

Information Theory

Instructor: Prof. Dimitris Maroulis

Semester: 5th

Basic Course - Sector of Communications and Signal Processing

Optional Course - Sector of Computer Systems and Applications

[Course Website](#)

Overview. Basic concepts. Definition and measurement of the quantity of information. Useful
SIZES
and functions

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Study of
discrete
messages
sources
(
entropy
, redundancy
,
source
codes
,
rate
of
information provision)

- . Memoryless sources and Markov sources
- . Discrete messages channel capacity
- . Consecutive messages sources and reduction to discrete. Sampling theorem
- . Excellent channel
- . ideal system
- . channel with noise
- . continuous message channel
- . Comparison of communication systems. Data error control coding
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