

# DAT094

## Introduction to Electronic System Design

### Files in Lab4 MAC\_loop\_min\_12\_17

#### Lab 4

#### MAC\_loop\_min\_12\_17

A FIR filter using FOR...LOOP to create the design. 12 bits signal, 12 bits coefficients, 17 taps

#### Files

MAC\_loop\_min\_12\_17.vhdl – the filter design

MAC\_loop\_min\_12\_17.do – do file for the filter design

MAC\_loop\_min\_12\_17\_tb3.vhdl - test bench for the design

MAC\_loop\_min\_12\_17\_tb3.do – do file to run the test bench

MAC\_loop\_min\_12\_17\_package.vhdl – gives coefficients for the filter and input signals and expected results for the simulation (from packages)

vec2str\_package.vhdl – converts STD\_LOGIC and STD\_LOGIC\_VECTOR to text for printing (from packages)

