

STUDENT HANDBOOK



جامعة الكويت
KUWAIT UNIVERSITY

Kuwait University College of Life Sciences Information Science Department

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY (MSIT)

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www.isc.ku.edu.kw



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1. INTRODUCTION

The Department of Information Science (ISC), College of Life Sciences, offers a Master of Science program in Information Technology (MSIT). Part-time and full-time candidates are admitted to this program. Research requirements include both thesis and non-thesis options. The curriculum has been designed to meet different needs of students from diverse non-information technology related background, allowing them to reach a professional level of competency in information technology. This is accomplished by providing students with the necessary technical knowledge and managerial skills required to develop, implement, supervise or manage information technology projects.

2. ABOUT THE DEPARTMENT

Information systems, technology, and computing are among the largest and fastest-growing fields in the world. Today's labor market demands qualified professionals to manage information systems, network, and software development projects. The Department of Information Science offers two master's programs, the first in Computing Information Systems aimed at graduating highly professional students who are immersed in information systems and the latest developments in computing. The second master's program in Information Technology, which attracts those interested in developing computing skills for non-specialists in the field. The department aims to provide a comprehensive and high-quality education to its graduates and equip them to be successful professionals capable of realizing the desire of His Highness, the Amir of the State of Kuwait, and his vision "Kuwait 2035" which relies on the knowledge-based economy as well as meet the needs of the labor market locally, regionally and globally.

The Department of Information Science also offers an undergraduate program that is accredited by the Accreditation Board for Engineering and Technology (ABET) under General Computing. Since its inception, the Department of Information Science has a strong commitment to maintaining a quality program consistent with the overall mission of the University and the ever-changing demands of the profession through outcome-based learning programs based on the recommendations from ABET.

The Department of Information Science is characterized by a team of highly qualified academic staff that aspire to qualify students to work in various areas of computing and information systems such as designing and managing databases, developing computer technologies and software, designing and developing information systems and networks, designing and developing network and information security methods and designing and developing websites on the Internet.

3. PROGRAM MISSION

The MSIT (Master of Science in Information Technology) balances the study of technology leadership and management strategies through advanced course work in an IT concentration.

4. PROGRAM EDUCATIONAL OBJECTIVES

The objective of the MSIT program is to graduate candidates with the ability to:

1. Lead enterprises aligning IT with business innovation, strategy and goals.
2. Apply cutting-edge information technology in today's competitive market.
3. Keep pace with changing technologies.

5. PROGRAM LEARNING OUTCOMES

Graduates of this program will be able to:

1. **Comprehend** the principles and theories underlying applied information technology;
2. **Apply** IT best practices to succeed in the workplace;
3. **Develop** an awareness of developments in the convergence of security, business, health and telecommunications technologies;
4. **Evaluate** the role of IT in organizational decision making;
5. **Apply** software and hardware lifecycles to build IT applications;
6. **Communicate** effectively and assume leadership.

6. ADMISSION REQUIREMENTS

1. Applicant must hold a bachelor's degree or its equivalent. The degree must be conferred by Kuwait University or by another approved academic institution.
2. Graduates holding bachelor's degree in all specializations except BSc (in Information Science, Information Systems, Computer Science, Computer Engineering, or any degree in a Computing discipline) are eligible to apply for admission to the program.
3. Applicant must have a minimum overall GPA of 2.67 points on a scale of 4.00, or its equivalent in the BSc degree. The applicant's average GPA in the main field of specialization should not be less than 3.00 points on a scale of 4.00, or its equivalent.
4. Applicant must have a good command of the English language. A minimum score of 500 in TOEFL or 5 in IELTS (academic) is required.

