# Digital Signal Processing

## Module handbook 2026/27

Department of Electronic Systems, Faculty of Electronics

Semester 1, weeks 1 to 11

### Modules

DESP2045 Signals and Systems, 10 credits, semester 1.

DESP2048 Digital Signal Processing, 10 credits, semester 1.

### Contacts

Departmental office: office@bmstu.co.uk, internal 4412.

Module leaders: Dr E. Nowak (DESP2045), Dr M. Halvorsen (DESP2048).

Laboratory: Mr J. Kowalski, Lab C-1, basement.

### Assessment

DESP2045: two laboratory reports (40%) and a written examination (60%).

DESP2048: one laboratory report (40%) and a written examination (60%).

Late submission loses 10% per working day.

## Timetable

Tuesday 10:15, DESP2045 lecture, room 214.

Tuesday 12:00 to 13:30, office hours, room C-208.

Thursday 14:00, DESP2048 lecture, room 214.

Thursday 15:00 to 16:00, office hours, room C-208.

Friday, odd weeks 09:00: DESP2045 laboratory, Lab C-1.

Friday, even weeks 11:00: DESP2048 laboratory, Lab C-1.

### Dates

10 November: Laboratory 2, DESP2045, sampling and aliasing.

24 November: Laboratory 1, DESP2048, FIR filter design.

8 December: report deadline, DESP2048.

15 December: revision session.

### Laboratory rules

Benches are assigned for the semester and do not change.

Record the observed frequency, not the expected one.

Reports are two pages: data, one figure, short discussion.

## Reading

Oppenheim and Willsky, Signals and Systems, chapters 1 to 4.

Proakis and Manolakis, Digital Signal Processing, chapters 3, 7, 8.

Course notes are distributed in class and posted after each session.

### Where to find things

Module pages: pl.bmstu.co.uk/modules/

Timetable: pl.bmstu.co.uk/schedule.html

Faculty: bmstu.co.uk

### Notes

This handbook is a convenience copy. If it disagrees with the module web page, the web page takes precedence.

Version 1.2, November 2026.