




## MSC IN INFORMATION TECHNOLOGY "ICONE" PROGRAMME SOFTWARE ARCHITECT

### IDENTITY CARD

- > Domain : Sciences, Technologies and Health
- > Full time course
- > [Continuing Education](#)
- > Degree apprenticeships
- > [Master of Engineering](#)
- > [120 ECTS credits](#)
- > 4 semesters
- > Course partly taught in English
- >  La Rochelle

### REGISTRATION

<https://www.univ-larochelle.fr/formation/admission-inscription-et-scolarité/candidatures-et-inscriptions/candidater-universite-la-rochelle/>

### CONTACT

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### OBJECTIVES

#### > Presentation

“ Do you wish to acquire general computer skills while specializing in one of the fields offered by the Software or Data Architect course ?

At the end of these two courses of the IT MSc, you will be able to perfectly understand the organization of digital flows as well as the implementation of tools for exploiting the intangible heritage of a company or a community. In fact, you will be able to deal with data management and analysis issues, design information systems and also exploit and enhance digital content. As a future IT executive, you will also learn about the different support methodologies that can improve the functioning of an organization.



Jean Loup Guillaume

## ✓ ADMISSION

### > Your profile

You have a bac+3, Bac+4 or equivalent (Bachelor's degree) : Bachelor's level knowledge in declarative and object programming, data structures, web languages, networks and protocols, client-server architecture and databases.

### > How to apply ?

In the 1st year of the Master's degree, the selection of candidates is made on the basis of their application documents.

You wish to apply for a 1st year Master's degree [1st year of Master](#)

You wish to apply for a 2nd year Master's degree [2nd year of Master](#)

## 📄 PROGRAMME

● Mandatory ■ Course option

### > Semester 1

#### > Bases de données avancées ●

- Bases de données avancées

#### > Information systems ●

- Information systems

#### > Ingénierie logicielle ●

- Ingénierie logicielle

#### > Mineure - Acquisition et traitement des contenus ■

- Approches expérimentales

#### > Mineure - Urbanisation des systèmes distribués ■

- Architecture de l'information
- Programmation concurrente et distribuée

#### > Unités transversales ●

- Découverte de la recherche
- LV1 Anglais
- Projet / mise en situation professionnelle
- Remédiation / personnalisation

### > Semester 2

#### > Architectures orientées services ●

- Architectures orientées services

#### > Réseaux et stockage sécurisés ●

- Réseaux et stockage sécurisés

#### > Mineure - Acquisition et traitement des contenus ■

- Qualité des contenus et des traitements

#### > Mineure - Urbanisation des systèmes distribués ■

- Calculs et sécurité décentralisés

#### > Unités transversales ●

- Etude bibliographique
- LV1 Anglais

- Missions en entreprise (APPRENTISSAGE)
- Stage (8 semaines) (INITIAL)

## > Semester 3

- > **Mise en œuvre des systèmes big data** ●
  - Mise en œuvre des systèmes big data
- > **Service web et mobilité** ●
  - Services web et mobilité
- > **Web sémantique** ●
  - Web sémantique
- > **Mineure - Acquisition et traitement des contenus** ■
  - Information retrieval and document understanding
  - Project
- > **Mineure - Urbanisation des systèmes distribués** ■
  - Fouille de processus
- > **Unités transversales** ●
  - LV1 Anglais
  - Projet / mise en situation professionnelle
  - Projet scientifique

## > Semester 4

- > **Projet** ●
  - Projet
- > **Professionalisation** ●
  - Missions en entreprise (APPRENTISSAGE)
  - Stage (20 semaines) (INITIAL)

## > Interaction with professionals

Many professionals are involved in the MSc (about 15%) either directly in the courses or through seminars integrated into the courses.

## > International

The ICONE IT MSc has multiple links with Vietnam. In particular, the second year can be done entirely in Hanoi, either in a francophone training (IFI) or an anglophone training (USTH).

## AFTERWARDS

### > Further Education

[PhD](#)

### > Professions

- Information systems architect
- Information system application manager
- Software development engineer
- Business intelligence engineer
- IT system engineer

Information subject to change

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