7. PROGRAM SUMMARY

MSIT program component	Non-Thesis Option (CRs)	Thesis Option (CRs)
Compulsory Credit	12	12
Elective Credits	18	12
Project (1832593)	3	NA
Thesis (1832597, 598, 599)	NA	9
Total Credit	33	33

8. PROGRAM REQUIREMENTS

8.1. COMPULSORY COURSES (for all students)

Course Number	Course Title	(Credit Hours)	Prerequisite
1832500	Introduction to Information Technology	(3)	None
1832501	Information Technology Infrastructures	(3)	None
1832502	Information Technology Management	(3)	None
1832505	Research Methodology and Seminar	(3)	9 CRs
1832592	Seminar	(0)	None

COMPULSORY FOR THESIS OPTION		COMPULSORY FOR NON-THESIS OPTION	
Course	(CR)	Course	(CR)
1832597 I	(0)	1832593 (project)	(3)
1832598 II	(0)		
2000599 III	(9)		

8.2. ELECTIVE COURSE REQUIREMENT

MSIT (Non-thesis Option): 18 CRs MSIT (Thesis Option): 12 CRs

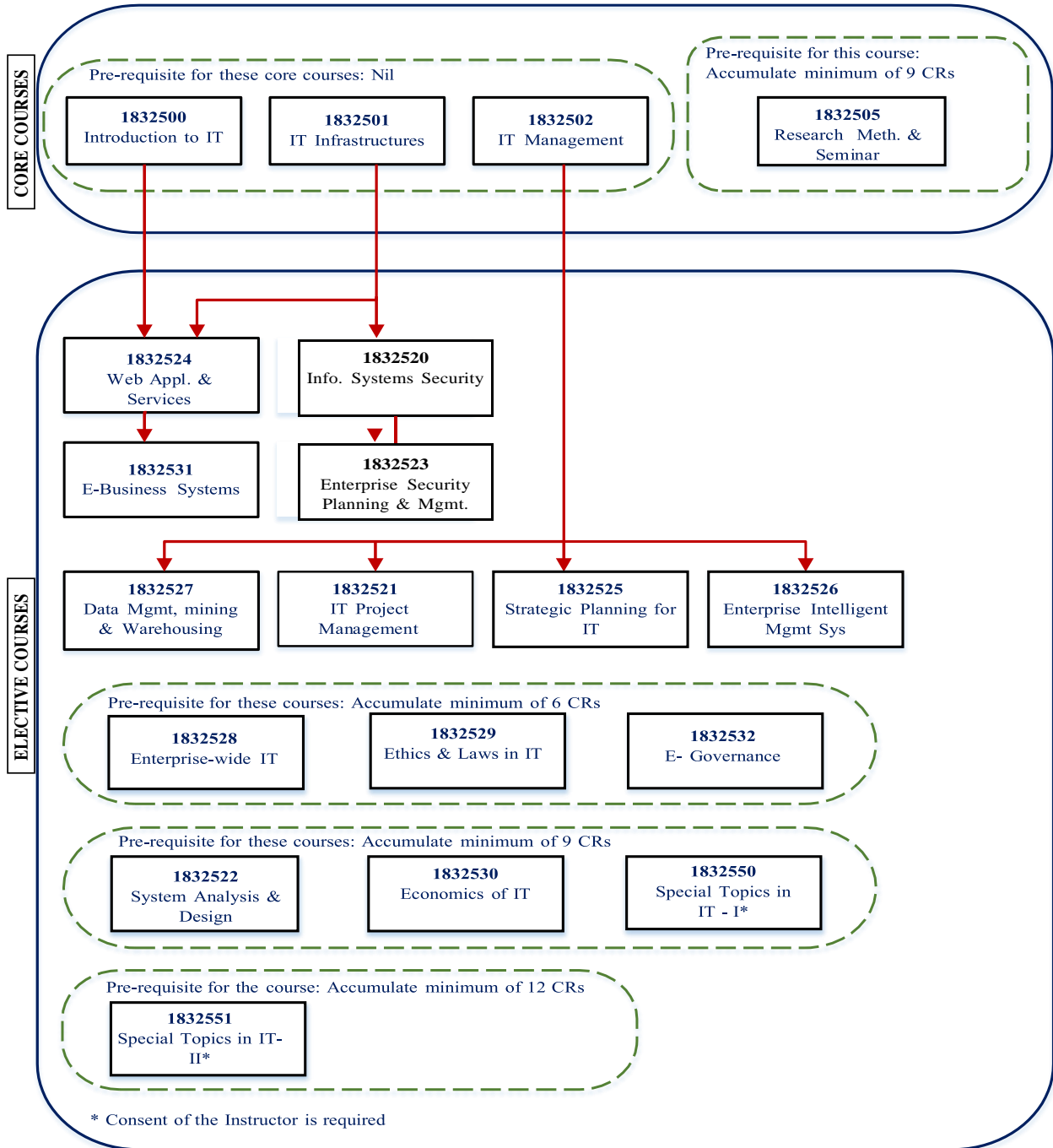
LIST OF ELECTIVE COURSES *

Course No	Course name	Prerequisite
1832520	Information Systems Security	1832501
1832521	Information Technology Project Management	1832502
1832522	Systems Analysis and Design	Accumulate a minimum of 9 CRs
1832523	Enterprise Security Planning and Management	1832520
1832524	Web Applications and Services	1832500 & 1832501
1832525	Strategic Planning for Information Technology	1832502
1832526	Enterprise Intelligent Management Systems	1832502
1832527	Data Management, Mining, and Warehousing	1832502
1832528	Enterprise-wide Information Technology	Accumulate a minimum of 6 CRs
1832529	Ethics and Laws in Information Technology	Accumulate a minimum of 6 CRs
1832530	Economics of Information Technology	Accumulate a minimum of 9 CRs
1832531	E-Business Systems	1832524
1832532	E-Governance	Accumulate a minimum of 6 CRs
1832550	Special Topics in Information Technology-I	Accumulate a minimum of 9 CRs + Consent of Instructor
1832551	Special Topics in Information Technology-II	Accumulate a minimum of 12 CRs + Consent of Instructor

*Students are allowed to take up to 6 credit hours (as part of the Elective Courses) from any 500 level courses offered by other departments at Kuwait University subject to the approval of the MSIT Graduate Program Committee. Alternatively, students are also allowed to take up to 6 credit hours in other universities under the Graduate Exchange Program or Study Abroad Program subject to the approval of the Graduate Program Committee

