Master 2 Human & System Intelligence for Management - HSIM



Chiffres clés

Présentation

A high -quality degree-seeking program organized by iaelyon School of Management (in English - Opening in September 2025)

Objectifs

Prepare students for new positions within the decision-making chain in the Big Data and artificial intelligence era, to answer the needs of organizations who wish to adopt a user-centric / Human-in-the-loop approach.

All companies, regardless of their sector, need high-performance information systems that are reactive or even proactive. These intelligence systems enable to collect, process and convey all the information flows needed to carry out intra- and inter-organizational activities, and to make decisions by supporting the intuitions of decision-makers or alerting them to the uncertainties of their micro- and macro-environments.

The second year of Master's Human & System Intelligence for Management – HSIM is a track of the **Master Management des Systèmes d'Information**.

Fully taught in English, the HSIM program prepare students to work in the design of interactive and adaptive systems to support decision-making for managers, by ensuring the interface between data and end-users.

All the courses will prepare students for positions within the decision-making chain in the Big Data and artificial intelligence era, where the decision-maker is at the core of the process. Students will be able to:

- take into account the specificities of data and human factors in the design of intelligent decision-making systems.
- master the processing of the data chain, from storage to visualization and user interaction.
- master user-centered design methods.

Durée de la formation

- 1 an

Lieu(x) de la formation

- Lyon

Public

Niveau(x) de recrutement

- Bac + 4

Rythme

- Compatible avec une activité professionnelle
- En alternance
  - Contrat d'apprentissage
  - Contrat de professionnalisation

Contacts

Responsables pédagogiques

- GHEDIRA GUEGAN Ons Chirine (Responsable)
- LAVOUE Elise (Responsable)

Contacts

Program administration

Pre-experienced program:
iae-M2HSIM@univ-lyon3.fr

More specifically, the program meets the needs of companies who are seeking people who are able to:

- understand the needs in terms of business intelligence and decision support, and to translate these needs into technical specifications.
- master the design of the development methodology and the supervision /monitoring of development to meet business needs.
- understand, interconnect, and make collaborations between different information systems (workflows, data).
- have an expertise in data, actors, techniques and solutions to improve business efficiency, facilitate intra- and inter-organizational collaboration and reduce costs.

All the courses of the HSIM program are based on field studies carried out by the companies supporting this project, as well as research work

The program is registered at the RNCP (Répertoire Nationale de la Certification
professionnelle) under the reference 35908, which guarantees it recognition by the state and social partners.

Highlights of the program:

- **A program fully taught in English**
- **A small cohort** of 24 students
- **Possibility to attend the cooperative program**
- **A diversity of students:** the program welcomes students both from information systems and management.
- **The Alumni association** « Cross MSI » gathering graduates from the Master's in Information Systems Management
- **Reseach:** le Master relies on the SOC, SICAL et TWEAK from the LIRIS Research Center and the Information Systems Research Team from iaelyon Magellan Research Center.

Spécificités

Le Master intègre également des professionnels en reprise d'études dans le cadre de la Formation Continue. Il est accessible sous le régime de la VAE (Validation d'Acquis de l'Expérience) totale ou partielle, sur dossier spécifique. Son organisation en alternance est compatible avec une activité professionnelle.

L'actu du Master HSIM

Executive Education:
contact.iaefc@univ-lyon3.fr

iaelyon School of Management
Université Jean Moulin Lyon 3
Campus Manufacture des Tabacs
1C, avenue des Frères Lumière - CS 78242 -
69372 LYON CEDEX 08

Inscriptions

Modalités d'inscription

le calendrier des candidatures

Handicap

Pôle Handicap Étudiant

Admission

Pré-requis

Formation(s) requise(s)

Le Master Systèmes d'Information Avancés s'adresse à des candidats issus d' un cursus en gestion ou en informatique, en France ou à l'étranger (université, école de management, école d'ingénieur).

Les candidats doivent être titulaires d'un Master 1 ou justifier de 240 crédits dans un diplôme équivalent. Tous les candidats doivent avoir des connaissances solides en systèmes d'information.

Le Master est également ouvert aux professionnels en activité.

Candidature

Conditions d'admission / Modalités de sélection

Accès Master 2 pour les candidats externes et les étudiants de l'iaelyon souhaitant changer de mention
Le recrutement s'opère, en fonction des places disponibles, sur la base d'un dossier de candidature :

- Résultats académiques
- Résultats du test SIM Score IAE Message (TAGE MAGE ou GMAT toléré uniquement pour les étudiants internationaux ou à l'international)
  A NOTER :
  - Les étudiants de l'iaelyon sont dispensés du Test SIM
  - Les professionnels en reprise d'études (Formation Continue) sont dispensés des tests SIM et TOEIC
- Résultats du test d'anglais (TOEIC ou TOEF ou IELTS ou Oxford ou Cambridge)
- Projet professionnel : CV et lettre de motivation.

- D'un entretien de motivation.

Pour les candidats souhaitant réaliser la formation en alternance (contrat d'apprentissage ou contrat de professionnalisation)
La fiche de missions
La fiche info contrat

Et après ?

