



MIAGE MASTER DEGREE (METHODES INFORMATIQUES APPLIQUÉES À LA GESTION DES ENTREPRISES) Innovative Information Systems (2IS)

Academic Manager: Umberto GRANDI, Lecturer, (UT1)

DESCRIPTION

Objectives:

The **2IS** Master program is designed for Bachelor students in information technologies (IT) aiming to expand their knowledge on innovative information technologies. **2IS** is organized by researchers of IRIT (*Institut de Recherche en Informatique de Toulouse*), one of the major French institutes in computer science.

2IS is a **MIAGE** Master Program (*Méthodes Informatiques Appliquées à la Gestion des Entreprises*), which is the reference Master in France for information technology. MIAGE programs are run by more than 20 universities in France.

Innovative information technologies reinvent and transform businesses. Artificial intelligence, big data and web-service orchestration drastically impact end-users as automation is at the heart of business processes.

Goals:

2IS proposes a **unique and broad perspective** on innovation in IT in a 2-year program:

- Innovative software solutions such as business intelligence and data visualization, machine learning, collective intelligence distributed databases.
- Innovative software development methods such as agile management and collaborative design.
- Innovation and entrepreneurship in strategy and management.

SKILLS AND TARGETED OCCUPATIONS

Skills:

2IS graduates have a solid preparation in computer science (from object-oriented programming, to data science and artificial intelligence) and information technologies (business intelligence, business process modelling and web services), complemented by basic training in management and strategy of innovation. Soft skills such as presentation and team-work skills will be acquired, as well as a strong attitude to life-long learning and self-development. Two group projects proposed by external companies and a 6-month long internship complete the training of 2IS students with the necessary professional skills.

Targeted Occupations:

All MIAGE graduate students have a **unique combination of technical and business skills**, guaranteeing a high employability in the software or consulting sector.

Typical positions held by MIAGE graduate students are:

- Business analyst
- Management and IT consultant
- IT support and project management
- IT consultant
- Data consultant
- Software analyst
- Innovative software architect
- Software entrepreneur

En Savoir +:

You may read the OFIP's surveys about occupational integration of the graduate student:

The OFIP (*Observatoire des Formations et de l'Insertion professionnelle*) surveys the academic and professional future of the alumni: continuation or resumption of studies, occupational integration, situation after 30 months (work, studies, unemployment), occupation characteristics (sector, status, functions, professions, wages, geographical mobility).

Available on the UT1 website, under "*Orientation et insertion*" or at the SUIO-IP.

ACADEMIC PROGRAM

❖ FIRST YEAR :

The coursework duration lasts 10 months and constitutes a total of 500 hours.

SEMESTER 1 – 30 ECTS – 250 hours	SEMESTER 2 – 30 ECTS – 250 hours
Fundamentals UE 1 : Business Intelligence – 40h – 5 ECTS UE 2 : Data analytics – 40h – 5 ECTS UE 3 : Advanced programming – 40h – 5 ECTS UE 4 : Project management – 40h – 5 ECTS UE 5 : Professionalization – 90h – 10 ECTS Term project, soft skills and foreign language courses Additional complementary activities: physical activities and sports, university orchestra.	From fundamentals to innovation UE 1 : Business process modelling – 40h – 5 ECTS UE 2 : Computational intelligence – 40h – 5 ECTS UE 3 : Web services and enterprise architecture – 40h – 5 ECTS UE 4 : Entrepreneurship – 40h – 5 ECTS UE 5 : Professionalization – 90h – 10 ECTS Term project, soft skills and foreign language courses Additional complementary activities: physical activities and sports, university orchestra.

Academic team:

- **Full professors** : Franck Ravat ; Laurent Perrussel ; Chihab Hanachi ; Josiane Mothe.
Lecturers : Sylvie Doutre ; Benoit Gaudou ; Sylvain Cussat-Blanc ; Cyrielle Vellera ; Julien Grobert ; Umberto Grandi; Stéphane Salgado ; Nathalie Valles-Parlangeau.
- **External teachers**: Gehrard Straub; Edith Gozlan; Lionel Durand; Radouhene Azzabi.

❖ SECOND YEAR:

The coursework duration lasts 10 months and constitutes a total of 250 hours.