8.3. COURSE DEPENDENCY GRAPH

MSIT Course Dependency Diagram



9. GRADUATION REQUIREMENTS FOR MASTER STUDENTS

9.1. REQUIREMENTS FOR MSIT WITH THESIS

1. Passing all the required courses (33CRs).
2. Obtaining minimum GPA of 3.00.
3. Passing the thesis examination.

MSIT Thesis Path

Course Requirements for the Thesis option

Completing course requirements for a total of 24 CRs (including 12 CRs of core courses: 1832500, 501, 502, 505, 592 and 12 CRs of elective courses (see list of Elective courses)).

Registration of course 1832597: Thesis Proposal needs to be submitted.

The following duly filled forms should be submitted to supervisor and subsequently to CGS through MSIT program director

1. **AC/1 T: Request to register for the Master's Thesis**
This form should be submitted to the CGS within 3 weeks from the beginning of the semester in which the student is currently registered for thesis.
2. **AC/2 T: Thesis research proposal and budget**
This form should be submitted to CGS within 5 weeks from the beginning of the semester in which the student is currently registered for thesis.
3. **AC/3 (If needed): Change of supervisory committee and request to change study option.**

Registration of course 1832598: Student must have satisfactory progress (S) in course 1832597.

Registration of course 2000599: Thesis Defense (9 CRs).

1. Candidate must have satisfactory progress in course 1832598, reported by the supervisor to CGS.
2. Candidate can register the 2000599 course as a co-requisite to 1832598.

On completing the requirements of course 2000599 satisfactorily, the following forms must be duly filled and submitted to CGS through the Program Director:

1. **AC/4:** Thesis examination committee: Two copies of the thesis (one spiral bound and one soft copy) must be submitted with the form.
2. **AC/6T:** Thesis examination date to be filled by MSIT program director.
3. **AC/7:** Thesis examination result to be filled by convener of thesis examination committee.
4. **AC/8:** Form for distributing final bound thesis to be duly filled and submitted.
5. **AC/9:** Submitting custody Items to be filled by student and submitted to the CGS through MSIT program director.
6. **AC/10:** Thesis binding allowance to be filled by student and duly submitted.

