



Faculty of Computers and Information
Department of Information Systems



Information Systems Master Program





Assiut University

Faculty of Computers
& Information



IS Master Program

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*Program
Specifications*



IS Master Program Specifications 2010-2011

A. Basic Information

1. **Program Title:** Master in Computers and Information (Information Systems)
2. **Program Type:** Single
3. **Faculty (Faculties):** Faculty of Computers and Information
4. **Department:** Information Systems
5. **Assistant Coordinator:**
6. **Coordinator:** Dr. Taysir H. Abdel-Hamid
7. **Last date of program specifications approval:**

B. Professional Information

1. Program Aims and Objectives

Successfully completing this program will contribute to some certain graduate attributes. Specifically, a graduate of Computers and Information (Information Systems) Master Program should be able to:

- I. Be proficient in applying scientific research basics and methodologies and using its various tools in information systems.
- II. Apply analytical methodologies and use it in information systems domains.
- III. Apply specialized knowledge in information systems and merge it with other related knowledge of his/her professional practice.
- IV. Be aware of current problems and vision of information systems.
- V. Determine professional problems and find solutions for them.
- VI. Master a suitable level of professional skills in information systems and use appropriate technology in his/her professional practices.
- VII. Communicate effectively at work.
- VIII. Lead team work and take decisions at different professional scenarios.
- IX. Employ available resources efficiently to preserve them and maximize their utilization.
- X. Show his/her awareness in community developing and preserving the environment according to the local and global changes.
- XI. Act with integrity, credibility and applying the rules of the profession.
- XII. Develop his/her professional and academic skills, and adopt life-long self-learning.
- XIII. Apply critical thinking to a particular challenge that might be experienced in a professional setting.
- XIV. Improve the efficiency and effectiveness of any organization by organizing information and information systems.

2. Intended Learning Outcomes (ILOs)

a. Knowledge and Understanding

After completing the Master program in Computers and Information (Information Systems), the graduate should be able to know and understand the following:

- a1. Identify theories and fundamentals in information systems and related domains.
- a2. Define effective exchange between professional practices and their reflection on the environment.
- a3. Discuss scientific development in information systems.
- a4. Explain ethical and legal principles for professional practice in information systems.
- a5. Identify quality principles of professional practice in information systems.
- a6. Define the fundamentals of scientific research and its ethics.
- a7. Identify organization architecture and role of information systems in organizations.
- a8. Explain the influence of social and political issues in information systems.

b. Intellectual Skills

On successful completion of this program, graduates should be able to:

- b1. Analyze and evaluate the information in the domain of information systems and take references from them for problem solving.
- b2. Solve specialized problems without enough inputs.
- b3. Link different knowledge to solve professional problems.
- b4. Carry out a research study and write a thesis around a research problem in information systems.
- b5. Assess risks in professional practice of information systems.
- b6. Plan to develop the performance in information systems.
- b7. Take professional decisions in different scenarios.
- b8. Specify and design intelligent and traditional computer-based systems, using formal design procedures where appropriate.

c. Professional and Practical Skills

On successful completion of this program, graduates should be able to:

- c1. Master basic and modern professional skills in information systems.
- c2. Write and evaluate professional reports.
- c3. Evaluate the strengths and weaknesses of particular solutions in information systems.

d. General and Transferable Skills

On successful completion of this program, graduates should be able to:

- d1. Communicate efficiently by different means.
- d2. Use the information technology to serve the professional practice.
- d3. Have self-assessment and identification of personal learning needs.
- d4. Use different recourses to obtain information and knowledge.
- d5. Propose roles and indicators to evaluate the performance of the others.
- d6. Work in a team and lead teams in different professional tracks.
- d7. Manage time efficiently.
- d8. Long-life self-learning.
- d9. Synthesize ideas from multiple sources.

d10. Develop an argument in a coherent and logical manner

3. Academic Standards

The academic standards invoked in this specification are driven from a number of resources:

- a. The generic standards in the “Guide of Academic Standards for Graduate Programs” published by the National Authority for Quality Assurance & Accreditation (NAQAAE) on March 2009.
- b. University of North Carolina, USA, M.Sc. in information sciences program.
- c. University of Edinburgh, UK, Master of Informatics.

4. Curriculum Structure and Contents

4a. Program duration: at least 2 years.