SEMESTER 3 – 30 ECTS – 250 hours	SEMESTER 4 – 30 ECTS
Innovation UE 1 : Innovative software methods – 40h – 5 ECTS UE 2 : Innovative data management – 40h – 5 ECTS UE 3 : Collective intelligence – 40h – 5 ECTS UE 4 : Business strategy and innovation in IT – 40h – 5 ECTS UE 5 : Professionalization – 90h – 10 ECTS Term project, soft skills and foreign language courses Additional complementary activities: physical activities and sports, university orchestra.	Innovation in action 5-month internship in a company, followed by a final examination. Additional complementary activities: physical activities and sports, university orchestra.

Academic team: To be announced in 2018/2019.

Pedagogical means and methods: In an internal attendance mode, the coursework is adjusted to the number of students enrolled in the Master 2. Besides theoretical courses conducted by teachers, a practical and concrete approach of studied topics is provided by professionals. Students will also be granted free access to various university services such as computer rooms or documentation services.

Assessment: Assessment procedures for exams are detailed in the university exam decree.

INTERNATIONAL ACADEMIC EXCHANGE PROGRAM

It is possible to spend part of the studies abroad, depending on the exchange programs in place between the University of Toulouse 1 Capitole and other EU or foreign countries. Applications and selections will be conducted the year before the exchange period. Make contact with the International Relations Office of the University if interested.

ADMISSION AND REGISTRATION REQUIREMENTS

Targeted public:

Admission conditions for the academic year 2017/2018 are currently updating. The procedure implies a selective access.

To enroll you must hold a **Bachelor's** (or equivalent) in **Information Technologies**, as well as a certification of English proficiency at B2 level. **Tuition fees are around 600€** per academic year including social security, in agreement with the standard price of public education in France.

International students will apply in March-April while domestic students will submit application in May. More details on the website miage.ut-capitole.fr/2is.

Registration capacity: This course is designed for a maximum number of 25 students.

Important dates:

- **International students:** applications to be sent by regular mail between **end of March and end of April**. Response by the end of May.
- **French students or international students holding a French Bachelor degree:** online application between **early May and early June**. Response by mid-June.

Applications consist of CV, grade transcripts, cover letter and evidence of English proficiency (CEF level B2 required).

Registration fees: visit the University website.

EMPLOYABILITY-AID AND SCHEMES (conducted in French)

• Internship:

The internship is compulsory and the relationship between the student, the company and the university must be defined by an Internship Agreement (available on *ENT* tab *Study*). More information at the Internship Office.

• Guidance on occupational integration:

Occupational integration workshops are conducted by the SUIO-IP:

- Building up a career project: highlighting experiences; identifying strengths; building a project.
- Hunting job techniques: CVs, cover letters, preparing for interviews.
- Student exchange: CVs, cover letters and interviews in English, applications in Spanish.
- Building up a Skill Portfolio (*Portefeuille d'Expériences et de Compétences*) with the PEC platform online.

Conferences and job days on various topics are organised throughout the year: « Searching for an internship », « Keys for successful first steps into a company », « VIE »...

The timetable is available at the SUIO-IP, in the University Newsletter and on the University website (tab *Orientation et insertion* and *Actualité*). Online registration.

Career guidance counsellors welcome and provide information at the SUIO-IP, (without appointment). Educational and career documentation is available at the help desks.

• Alumni Network:

Sign up for the University Capitole 1 professional network at <https://alumni.ut-capitole.fr> and check out internship or employment opportunities, graduate/student/company directories, news, events and discussion groups.

For more information on career counselling and occupational integration visit:
<http://www.ut-capitole.fr/orientation-et-insertion>
<http://suiio-ut-capitole.centredoc.fr>

CONTACT DETAILS

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University Career, Guidance and Information Service

(SUIO-IP) (Anciennes Facultés)

2, rue du Doyen Gabriel Marty - 31042 Toulouse Cedex 9
Mail : suio-ip@ut-capitole.fr
Phone : 05 61 63 37 28

Internship Office

Bâtiment Arsenal, 3ème étage, AR379 et 381
Mail : stages@ut-capitole.fr
Phone : 05 61 63 37 35/35 18

For information on internships visit:
<http://www.ut-capitole.fr/orientation-et-insertion/preparer-son-insertion/stages/>

For more information visit:
<http://tls-droit.ut-capitole.fr/>
<http://www.ut-capitole.fr/formations/>