Niveau de sortie

Année post-bac de sortie

- Bac + 5

Niveau de sortie

- Niveau 7

Secteurs d'activité ou type d'emploi

Targeted jobs:

Chief data officer: collect data within the company's information system, before classifying and mapping it to make it accessible to the right person, at the right time, for the right use. They identify external data (whether free or fee-paying) that is useful to the business. Their role now extends beyond Big Data, to ensure the reliability of all the information produced or used by the company, in the interests of overall consistency.

UX Manager: User experience (UX) management consists in managing activities related to user experience design within an organization to improve its performance and generate good management practices. Typical UX management activities involve defining an organization's UX design language and strategy, and managing work processes around UX design. More specifically, students will learn about user experience in the decision-making process.

Business intelligence Manager: This job is at the crossroads of marketing, IT and consulting. The role of business intelligence manager is to delve into all company data and select, sort and analyze them.
From this analysis, they produce detailed reports to guide decision-making. Their aim is to provide solutions by implementing processes, or tools, that will be useful in the future and enable decision- making.

Data Protection Officer: is responsible for the company's data protection and compliance systems. The data protection officer's role also covers the management of security, ethical questions, and responsible AI.

Digital Personal Curator: is in charge of monitoring but also recommending the best apps, devices, software and tools to make employees more efficient. This job is ranked among the 20 potential jobs of the future by the American agency Sparks & Honey and among the job opportunities that could emerge thanks to the developments in digital technology and artificial intelligence by the Institut du Futur.

All of these positions are rapidly expanding since companies need to better master the great amount of data they collect, to translate them to help managers make decisions, and to help users master all the data and tools available according to their needs. Meeting these needs requires skills in strategic business management, data science methods and tools, and AI-based interactive systems design. The transformation of the job market has been initiated with the digital area and it still undergoing as the digital field is constantly evolving: "Human Resources professionals are looking for candidates with skills in data visualization, user experience [...] and this will be even more true in the future."

Programme

PROGRAM ORGANIZATION

The second year of Master's Human & System Intelligence for Management – HSIM is a track of the Master's in Information Systems Management.

- Courses are taught by faculty from iaelyon and expert practitioners
- Courses are taught over three days from the beginning of September to the end of February, allowing executive participants to keep working
- A mandatory 6-month internship in a company or a research environment fosters the employability of students (to be completed from March)
- Possibility to join the cooperative program from September (internship or apprenticeship): Wednesdays, Thursday and Fridays at iaelyon- Mondays and Tuesdays: working in a company
- Master thesis at the end of the year to assess the academic rigor (master thesis to be defended in September)

VOLUME HORAIRE :

- 344h pour les étudiants en Formation Initiale
- 448h pour les étudiants en alternance

Program content - Master Human & System Intelligence for Management (HSIM)

Semestre 3

UE1 - Introduction to Decision-making, Strategy and Management (6 ects)

Content

- 27220038 - Introduction to Decision-making, Strategy and Management (CM : 40h - 6 ects)

UE2 - Big Data Storage and Management (6 ects)

Content

- 27260047 - Big Data Storage and Management (CM : 40h - 6 ects)

UE3 - Introduction to AI, Machine Learning & Knowledge Extraction (6 ects)

Content

- 27250014 - Introduction to AI, Machine Learning & Knowledge Extraction (CM : 40h - 6 ects)

UE4 - Designing Interfaces for Decision Support (6 ects)

Content

- 27210051 Designing Interfaces for Decision Support (CM : 40h - 6 ects)

UE5 - Cours Elearning (1 cours) + cours spécialité (1 cours) (6 ects)

Contenu

- 06290819 - Corporate Social Responsibility - Elearning (CforCSR© Training and Certification) (CM : 20h - TD : 1h - 3 ects)
- 27210052 - Adaptive Interactive Systems (CM : 20h - 3 ects)

UE6 - Professsionnalisation

Contenu

- 99020439 - Tutorat collectif (retour d'alternance) (TD : 12h)
- 99020440 - Tutorat individuel (TD : 3h)
- 99040364 - Projet de groupe (TD : 70h)

Semestre 4

UE1 - Research in Smart Environments for Management: Interactions, Data and Services (6 ects)

Content

- 27300004 - Research in Smart Environments for Management: Interactions, Data and Services (CM : 40h - 6 ects)

UE2 - Understanding users for optimal decision-making (6 ects)

Content

- 27210053 - Understanding users for optimal decision-making (CM : 40h - 6 ects)

UE3 - User-Centred Data Visualization (3 ects)

Content

- 27330007 - User-Centred Data Visualization (CM : 20h - 3 ects)

UE 4 : Séminaire international et projet de fin d'études (5 ects)

Contenu

- 06260274 - Séminaire international / International seminar (CM : 18h - 2 ects)
- 27290112 - Projet de fin d'études (CM : 22h - 3 ects)

UE5 - Professsionnalisation

Contenu

- 99020443 - Tutorat collectif (retour d'alternance) (TD : 12h)
- 99020444 - Tutorat individuel (TD : 7h)
- 99040366 - Projet de groupe (TD : 70h)

UE6 - Stage et mémoire (10 ects)

Contenu

- 27290101 - Méthodologie du mémoire (2h mention) (CM : 2h)
- 27290110 - Méthodologie du mémoire (2h spécifiques parcours) (CM : 2h)
- 99011087 - Mission de professionnalisation (note de l'entreprise) (2 ects)
- 27290108 - Mémoire (75%) et soutenance (25%) du mémoire de fin d'études (8 ects)