9.2. REQUIREMENTS FOR MSIT NON-THESIS

1. Passing all the required courses (33CR).
2. Obtaining minimum GPA of 3.00.
3. Passing the comprehensive examination.

MSIT Non-Thesis Path

Course Requirements for the Non-Thesis option

Completing course requirements for a total of 30 CRs (including 12 CRs of core courses: 1832500, 501, 502, 505, 592 and 18 CRs of elective courses (see list of elective Courses))



Student registers in the following course

1832593: Project (3 CR)



The following duly filled forms should be submitted to supervisor and subsequently to the CGS through MSIT program director

1. **AC/1 P: Request to register for the Master's Project**
This form should be submitted to the CGS within 3 weeks from the beginning of the semester in which the student is currently registered for project (1832593).
2. **AC/2 P: Project Research Proposal & Budget**
This form should be submitted to CGS within 5 weeks from the beginning of the semester in which the student is currently registered for project.
3. **AC/3 (If needed): Change of supervisory committee & request to change study option.**



Comprehensive Examination

1. Non-thesis MSIT students are eligible to take the comprehensive exam after satisfactorily passing the core courses (1832500, 501, 502, 505, 592).
2. A student has to pass the comprehensive examination arranged by MSIT departmental committee under the article (22) of CGS by-laws.



1. A student must submit a project report and give a project presentation to the project supervisor.
2. **AC/9:** Submitting custody Items to be filled by student and submitted to the CGS through MSIT program director.

10. THESIS REGISTRATION

Upon completing one semester, a graduate student may (with the approval of the academic supervisor, the program director and the CGS) register for a thesis in accordance with the following rules:

1. Completion of a minimum of 12 credits of courses approved for the degree, with a minimum GPA of 2.67.
2. Registration for a thesis as a full-time study load.

It should be noted that registration for thesis may last for more than one semester and the student must register every semester until graduation. The thesis under preparation is given a grade of "Satisfactory (S)" or "Unsatisfactory (U)". The final grade given after thesis examination is either Pass (P) or Fail (F).

3. Fulfillment of the thesis registration forms.

It should be noted that the required forms can be obtained on-line from the website of the College of Graduate Studies (CGS) website (<http://kuweb.ku.edu.kw/COGS/>) or from Information Science Department Website (<http://www.isc.ku.edu.kw>) or from the Program Director's office.

11. MASTER THESIS

10.1. SUPERVISION OF THESIS

An academic supervisor shall be nominated for each Master's student who is required to prepare a thesis. The nomination should take place as soon as possible but not later than the end of the semester following the one in which the student was admitted. The supervisor's major field of specialization should be the same as that of the student. A co-supervisor whose major field of specialization or program is different from that of the student but related to the student's research, may be nominated.

The Program Committee submits its recommendation for the nomination of the main supervisor and co-supervisor (if any) to the CGS for approval. The approval is based on satisfying the requirements stipulated by CGS. The student is supposed to have only one main supervisor. The addition of a co-supervisor should be justified and approved by the CGS after studying the matter.

10.2. RESPONSIBILITIES OF THE MAIN SUPERVISOR AND CO-SUPERVISOR

The main supervisor is primarily responsible for guiding the student through various stages leading to the preparation and submission of the thesis. These stages include selecting a research topic, formulating the research plan, registering for the thesis, conducting the actual research, and writing the thesis. Other responsibilities of the main supervisor are as follows:

1. Accounting for any payments made for the student's thesis research, in accordance with the relevant guidelines and prescribed procedures.

2. Conducting periodical evaluation of the student's research performance and thesis under preparation.
3. Participating in the final evaluation of the student's thesis.

The role and responsibilities of the co-supervisor are determined by the concerned Program Committee.

10.3. EVALUATION OF THESIS

All thesis prepared by Master's degree students at Kuwait University are evaluated by external referees. Details on the rules governing the evaluation process and the procedures that have to be followed, can be found in the booklet entitled "A Guide to Master's Thesis".

10.4. THESIS EXAMINATION COMMITTEE

The Thesis Examination Committee is formed according to article (24) of the CGS by-laws. In the case of resorting to voting in order to determine the result of the examination, the vote should be counted as follows:

1. Supervisor or co-supervisor or both (one vote)
2. The two faculty members in the major specialization of the student (one vote each)
3. Report of the external referee (one vote)
4. Report of the second external referee if resorted to (one vote).

