

## Faculty of Economic, Social and Political Sciences



### COMU2122 Communications technology: audio visual and multimedia technology

[30h] 3 credits

**Teacher(s):** Thierry De Smedt, Benoît Macq  
**Language:** French  
**Level:** Second cycle

#### Aims

The course develops the following skills:  
 an understanding of the mechanisms of interactions (and their various issues) between the development of techniques and social means of communicating;  
 the ability, particularly among students of communications, to interact with engineers (who design equipment) and technicians (who install them and make them work);  
 the ability, particularly among student engineers, to interact with practitioners in audio scripto visual communications (who design media messages).

#### Main themes

Principles of the functioning of the main social communications technologies.  
 Theories used in the evaluation of transmission measures.  
 The conversion, coding and compression of analogue and digital audio scripto visual signals.  
 The architecture of networks.  
 Measures for ensuring safety and carrying out authentication procedures.  
 The social appropriation of communications technologies.

#### Content and teaching methods

##### Content

Elementary notions of electricity and electronics.  
 The mathematical theory of information, a model for the issue of technology.  
 The coding of a signal: analogue and digital.  
 Applications of digital coding to audio, video and information technology.  
 The storage and processing of documents by analogue and digital procedures.  
 Procedures for transmitting signals.  
 Introduction to interactive audio scripto visual communications networks.  
 Approach to a range of interpretations of the notion of technical quality.  
 The communications issue of technological evaluation.

##### Methodology

Lectures, and a demonstration and analysis of instruments. Eliciting knowledge that the students have acquired in their experience of using technology.

#### Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

No pre requirements: this is a general introductory course.

Assessment through a review of the subjects taught during the course, by application to concrete cases, and by personal in depth study. Duplicated notes, bibliographical references, and a website.

**Programmes in which this activity is taught**

**COMU3DS** Diplôme d'études spécialisées en communication multimédia

**Other credits in programs**

<b>ARCH12BA</b>	Deuxième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil architecte	(3 credits)
<b>COMU12BA</b>	Deuxième année de bachelier en information et communication	(4 credits)
<b>COMU21/AM</b>	Première licence en information et communication (Analyse des médias)	(3 credits)
<b>COMU21/MS</b>	Première licence en information et communication (Médiation des savoirs)	(3 credits)
<b>COMU22/AM</b>	Deuxième licence en information et communication (Analyse des médias)	(3 credits)
<b>COMU22/J</b>	Deuxième licence en information et communication (Journalisme)	(3 credits)
<b>COMU22/MS</b>	Deuxième licence en information et communication (Médiation des savoirs)	(3 credits)
<b>COMU22/RP</b>	Deuxième licence en information et communication (Relations publiques et communication d'organisation)	(3 credits)
<b>COMU3DS</b>	Diplôme d'études spécialisées en communication multimédia	(3 credits)
<b>ELEC22</b>	Deuxième année du programme conduisant au grade d'ingénieur civil électricien	(3 credits)