

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

School of Computer and Communication Sciences

Handout 1

General Course Information

Principles of Digital Communications

Feb. 22, 2021

Principles of Digital Communications

Time and location:

Wednesdays, 15–18, <https://epfl.zoom.us/j/82106208903>

Fridays, 10–13, <https://epfl.zoom.us/j/82106208903>

Instructor:

Emre Telatar (INR 117, emre.telatar@epfl.ch)

Office hours: by appointment.

Graduate teaching assistants:

Pierre Quinton (INR 030/INR 015, pierre.quinton@epfl.ch)

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Administrative assistant:

Muriel Bardet, (INR 137, muriel.bardet@epfl.ch)

Prerequisite:

Signal processing for communications

Stochastic processes for communications

Web page: <https://moodle.epfl.ch/course/view.php?id=15897>

Textbook:

B. Rimoldi, *Principles of Digital Communication: A Top-Down Approach*,
Cambridge University Press, 2016. ISBN: 9781316337387.

Online version: nb.mit.edu.

Course mechanics:

Two Graded Homeworks (10% each),

Project (20%),

Final exam during finals period (60%).

Approximate Outline:

Hypothesis testing and discrete-time receiver design (3 weeks)

Continuous-time receiver design (3 weeks)

Signal constellation design (3 weeks)

Waveform design, coded transmission (3–4 weeks)

Additional topics (1–2 weeks)