

People's Democratic Republic of Algeria Ministry of Higher Education and Scientific Research Setif 1 University – Ferhat Abbas

Faculty : Sciences

Master in Foundations and Engineering of Information and Imaging « F3I »

Overview and Objectives of the Specialization :	Strengths of the Curriculum :
The F3I Master's program is a second-cycle scientific academic education. This training aims to facilitate the professional integration of graduates through the development and management of projects in the field of knowledge engineering. The overall objective is to enable holders of an academic Master's degree to effectively address problems related to new technologies, particularly in contexts characterized by an abundance of diverse information, that must be thoroughly analyzed in	The teaching of computer science in the Master's program F3I is both an introduction and an in-depth exploration of the practical and fundamental aspects of the discipline, particularly in knowledge extraction and management through so-called machine learning techniques. The course emphasizes problem modeling and program design activities, stressing the necessity of a rigorous methodology. The examples and case studies provided also help broaden the understanding of the discipline.
This Master's program focuses on the application of foundational knowledge in areas such as multimedia and biological modeling, specifically: knowledge management and extraction, computer graphics, medical imaging, intelligent systems, and more.	Thus, all students graduating from the academic Master's program F3I at the university will have acquired basic knowledge in computer science and will have become aware of both the material and intellectual challenges that are part of the field of computer science in information and communication sciences and technologies.
Access Conditions:	Admission Information:
 Academic Bachelor's degree in Computer Science Any Bachelor's degree focused on one of the following areas: Artificial Intelligence Data Mining Decision Systems Machine Learning Imaging Any other Bachelor's degree where the overlap rate with the core modules of the classic academic Bachelor's degree is more than 60% for the fundamental units. 	 Current application of Articles 171 and 1023 of the decrees: The acquisition of skills and knowledge is evaluated every six months through continuous assessment and a final exam. Progression from the first to the second year is automatic if the student has passed the first two semesters of the training program. The student's evaluation covers, according to the training program, lectures, practical work, tutorials, and internships. Basic Modules of the Program :
Program Overview ·	BDA: Advanced Databases
Semester 01 :BDA: Advanced DatabasesPWA: Advanced Web ProgrammingAAC: Advanced Algorithms and ComplexityMS: Modeling and SimulationSR: Distributed SystemsCP: Project ManagementANG 1: English 1CDT: Corruption and Work EthicsSemester 02 :	AAC: Advanced Algorithms and ComplexitySR: Distributed SystemsAA1: Machine Learning 1IAA: Advanced Artificial IntelligenceAA2: Machine Learning 2TIM2: Image Processing 2RDF: Pattern RecognitionAdvanced TopicsAA2: Machine Learning 2
AA1: Machine Learning 1	TIM2: Image Processing 2
ADD: Data Analysis	RDF: Pattern Recognition EBD: Data Warehouses and Big Data

TIM1: Image Processing 1	SIG: Geographic Information Systems
BIO: Bioinformatics	TALN: Natural Language Processing
AOB: Bio-inspired Optimization Algorithms	
CSD: Data Compression and Security	Language of Instruction:
CCA1: English Communication Skills 1	
ELR: E-learning	French and English
Semester 03 :	
AA2: Machine Learning 2	
TIM2: Image Processing 2	Training outline ·
RDF: Pattern Recognition	
EBD: Data Warehouses and Big Data	The tables provided in the provious section
SIG: Geographic Information Systems	"Program Overview"
TALN: Natural Language Processing	
CCA2: English Communication Skills 2	
AA2: Machine Learning 2	
Semester 04 :	Program Coordinator: Dr. B. ANNANE
Internship in a company, assessed by a thesis and an oral defense.	Contact : boubakeur.annane@univ-setif.dz