



Faculty of Computers and Information  
Department of Information Systems



# Information Systems PhD Program





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Assiut University

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Faculty of Computers  
& Information

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# IS Ph.D. Program

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*Program  
Specifications*



## IS Ph.D. Program Specifications

### A. Basic Information

1. **Program Title:** Ph.D. 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) Ph. D. Program should be able to:

- I. Master scientific research basics and methodologies.
- II. Work continuously to add knowledge in information systems.
- III. Apply analytical and criticizing methodologies in information systems and other related domains.
- IV. Examine the social, cultural, economic, historical, legal, and political contexts in which information systems are employed, both to inform the design of such systems and to understand their impact on individuals, social groups, and institutions.
- V. Develop critical social evaluations.
- VI. Merge the specialized knowledge with other and indicate relations between them.
- VII. Be deeply aware of current problems and recent theories in information systems and its impact on organizations.
- VIII. Determine professional problems and find innovative solutions for them.
- IX. Master professional skills in information systems.
- X. Develop new tools, methodologies, and techniques for practicing the profession.
- XI. Communicate effectively at work and lead team work at various professional contexts.
- XII. Take decisions from provided information.
- XIII. Utilize and develop available resources efficiently and discover new resources.
- XIV. Be aware of his role in developing the society and preserve the environment.
- XV. Act with integrity, credibility and applying the rules of the profession.
- XVI. Adopt life-long self-learning and transfer his/her knowledge and experience to others.

## 2. Intended Learning Outcomes (ILOs)

### a. Knowledge and Understanding

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

- a1. Identify theories, fundamentals, and current state-of-the-art in information systems domain and their related domains.
- a2. Discuss scientific research fundamentals, methodologies, ethics, and its various tools.
- a3. Define ethical and legal principles for professional practice in information systems.
- a4. Explain quality principles for professional practice in information systems.
- a5. Discuss related knowledge of professional information systems practice effect on the social context.
- a6. Discuss the impact of information systems on individuals, social groups, and institutions.

### b. Intellectual Skills

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

- b1. Analyze and evaluate various kinds of information in digital form in the domain of information systems and take references and induce from them.
- b2. Solve specialized problems based on the available inputs.
- b3. Carry out new research studies in information systems.
- b4. Write scientific papers in information systems.
- b5. Assess risks in professional information systems practices.
- b6. Plan to develop the performance in information systems.
- b7. Take professional decisions in different scenarios related to information systems.
- b8. Create and innovate.
- b9. Talk and discuss based on proofs and evidences.

### 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 related to information systems.
- c3. Evaluate and develop current methods and tools in information systems.
- c4. Use technological tools to serve the professional information systems practice.
- c5. Plan to develop the professional information systems practice and the performance of the others.
- c6. Evaluate the impact of information systems on the society.

### 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 develop the professional practice.
- d3. Educate the others and assess their performance.
- d4. Have a self-assessment and long-life learning.
- d5. Use different recourses to obtain information and knowledge.
- d6. Work in a team and lead work teams.
- d7. Manage scientific meeting with the ability to manage time.

### 3. Academic Standards

The academic standards invoked in this specification are driven from:

- Generic the standards in the “Guide of Academic Standards for Graduate Programs” published by the National Authority for Quality Assurance & Accreditation (NAQA AE) on March 2009.
- Ph.D. in information systems, Baylor University, USA.
- Ph.D. in information sciences, Cornell University, USA.

### 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 (18), Elective (12)
- No. of hours of basic computing: ... credits, ... %
- No. of hours of specialized information systems courses: ... credits, ... %
- 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			
INF621	Intelligent Information Systems	4	2	–	–	1 <sup>st</sup>	1 <sup>st</sup> + 2 <sup>nd</sup>	a1, a2, a5, b1-b3,b5, b7-b9, c1, c3,c4, d1, d2, d5,d7
INF622	Advanced Topics in Database Systems	4	2	–	–	1 <sup>st</sup>	1 <sup>st</sup> + 2 <sup>nd</sup>	a1, a2, a4, a5, b1, b2, b4, b7, b9, c1, c3, c4, d1, d2, d5
INF623	Analysis of Information Organizations and Systems	4	2	–	–	1 <sup>st</sup>	1 <sup>st</sup> + 2 <sup>nd</sup>	a1, a2, a4, a5, b1, b2, b5-b7,b9, c1-c5,d1-d7
<b>TOTAL</b>		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 <sup>st</sup>	1 <sup>st</sup> + 2 <sup>nd</sup>	a1, a2, a5, a6, b1-b3,b8,b9, c1, c4, d1, d2, d5
2	Elective Course II	4	2	–	–	1 <sup>st</sup>	1 <sup>st</sup> + 2 <sup>nd</sup>	a1, a2, a5, a6, b1-b3,b8,b9, c1, c4, c6, d1, d2, d5
TOTAL		12	4	–	–			

Elective Course I		Elective Course II	
Course Code	Course Title	Course Code	Course Title
INF624	Advanced Intelligent Systems	INF626	Multimedia Information
INF625	Networked Information Systems	INF627	Information Visualization and Presentation
IT627	Advanced E-Commerce	IT629	E-Commerce Applications Software

### 5c. Ph. D. Thesis

No.	Title	Units No	Year	Semester	Achieved ILOs
1	Ph. D. Thesis	40	2 <sup>nd</sup>	1 <sup>st</sup> + 2 <sup>nd</sup>	a1-a6,b1-b4, b6-b9, c1-c5, d1, d2, d4, d5

## 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:** Prof..Youssef B. Mahdy

**Signature:**

**Date:** 22/9/2010

*Program  
Matrix*



## ISMater Program Matrices

Program ILOs		a1	a2	a3	a4	a5	a6	b1	b2	b3	b4	b5	b6	b7	b8	b9	c1	c2	c3	c4	c5	c6	d1	d2	d3	d4	d5	d6	d7
Courses and Thesis	INF621	✓	✓			✓		✓	✓	✓		✓		✓	✓	✓	✓		✓	✓			✓	✓			✓		✓
	INF622	✓	✓		✓	✓		✓	✓		✓			✓		✓	✓		✓	✓			✓	✓			✓		
	INF623	✓	✓		✓	✓		✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
	EL1	✓	✓			✓	✓	✓	✓	✓						✓	✓	✓		✓			✓	✓			✓		
	EL2	✓	✓			✓	✓	✓	✓	✓						✓	✓	✓		✓			✓	✓			✓		
	Ph. D. Thesis	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	

*Program  
Report*



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



# Program Report

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