

# DAT094

## Introduction to Electronic System Design

### Files in Lab4 MAC\_gen\_min\_12\_101

#### Lab 4

#### MAC\_gen\_min\_12\_101

A FIR filter using GENERATE to create the design. 12 bits signal, 12 bits coefficients, 101 taps

#### Files

FIR\_tap.vhdl – project component (from lab 2)

MAC\_gen\_min\_12\_101.vhdl – the filter design

MAC\_gen\_min\_12\_101\_tb3.vhdl – do file for the design

MAC\_gen\_min\_12\_101\_tb3\_do – do file to run the test bench

MAC\_gen\_min\_12\_101\_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)



