

Draft of a training for The Riviera University ([Université Côte d'Azur](#)) and The Cannes Campus

"The Interdisciplinary Doctoral Training of Immersive Media (IDTIM)"

Table of Contents

Partners of The Riviera University approached:	1
External partner's given agreement:.....	1
Discussions with external partners:	1
Subjects taught:.....	1
Duration:.....	2
Delivered Credits:	2
Assessment of the core curriculum (common courses required):	2
Languages:.....	2
Educational formula:	2
Theoretical basis of training:	2
Purposes:	2
Source of inspiration:	3
Examples of similar courses:	3

Partners of The Riviera University approached:

- [The College of Doctoral Studies](#) (CDS) of the University of Nice Sophia Antipolis
- [INRIA Sophia Antipolis Méditerranée](#) ([Biovision team](#) and [GraphDeco](#))
- [SKEMA Business School](#), School of Knowledge Economy and Management Sophia Antipolis

External partner's given agreement:

- [Institut für Medien immersive](#) ([Fachhochschule Kiel](#), DE)

Discussions with external partners:

- [Interdisziplinäre Zentrum für Wissenschafts- und Technikforschung. Normative und historische Grundlagen](#), [Bergische Universität Wuppertal](#)

Subjects taught:

- Humanities - creation of contents for the Communicating Immersive Environments (CIE)
- Cognitive Sciences - monitoring of perceptual and intellectual activities in immersive remote communication
- Computer Science and Informatics - sensory interfaces

- Studies of industrial offers in the immersive equipment
- Digital-media factual and virtual prototyping
- Design of the immersive media (personal equipment - smartphones, connected devices, embedded devices - individual and crowd transport, connected objects, professional and residential architecture, urban scenography, intelligent signage)

Duration:

2 semesters

Delivered Credits:

60 ECTS

Assessment of the core curriculum (common courses required):

Conceding of the ECTS by a jury on the basis of a dossier of prototype or an experimental study, considered as a large part of the candidate's doctoral thesis.

Languages:

English, French and German

Educational formula:

This program brings together the students from different fields who wish to join an interdisciplinary one-year training culminating in the realization of a study and / or a prototype in the domain of immersive media. Researchers, engineers and media designers assist the work of PhD students as part of their technology transfer mission.

Theoretical basis of training:

Currently we observe the proliferation of computerized communication technology providing rich sensory interfaces. Being located at different scales (portable devices, individual and collective means of transport, architecture, urban scenography), combining several modal pathways (vision, hearing, touch, taste, smell, thermoreception and others), these media call for a new learning and acculturation.

As "peripheral" terminals of different digital communication networks, they culminate in the emergence of the future "Immersive Web". Their use implies both: the creation process of the significant contents, that the action of the multimodal capture of real, from detecting of the physical presence to monitoring of the behaviors and interpretation of the cognitive activities of protagonists. The media convergence offered by today's industry and experimental prototypes, is achieved according to the multi-sensory completion diagram (Sobieszczanski) that can be called "media effect", the cerebral threshold effect of the cognitive "relevance" of media (Sperber, Wilson).

Purposes:

The establishments which we were inspired permit to achieve three aims:

- Addressing highly specialized topics
- Ensuring technology transfer and increase the employability of doctors
- Encouraging the international mobility of candidates

Source of inspiration:

The project of this doctoral program is inspired by new European trends in the field of engineering doctoral studies. The originality of this approach however is to proceed with the establishment of an interdisciplinary training which, unlike existing degree courses, is part of the graduation process of partner institutions, under the appropriate agreements.

Examples of similar courses:

We studied three institutions:

- The EIT ICT Labs Doctoral Training Centre (DTC) in Rennes, on "Future Media: [Ubiquitous Delivery and Interaction](#)", doctoral training involving IRISA UMR, University of Rennes 1, INRIA, Telecom Bretagne and MATISSE doctoral school.
- "PhD - Track Lyon / Passau" double degree INSA Engineer (IT department) / Master Passau (Faculty of Informatics and Mathematics) as part of the co-supervised thesis INSA / Passau in the French Doctoral College - German Multimedia Distributed and Pervasive Secure Systems (MDPS), supported by the [Université Franco-Allemande](#) / [Deutsch Französische Hochschule](#).
- "[Track PhD Cultural mediation of art](#)", supported by the [Université Franco-Allemande](#) / [Deutsch Französische Hochschule](#).