Internal Regulation

Faculty of Computers and Information – Tanta University

Bachelor Degree Credited-Hours System

2019

Faculty of Computers and Information

# Faculty of Computers and Information Tanta University

#### Academic Regulation

#### 1-Introduction

Hundreds of thousands of Egyptian students with general secondary education race every year on available seats in higher education, especially in government universities. Egyptians prefer certain colleges, where the intense race has caused them to be called the top colleges, which depend on the admission of highergrade students. The study of engineering and its various specializations comes at the forefront of programs in which high-school graduates and their high-tech colleagues compete to join.

Although the state is increasing its enrollment in high-school science rather than a significant increase in the number of people enrolled in literary disciplines, as well as increasing numbers in applied scientific disciplines in higher education, such as engineering, computers, information, and science, the coordinating office records show that the minimum admission to these faculties is still high in most cases, at 95%.

Although existing private universities are the alternative to fulfill the dream of studying engineering, computers and information for a number of those who have not been able to attend government universities, this alternative still fails to provide sufficient opportunities for a large number of students for two main reasons:

1- The numbers that other universities can accommodate in this specialization are still limited, and thus do not accommodate those who wish to study it.

2- A large part of society still includes students who are relatively higher at the scientific level than those who accept private universities, especially who cannot attend the engineering, computer, and information study for their financial conditions that do not allow them to pay the increasing tuition fees to these universities.

So, it's necessary to find additional alternatives that provide tutorial opportunities in engineering areas allowing students of reasonable scientific standard to enroll in for lower tuition fees or funds less than those cost students at private universities. In our view, such a proposed college would provide this alternative at a cost that many at a low level can afford.

Faculty of Computers and Information would provide an opportunity for holders of high school certificate or equivalent of Mid Delta indigenous to meet the increasing needs of specialists in fields of computers sciences and information systems to fulfill the labor market requirements at the local, Arabic, and region levels, based on developed innovative scientific principles that fulfill education and training quality and serve with its experiences a state's fundamental sector – that is the communication one that develops and unprecedentedly progresses.

In addition, the expansion of the communications industry in the entire Arab region, along with the lack of graduates in this field, also justifies the establishment of such a college. This seems clear in the number of Egyptians traveling to work in this sector. In addition to the expansion of the communications sector in Egypt and the need for specialists in this field.

## Vision

Faculty of Computers and Information aims to be locally and regionally one of the best and most important sources in academic education, scientific and applied research in areas of computer sciences, information systems and technology, and software engineering to strive for excellence and innovation in scientific research and community service at the local and regional levels.

## Mission

Faculty of Computers and Information is committed to provide an outstanding scientific and educational environment to build specialized cadres having highly competitive capacities in the areas of computer sciences, information systems and technology, and software engineering through:

\* Building developed educational system that fits with the vast growth in areas of computers and information.

\* Provide students with the assets of knowledge and scientific research in computer science and information technology, and developing the students' personality to make them willing to innovate, enviable for group work, and able to compete locally, regionally and globally.

\* The development and continuous updating of curricula in line with scientific progress, needs of the era and needs of the labor market.

\* Raising awareness of the value of continuing education, the inevitability of selflearning and the importance of using modern methods in this area.

\* Use scientific research as a means of achieving innovation in the faculty areas by examining the economic, commercial and social importance of scientific research responses.

\* Providing a distinct community service information technology areas.

Departments of Faculty

Faculty of Computers and Information – Tanta University includes the following departments:

Computer Sciences Department Information System Department Information Technology Department Software Engineering Department

### **Computer Sciences Department**

Computer Programming and Computer Language Concepts and Interpreters, Data Structure and File Organization and Processing, Algorithm Analysis and Design, Computer Operating Systems, Data Architecture and Organization, Software Engineering, Artificial Intelligence Basics and Applications, Smart Systems, Natural Language Processing, Multi-agent Systems, Genetic Algorithm, Knowledge Base Systems, Parallel and Distributed Processing Systems, Computers Learning, Human Computer Interaction Methods, Cloud Computing, Software System, Applied Data Science, Software Examination Methods, Knowledge Engineering, Biological Information Systems, Integrated Systems, Concurrent and Distributed Programming, Soft Computing, Mobile Computing, Computer Theories.

Information System Department

Information System Analysis and Organization, Information System Development Approaches, Information System Architectures, Information Storage and Retrieval Systems, Database Systems, Information Systems, Management Information Systems, Geographic Information Systems, Multimedia Information Systems, Distributed Information Systems, Large-sized Data Systems, Data Sciences, Data Sources Tracking, Smart Information Systems, Knowledge Discovery in Database Information, Object Database, Information Systems, Information Systems Development Approaches, Integrated Information Systems, Information Systems Development Approaches, Software and Information Systems Quality Assurance, Social Media Networks Analysis and Mining, Information Systems Revision and Scrutiny, Information Systems Applications in Different Areas, Electronic Merchandising, Internet Information Systems, Work Procedures Management and Mining.

Information Technology Department

Different Types of Computer Networks, Communications Technology, Internet Technology, Information and Networking Security and Networking, Pattern Recognition, Digital Signal Processing, Speech Recognition and Utterance, Pictures Recognition and Processing, Computer Vision, Computer Graphic Systems, Computer Animation, Visual Reality, Data Compression and Security, Cyber Security, Computer Architecture, Microprocessor Applications, Incorporated Systems, Smart and Quantitative Computers, Web Technology, Internet Protocols and Programming, Robot Control, Cloud Computation, Mobile Computation, Quantity Computation, Concurrent Computation.

Software Engineering Department

The Department includes the following scientific areas:

Software Engineering, Information Engineering, Systems and Programs Quality, Knowledge Engineering, Software Design, Software Maintenance, Software Examination, Software Development Methodology, Software Security Systems, Software Crisis, Computers Engineering.