In the case of equal number of votes on both sides, the opinion of the side which include the Committee Chairman shall prevail.

12. MASTER'S PROJECT

12.1. SUPERVISION OF PROJECT

An academic supervisor shall be designated for each Master's student who is required to prepare a project. A student must have passed the comprehensive exam and must have a GPA of at least 3 before registering the project course. The deadline for filling the designation of supervisor form (AC/1P) is the last day of the semester preceding the semester in which the student intends to register for the project. If funding for the project is requested, the form AC/2P must be submitted to CGS within 8 weeks from the beginning of the semester.

The Program Committee submits its recommendation for the nomination of the main supervisor and co-supervisor (if any) to the College of Graduate Studies (CGS) for approval. The approval is based on satisfying the requirements stipulated by CGS. The student is supposed to have only one main supervisor. The addition of a co-supervisor should be justified and approved by the College of Graduate Studies after studying the matter.

12.2. RESPONSIBILITIES OF THE SUPERVISOR

The main supervisor is primarily responsible for guiding the student through various stages leading to the preparation and submission of the project. These stages include selecting a

research topic, formulating the research plan, registering for the project, conducting the actual research, and writing the project report. Other responsibilities of the main supervisor are as follows:

1. Accounting for any payments made for the student's project research, in accordance with the relevant guidelines and prescribed procedures.
2. Conducting periodical evaluation of the student's research performance and project report under preparation.
3. Participating in the final evaluation of the student's project report.

12.3. EVALUATION OF THE PROJECT

All project reports prepared by Master's degree students at Kuwait University are evaluated by a project examination committee assigned by the graduate program committee. Details on the rules governing the evaluation process and the procedures that have to be followed, can be obtained from the program director. An electronic copy of the final master project report must be submitted to CGS for archival.

12.4. TIME LIMITS

The maximum time allowed to finish the project is two semesters. Grade CC (course continue) will be given if the project is not completed within the first semester. Grade I (incomplete) will be given if the project is not completed within the second semester. After getting an I the student will be given until the second week of the subsequent semester to finish and be assigned a grade otherwise the grade will be F.

12.5. TRANSFER IN AND OUT OF PROJECT OPTION

To transfer from thesis option to project option, the student must have passed the comprehensive exam, must have 3.00 GPA and must have at least TWO semesters before reaching the allowed time limit to graduate.

13. COMPREHENSIVE EXAMINATION

Each non-thesis graduate student has to pass a written and oral examination. The examination must be so comprehensive as to reveal the extent of the student's preparation to pursue graduate studies in his/her field of specialization. In particular, it must show the student's capabilities with respect to synthesis, analysis, interpretation, application and discussion.

The Program Committee shall lay down clear written rules as well as a well-defined policy on comprehensive examination and inform the concerned students, about the following:

1. Date, time, and place of holding the comprehensive examination.
2. Clearly defined and written academic subject in which the students are to be examined.

In the case of programs which follow the annual system, the Comprehensive Examination may be conducted through the committees of oral examinations which are held for each course, provided that the area committee specifies the rules and regulations under which

these examinations shall be held and attended, and the comprehensiveness in the field of specialization is taken into consideration.

13.1. COMPREHENSIVE EXAMINATION COMMITTEE

The Comprehensive Examination Committee consists of at least three members of the academic program, appointed by the Dean of the CGS upon the recommendation of the program committee. The committee carries out the task of examining the students and delivering the results, using the form prepared for that purpose, to the program committee for submission to the CGS.

13.2. GRADE OF THE COMPREHENSIVE EXAMINATION

The student's grade in the Comprehensive Examination shall be "Pass" or "Fail".

A student who fails the examination for the first time must repeat it during the next semester. If the student fails for the second time, he/she is academically dismissed from the Master's Degree Program.

13.3. RULES & REGULATIONS FOR THE COMPREHENSIVE EXAMINATION

The MSIT Non-Thesis option requires successful completion of comprehensive examination and a graduate-level capstone project. All MSIT students who choose Non-Thesis Option must pass the Comprehensive Examination after satisfactorily passing the core courses (1832500, 501, 502, 505, 592). The Comprehensive Examination is conducted each semester by the MSIT Program committee.

