUE OF THE MAXIMUM AXIAL FORCE WITH UNITS in the left lower textbox
   b) Display the VALUE OF THE MAXIMUM PERMISSABLE TORQUE WITH UNITS in the right lower textbox


3. To expand the range of shaft diameters the programme can read tolerance limits for, by adding the following columns of limits of tolerance date, available on the worksheet named Data, to the programme.

| 80-100 | | 100-120 | |
|---|---|---|---|
| *upper* | *lower* | *upper* | *lower* |
| 0.087 | 0.000 | 0.087 | 0.000 |
| -0.072 | -0.159 | -0.072 | -0.159 |
| 0.035 | 0.000 | 0.035 | 0.000 |
| -0.012 | -0.034 | -0.012 | -0.034 |
| 0.035 | 0.000 | 0.035 | 0.000 |
| 0.059 | 0.037 | 0.059 | 0.037 |
| 0.035 | 0.000 | 0.035 | 0.000 |
| 0.093 | 0.071 | 0.101 | 0.079 |

4. To display the appropriate FACTOR OF SAFETY in the textbox available and include a MESSAGE BOX under the following conditions:
   a. If the factor of safety is less than 1 include a WARNING DANGER, THE HUB COMPONENT WILL BURST AT THIS STRESS.
   b. If the factor of safety is greater than 1 and less than 2 include a WARNING, THE FACTOR OF SAFETY IS (*show factor of safety*), BY CLICKING OK YOU AGREE TO PROCEED EITH THIS VALUE.
   c.

5. To include a sufficient number of your comments beside sections of the code in order to show that you understand how the programme operates.