4b. Program structure

- No. of hours per week: Lectures (10), Lab./Tut. (0), Total (10)
- No. of credit hours: Compulsory (40), Elective (6)
- No. of hours of basic computing: 8 credits, 40%
- No. of hours of specialized information systems courses: 12 credits, 60%
- Field Training: Not compulsory
- Program Levels (in credit-hours system): Not applicable.

5. Program Courses

5a. Compulsory Courses

Course Code / No.	Course Title	Units No	No. of hours /week			Year	Semester	Achieved ILOs
			Lect	Lab	Exer			
INF611	Theory of Information Systems Design	4	2	–	–	1 st	1 st + 2 nd	a1, a3, a6, b1-b4, b6, b8, c1, c3, d1, d2, d4, d8
CS611	Data Compression	4	2	–	–	1 st	1 st + 2 nd	a1, a3, a6, b1-b4, b6, c1, c3, d1, d2, d4, d8
CE611	Modern Computer Architecture	4	2	–	–	1 st	1 st + 2 nd	a1, a3, a6, b1-b4, b6, c1, c3, d1, d2, d4, d8
TOTAL		12	6	–	–			

5b. Elective Courses

Course Code / No.	Course Title	Units No	No. of hours /week			Year	Semester	Achieved ILOs
			Lect.	Lab	Exer.			
1	Elective Course I	4	2	-	-	1 st	1 st + 2 nd	a1-a3, a5-a8, b1-b3, b5-b7, c1, c3, d1, d2, d4, d8
2	Elective Course II	4	2	-	-	1 st	1 st + 2 nd	a1-a3, a5, a6, b1-b3, b5-b7, c1, c3, d1, d2, d4, d8-d10
TOTAL		12	4	-	-			

Elective Course I		Elective Course II	
Course Code	Course Title	Course Code	Course Title
INF612	Information Systems for Business Management	INF614	Information Retrieval
INF613	Advanced Database Organization	INF615	Information Systems Applications
IT614	Client/Server Applications Development	INF616	Decision Technology Systems
		INF617	Advanced Topics In Information Systems

5c. Master Thesis

No.	Title	Units No	Year	Semester	Achieved ILOs
1	Master Thesis	20	2 nd	1 st + 2 nd	a2-a6, b1-b7, c1-c3, d2-d4

6. Contents of Courses

Syllabus: See below

7. Program Admission Requirements

High score in secondary school education certificate in (mathematic section).

8. Regulations for progression and program completion

Please, refer to faculty bylaw (curriculum of undergraduate programs), 2004, pages 4-5.

9. Student Assessment (Methods and rules for student assessment)

Method (tool)	Intended learning outcomes assessed
1- Written examinations	Knowledge and Understanding - Intellectual Skills - Professional Skills - General Skills
2- Oral examination	Knowledge and Understanding - Intellectual Skills - General Skills
3- Thesis	Knowledge and Understanding - Intellectual Skills - Professional Skills - General Skills

10. Program Evaluation

Evaluator	Tool	Sample
1- Senior students		
2- Alumni		
3- Stakeholders		
4-External Evaluator(s) (External Examiner(s))		
5- Other		

Program Coordinator: Dr. Taysir Hassan Abdel Hamid

Signature:

Date: 22/9/2010

Department Head: Dr. Taysir Hassan Abdel Hamid

Signature:

Date: 22/9/2010

Approved by the Dean: Youssef B. Mahdy

Signature:

Date: 22/9/2010

*Program
Matrix*



IS Master Program Matrices

Program ILOs		a1	a2	a3	a4	a5	a6	a7	a8	b1	b2	b3	b4	b5	b6	b7	b8	c1	c2	c3	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	
Courses and Thesis	INF611	✓		✓			✓			✓	✓	✓	✓		✓		✓	✓		✓	✓		✓						✓		
	CS611	✓		✓			✓			✓	✓	✓	✓		✓			✓		✓	✓	✓	✓		✓				✓		
	CE611	✓		✓			✓			✓	✓	✓	✓		✓			✓		✓	✓	✓	✓		✓				✓		
	EL1	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓		✓				✓		
	EL2	✓	✓	✓		✓	✓				✓	✓	✓		✓	✓	✓		✓		✓	✓	✓	✓		✓			✓	✓	✓
	Master Thesis		✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓						

*Program
Report*



*Assiut University
Faculty of Computers & Information
Information Systems Department
Quality Assurance Unit*



Program Report 2010-2011

This program has no graduate during the academic year 2010-2011.