The Comprehensive Examination has a written exam and an oral exam. The written exam constitutes 60% and the oral exam constitutes 40% of the total grade. The written exam covers three domains which are the core courses of the MSIT Program. The three domains are as follows:

Course #	Course Name
1832500	Introduction to Information Technology
1832501	Information Technology Infrastructures
1832502	Information Technology Management

The comprehensive examination committee consists of at least Three faculty members representing the three areas listed above. The comprehensive examination committee is appointed by the MSIT program committee. The comprehensive examination committee is responsible for conducting the written exam and the oral exam.

The structure of the comprehensive examination is as follows:

- Each written exam consists of Subjective types of Questions. The written exam can include Objective types of Questions at the discretion of the examiner. It is preferred that Objective types of Questions do not exceed 40% of the total grade.
- The syllabus for each written exam should cover the entire syllabus from the respective core course. The mode of the written exam may be OPEN book. However, the final decision is by the comprehensive examination committee.
- The duration of each written exam is 40 minutes.

- The duration of oral examination for each candidate is 20 minutes. Oral Exam is graded using the rubrics set by MSIT Comprehensive Committee.

The comprehensive examination committee conducts the exam and submits the result to the MSIT Program Director. The MSIT Program Director will then submit the grades to the CGS.

A student can appear for the comprehensive examination two times. A student who appears second time need not appear for all the exams. The student can choose to sit for the weak exams only. The grades of the previous exams will be retained for the second appearance. The grades in the second appearance is the maximum of first and second appearance for each exam.

The MSIT Comprehensive Examination will be held on the following dates:

Exam Type	Date
Written Exam	Monday of the 4 th Week Every Semester
Oral Exam	Tuesday of the 4 th Week Every Semester

The place and Time of the MSIT Comprehensive exam will be announced through circulation and publication on the MSIT website.

The syllabus of the MSIT Comprehensive exam is as follows:

Exam	Course #	Course Name	Syllabus
Exam I	1832500	Introduction to Information Technology	All Chapters
Exam II	1832501	Information Technology Infrastructures	All Chapters
Exam III	1832502	Information Technology Management	All Chapters

The grading system of the comprehensive examination is as follows:

Exam Type	Course #	%
Written Exam I	1832500	20%
Written Exam II	1832501	20%
Written Exam III	1832502	20%
Oral Exam	1832500 + 1832500 + 1832500	40%
The overall passing grade is 70%		

14. COURSE DESCRIPTION

1832500: INTRODUCTION TO INFORMATION TECHNOLOGY (CR: 3)

PR: None

This course introduces students to the fundamentals of Information Technology. Topics covered include the binary system, data representation and coding, data communication, data compression, information theory, transmission and storage technology, graphics, role of the Information Technology in business, Information Systems, Databases. Data Warehousing, WEB Services, Enterprise Resource Management, Decision Support Systems. Students will have hands-on training in IT development tools.

1832501: INFORMATION TECHNOLOGY INFRASTRUCTURES (CR: 3)

PR: None

This course introduces students to the components of the IT infrastructures. It covers the topics of the development and deployment of high-speed networks and application services in support of modern enterprise resource planning and management, technologies concepts include data communication, switching mechanisms, routing, data flow, network bridging, advanced network topologies, protocols, standards, server architectures, storage area networks, data center design and implementation, development of an integrated technical architecture (hardware, software, networks, and data) to serve organizational needs, enterprise application integration, XML and Web Services. Students will have hands-on training in some programming language. Students will have hands-on training in IT development tools.

1832502: INFORMATION TECHNOLOGY MANAGEMENT (CR: 3)

PR: None

This course introduces students to the fundamentals of information management. Information technology management encompasses the activities related to the planning, organizing, acquiring, maintaining, and controlling of IT resources. Topics covered in the course include the process of managing IT in organizations, Data/Information/Knowledge Management. Utilization of IT in decision making, IT Management and Management Supported by IT, IT Economics, Managing IT Infrastructures, Information Resources Managing, System Development, and IT Control and Security, Managing merging Technologies, IT processes, Management of change, IT governance, Managing innovation in IT, and entrepreneurship in IT. Student will have hands-on training in database management systems. Students will have hands-on training in IT development tools.

