ISITCOM - Institut Superieur d'Informatique et des Technologies de Com

ABOUT ISITCOM

ISITCOM is the Institut Superieur d'Informatique et des Technologies de Communication located in Hammam Sousse, Tunisia. It was established in August 2001 by decree number 1912/2001. ISITCOM is a prestigious higher education institution specializing in computer science and communication technologies.

ISITCOM is the second major Tunisian institution for telecommunications education after the Ecole superieure des communications de Tunis. It is affiliated with the University of Sousse and has a faculty and staff size of 51-200 employees.

The institution aims to serve students and businesses by providing quality education and fostering research through its dedicated laboratories. ISITCOM combines theoretical knowledge with hands-on experience to produce highly skilled professionals ready to meet industry demands.

LOCATION AND CONTACT

Address: Route G.P.1, 4011 Hammam Sousse, Sousse Governorate, Tunisia
Website: isitcom.rnu.tn
Email: @isitcom.rnu.tn
University: University of Sousse (Universite de Sousse)

ACADEMIC PROGRAMS

ISITCOM offers comprehensive programs at multiple levels:

Applied Bachelor Degrees (Licence Appliquee):

- Technologies du Multimedia et du Web
- Technologies des Reseaux Informatiques
- Technologies des Communications
- Technologies de l'Information et des Telecommunications

Engineering Degree:

Diplome National d'Ingenieur en Teleinformatique - This unique program in Tunisia combines telecommunications with computer science.

Master Programs (Masteres):

Research Master: Informatique Distribuee (Distributed Computing)
Professional Masters:

- Securite et Services des Reseaux
- Services du Web et du Multimedia
- SSA-IoT

Doctoral Program:

Doctorat en Sciences de l'Informatique (PhD in Computer Science)

MARS RESEARCH LABORATORY

The MARS Laboratory stands for Modeling of Automated Reasoning Systems. It is a distinguished computer science research structure affiliated with ISITCOM at the University of Sousse. MARS represents a cornerstone of research excellence and innovation in Tunisia's technology research landscape.

HISTORY

- 2011: Initially launched as a research unit
- January 2017: Transitioned to a full research laboratory

LEADERSHIP

Laboratory Director: Professor Lotfi Ben Romdhane
Email: lotfi.ben.romdhane@isitc.u-sousse.tn

RESEARCH MISSION

The MARS Laboratory focuses on developing automated reasoning systems through advanced modeling techniques. The laboratory's research encompasses theoretical foundations and practical applications in distributed systems, information retrieval, social network analysis, and production system optimization.

Researchers at MARS work on cutting-edge problems in computer science, contributing to both academic knowledge and practical solutions for industry challenges.

RESEARCH GROUPS

The MARS Laboratory is organized into three specialized research groups, each focusing on distinct but complementary areas of computer science research.

1. OSS - Optimisation et Supervision des Systemes

Leader: Professor Ouajdi Korbaa
The OSS team explores production systems from vertical and horizontal perspectives. The group develops comprehensive optimization approaches spanning from system design to monitoring, including flow management, planning and scheduling, transient and permanent regimes, and system supervision and monitoring.

2. IRIT - Information Retrieval and Indexing Techniques

Leader: Professor Mohamed Nazih Omri
The IRIT group specializes in advanced techniques for information retrieval and indexing. Their work includes development of efficient search algorithms, information organization and classification systems, text mining and natural language processing, medical document analysis and information extraction, and semantic search and knowledge representation.

3. SDM - Social Data Mining

Leader: Professor Lotfi Ben Romdhane

The SDM group focuses on the analysis and mining of social network data. Key research areas include social network dynamics analysis using multi-agent systems, behavior-based malware detection, identification of influential elements in social networks, community evolution and group dynamics, temporal analysis of user interactions, topic extraction from social media platforms, and influence maximization strategies.

The group has developed several software prototypes directly derived from doctoral research, including multi-agent based social network dynamics analyzers and behavior-based malware detection systems.

INTERNATIONAL COLLABORATIONS

MARS Laboratory maintains strong international research partnerships with:

- University of Reims Champagne-Ardenne, France (CReSTIC laboratory)
- Sorbonne University, France (LIP6 laboratory)
- University of Toulouse, France (ISIS Institute)
- Ecole Centrale de Lille, France

RESEARCH AREAS

Medical Informatics and Healthcare

MARS researchers have made significant contributions to medical informatics, particularly in information extraction from electronic medical documents. This research addresses processing unstructured clinical text, named entity recognition in medical records, clinical decision support systems, and privacy-preserving data analysis.

Social Network Analysis and Mining

Research focuses on understanding online communities and information diffusion, including topic extraction from Twitter and other social platforms, user behavior analysis using big data techniques, influence propagation modeling, community detection and evolution, and sentiment analysis and opinion mining.

Machine Learning and Artificial Intelligence

MARS researchers actively contribute to advances in machine learning, including feature extraction and selection techniques, classification and supervised learning methods, medical image analysis, smart contracts and blockchain verification, and intelligent tutoring systems.

Business Process Management

Recent research has addressed risk-aware business process management using multi-view modeling approaches. This work combines theoretical foundations with practical tools for risk identification and assessment in business processes, process optimization under uncertainty, and multi-perspective process modeling.

STUDENT LIFE AND ACTIVITIES

ISITCOM provides a vibrant campus environment that extends beyond academics. The institution recognizes the importance of holistic student development and offers various extracurricular opportunities.

Student Clubs and Organizations

Securinets ISITCom is a prominent cybersecurity club that organizes events, competitions, and training sessions. The club celebrates annual anniversaries and engages students in practical cybersecurity challenges.

Other activities include:

- Sports activities and competitions
- Cultural events and festivals
- Technical workshops and seminars
- Professional development programs

CONCLUSION

ISITCOM and its MARS Research Laboratory represent centers of excellence in computer science education and research in Tunisia and the broader region. Through its comprehensive academic programs, dedicated research groups, and commitment to innovation, ISITCOM prepares students for successful careers while contributing to the advancement of knowledge in critical technology domains.

The institution's combination of theoretical rigor, practical application, and research excellence positions it as a leading contributor to Tunisia's technology sector and the global computer science community. With ongoing international collaborations and a focus on emerging technologies, ISITCOM continues to evolve and adapt to meet the challenges of the digital age.