CONSERVATOIRE
NATIONAL
DES ARTS
E T M E T I E R S

Cnam POITOU-CHARENTES

CENTRE NATIONAL
DE LA BANDE DESSINÉE
ET DE L'IMAGE

DESS
Multimedia: Video games and Interactive Media

http://deptinfo.cnam.fr/Enseignement/DESSJEUX/

IRCAM Centre Georges Pompidou

Université
de POITIERS

UNIVERSITÉ
LA ROCHELLE

What is it ?

- The Computer Science Department of the Conservatoire National des Arts et Métiers (Cnam),

- La Rochelle and Poitiers Universities

- Cnam Poitou-Charentes,

- Centre National de la BandeDessinée et de l'Image (CNBDI)

- L'Institut de Recherche et de Coordination Acoustique/Musique (Ircam)

Offer a new vocational training in the field of video games leading to the DESS (Dipôme d'EtudesSupérieures de Spécialité)"Multimedia : Video Games and Interactive Media", a French National Education postgraduate diploma.

DESS Multimedia: Video games and Interactive Media

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Goals

- A one year formation opened to students with a master degree or a bachelor degree and five years of professional experience in one of the field of Audiovisual, Visual Arts, Sound and Music Design, Computer Science, Psycho-perception and Cognition

- According to their background students will choose specialization on
  - Man-Machine Interface and Game Evaluation (Poitiers University)
  - Computer graphics (La Rochelle University)
  - Sound design (Cnam Paris et Ircam)
  - Programming (Cnam Paris)
  - Game Design and Project Management (La Rochelle University)

Principles

- Built on the model of audio visual schools to train student to a multidisciplinary production team work
- Basis of every fields in each other fields (i.e. sound student learn elements of computer graphics, programming, ergonomics…)
- 3 months of intensive specialization courses in the original domain of the student (i.e. Sound design for games)
- More than 70% of the course are given by computer games professionals
- Development of a game prototype by teams of 6 to 8 students

Application

In each specialty, a game project on a theme chosen among three, and according to the spécialty

- Game design: a detailed scenario

- Computer graphics: Design rules, four original images

- Sound Design: Design rules, sample of sounds

- Programming: An analysis related to the game code specification or architecture

- Ergonomics: A justified proposal for the game interface

2002-2003

Choice between three themes :

- **1793 (V. Hugo)**
- **Un chien Andalou (Luis Bunuel)**
- **Gorillaz**

Choice of a Platform:

- **Xbox**
- **Game Cube**
- **Play Station 2 (Sony)**
- **Game Boy Color (Nintendo)**
- **PC/Windows 98/2000**
- **PC/Linux**

2002-2003

40 Students

- 10 Game design

- 10 Programming

- 10 Image synthesis

- 5 Sound design

- 5 Ergonomics

Program

- Project management (60h) Angoulême
- Basic courses (120h), Angoulême
- Conférences (30h) Angoulême
- Advanced courses (75h) Paris, Poitiers or Angoulême according to the specialty
- Project (195 h)
- Student practice 4 to 6 month in a game company (editor, studio, tool manufacturer)

Basic courses

- Multimedia fundamentals and Interactive writing
- Programming
- Computer architecture,Operating system, Networks
- Basis of Image synthesis
- Computer ergonomics principles,
- Introduction to sound design,
- Introduction to the design of computer graphics and animation

Conferences

J.M. Blottière

2000/2001

Jean Claude Larue (Director Infogrames Entertainment Europe) :
  Editors/Studio relationship, an international point of view

Eric Lux (Vice Président VUIPF (Coktel) :Game development in France
  and USA

Frédéric Tibout (Président Oïko) : AI and gameplay

Alain Le Diberder (iCLVE (département conseil de CLVE
  (Communication and Life in Virtual Environments)) History of video
  games

Game Design

Pascal Estraillier (University of La Rochelle)

Module 1 : Writing for games: genre and style analysis, techniques and tools

Module 2 : Production and project management

Computer graphics

T. Bouwmans University of La Rochelle

L. Herbreteau CNDBI (Angoulême)

Module 1 : Still and animated images: Digitizing, coding, storing and transfer

Module 2 : Virtual scenes description

Module 3 : Synthesis, transformation and animation 2D.

Module 4 : Synthesis, transformation and animation 3D.

Module 5 : Real time synthesis and animation et sound and image synchronisation.

Module 6 : Computer games constraints .

Module 7 : Development and execution tools.

Module 8 :Unsing RenderWare studio and Virtools

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Sound Design

Cécile Le Prado CNAM Paris
Ircam

Module 1 Sound design: from movies to games

Module 2 Principles and tools for interactive composition

Module 3 Tools for sounds in video games

Programming

Stéphane Natkin CNAM Paris

Module 1   CASE for video games programming

Module 2 IA for games

Module 3 Real time Image and sound synthesis

Module 4 Game engines

Ergonomics and Man Machine interface

Module 1   Multimedia and hypermedia integration

Module 2 Analysis and verbalization principles and techniques

Module 3 Man Machine interaction, computer games interface

Module 4 Computer games evaluation