

2ND AND 3RD YEAR SPECIALISATION

COMPUTER SCIENCE FOR INFORMATION SYSTEMS

Providing future engineers with the knowledge required to manage IT projects across all sectors of application. The course deals with the major concepts required for the majority of projects, from the different perspectives of customer, contractor and project manager.



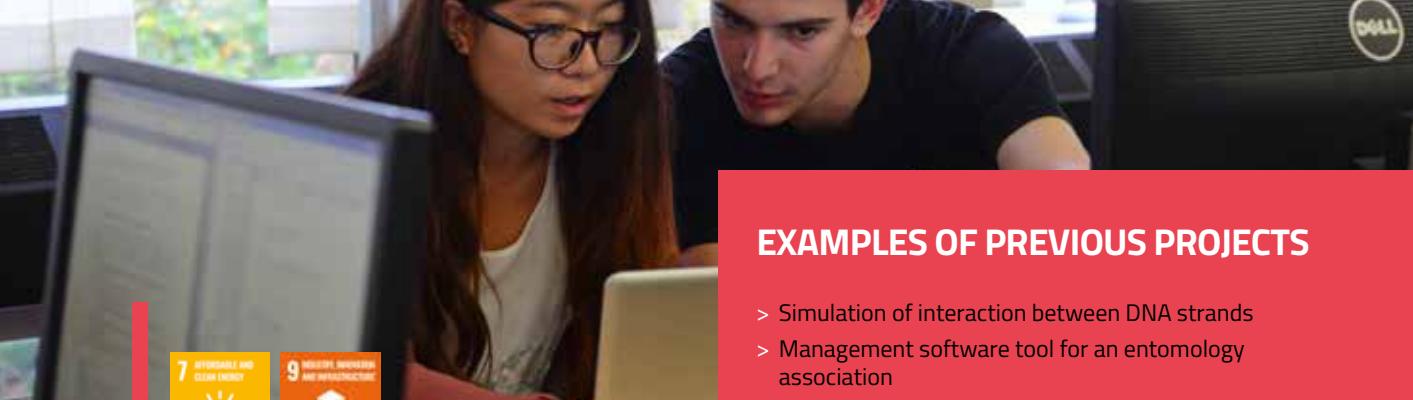
COURSE CONTENT

SEMESTER 1

- > Databases
- > Software engineering
- > Discrete mathematics
- > Object oriented programming
- > Industrial software development
- > Systems and Data Security
- > Systems and networks
- > Data analysis
- > Software development project

SEMESTER 2

- > Language theory
- > Group Project
- > UI-UX design and mobile development
- > Web programming
- > Information systems
- > Internship



INDUSTRY SECTORS

- > IT services
- > IT Consultancy
- > large industrial groups
- > SMEs
- > Banking and insurance

CAREER PROSPECTS

- > Software Analyst, Designer, Systems Integration
- > Web and IT developer
- > Information Systems Architect
- > IT Support
- > IT Project manager
- > Systems and data security
- > Data Scientist

TEACHING STAFF

HEAD OF SPECIALISATION:

Jean-Yves Martin

CENTRALE NANTES LECTURERS:

Carito Guziolowski, Jean-Sébastien Le-Brizaut, Didier Lime, Morgan Magnin, Jean-Yves Martin, Olivier Roux, Myriam Servières, Vincent Tourre, Jean-Marie Normand, Mathieu Ribatet, Thomas Lechevallier

EXTERNAL SPEAKERS:

Pierre Auclair (RippleMotion), Victorien Foret (CGI), Yves Schuller (Cap Gemini), Guillaume Sevestre (Akeneo), Laurent Clogenson (Wavestone), Matthieu Archambeau (Wavestone), Thierry Dumoulin (CHU), Tony Martin (CNIL), Alexandre Revil-Signorat (Wavestone)

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EXAMPLES OF PREVIOUS PROJECTS

- > Simulation of interaction between DNA strands
- > Management software tool for an entomology association
- > Roll-out of an automatic generator/corrector of multiple choice tests
- > Construction of collaborative abstracts on Android
- > Implementation of an API demonstrator for form recognition (MyScript)
- > Android application for a healthcare protocol (Nantes University Hospital)
- > Implementation of computerized discharge prescriptions at Nantes University Hospital

EXAMPLES OF PREVIOUS INTERNSHIPS

- > Web API for cloud-based energy management and forecast (Wattics Ltd)
- > Big data and unstructured data (Solucom)
- > Development of a customer management software tool (IOS, Android and Web) for flight cancellations (Amadeus)
- > Security in IT services companies (Natixis)
- > Paperless social security returns (Sopra)
- > Cyber Defence consulting (Sopra)
- > Natural User Interface (University of Dublin, Microsoft, Skype)
- > Project portfolio management support (Total)
- > Automated reporting (Crédit Agricole CIB)
- > Data acquisition software (DCNS)

