

# Electromagnetic Compatibility

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*Tentative Programme*

| Date  | Programme                                                          |
|-------|--------------------------------------------------------------------|
| 20.02 | Introduction to EMC, Coupling Modes                                |
| 21.02 | Electromagnetic Coupling 1                                         |
| 27.02 | Electromagnetic Coupling 2                                         |
| 28.02 | Problem Set 1                                                      |
| 06.03 | Frequency domain solutions                                         |
| 07.03 | Time domain solutions                                              |
| 13.03 | Problem Set 2                                                      |
| 14.03 | Two-port representation of TLs                                     |
| 20.03 | Lab 1: Characterization of TLs using s-parameters (MED2 2419)      |
| 21.03 | Electromagnetic crosstalk: 3-conductor lines                       |
| 27.03 | Electromagnetic crosstalk: Inductive and capacitive coupling       |
| 28.03 | Solutions for multiconductor lines                                 |
| 03.04 | Problem Set 3                                                      |
| 04.04 | Lab 2: EM coupling and crosstalk (MED2 2419)                       |
| 10.04 | Low Frequency Coupling Mitigation (shielded cables, twisted pairs) |
| 11.04 | Problem Set 4                                                      |
| 17.04 | EM shielding                                                       |
| 01.05 | Lab 3: Coupling mitigation (MED2 2419)                             |
| 02.05 | Coupling to shielded cables                                        |
| 08.05 | Problem Set 5                                                      |
| 09.05 | Grounding, Filtering and Balancing                                 |
| 15.05 | Lightning phenomenon                                               |
| 16.05 | Lightning protection on power lines                                |
| 22.05 | EMC in digital circuits                                            |
| 23.05 | Problem Set 6                                                      |
| 30.05 | Final Test                                                         |

Electromagnetic Compatibility Laboratory

<http://emc.epfl.ch>

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