1832505: RESEARCH METHODOLOGY AND SEMINAR (CR: 3)**PR: Accumulated total of 9 CRs**

This course introduces first time research graduate students to the fundamental elements of research methodology. Course topics covered include an overview of discipline-related methodological approaches to research, efficient development of research theme, managing a research project, basics of research design, research documentation, data information collection, efficient use of search engines, legal and ethical issues, protecting and exploiting research, intellectual property rights, presentation skills development, and the use of relevant research tools and technologies. The seminar will provide students an opportunity to practice critical review of a research topic and/or publication and to provide a professional presentation of the review. Each student will be assigned a topic in his/her area of research. In addition, a student will be asked to critically review the literature in his/her specific area of research. Each student will be asked to conduct a presentation using up-to-date presentation technologies.

1832520: INFORMATION SYSTEMS SECURITY (CR: 3)**PR: 1832501**

This course introduces students to the fundamentals of information systems security. Topics covered include Elementary Cryptography, Private versus Public Key Cryptography. Security requirements and applications of security in networking, the Web, databases, operating systems, basic concepts in security legal, ethical, social, and administrative principles.

1832521: INFORMATION TECHNOLOGY PROJECT MANAGEMENT (CR: 3)**PR: 1832502**

This course introduces students to fundamentals of Information Technology Project Management based on the recognized international standards. The course is designed to equip students with knowledge and skills needed to prepare them to become better IT projects managers. They can apply in the IT project management. Topics covered in the course include the basic concepts of IT project management, including initiating, planning, controlling, executing, and closing projects. The course also shows how IT projects should be managed, from inception to post implementation review. The course aims at providing students with an opportunity to acquire improved management skills and abilities to define the project scope, create a workable project plan, and manage within the budget and schedule.

1832522: SYSTEMS ANALYSIS AND DESIGN (CR: 3)**PR: Accumulate a minimum of 9 CRs**

This course introduces student to the systems analysis and design principles and application. Topics covered include Systems development life cycle, analysis and design techniques, information systems planning and project identification and selection, requirements collection and structuring, process modeling, conceptual and logical data modeling, database implementation, design of the human-computer interface and data management, design of the human computer interface (HCI) System implementation and operation, system maintenance, and change management implications of systems. Students will use current methods and tools such as rapid application development, object-oriented analysis and design, prototyping, and visual development. Students will have hands-on training in UML and its related software tools. Students will have hands-on training in IT development tools.

1832523: ENTERPRISE SECURITY PLANNING AND MANAGEMENT (CR: 3)**PR: 1832520**

The course focuses on the managerial aspects of information security in enterprises, such as access control models, information security governance, and information security program assessment and metrics. Developing security plans including a risk management plan. Developing a disaster recovery and business continuity plans. Coverage of the foundational and technical components of information security is included to reinforce key concepts. Laws and international security standards like the ISO 27000 series will introduced.

1832524: WEB APPLICATIONS AND SERVICES (CR: 3)**PR: 1832500 & 501**

This course introduces students to the web applications and services. Topics include core technologies and standards for Web-based distributed systems, network and data standards with particular attention to HTML, XML, http, URL and other web technologies including APIs. Also included are web services and various applications. Students will have hands-on training in web application and development.

1832525: STRATEGIC PLANNING FOR INFORMATION TECHNOLOGY (CR: 3)**PR: 1832502**

This course introduces students to the fundamental principles of strategic planning for information technology. Topics covered in this course include tactical, operational and strategic planning, the importance of strategic IT planning, developing IT strategy, business IT Strategic alignment, developing and maintaining a strategic plan.

1832526: ENTERPRISE INTELLIGENT MANAGEMENT SYSTEMS (CR: 3)

PR: 1832502

This course introduces students to the fast-evolving area of Enterprise Intelligent Management Systems (EIMSs). Topics covered include data transformation to knowledge and value chain, customer service management, business process analysis and design, the principles of decision support systems, intelligent tools for enterprise management, executive information systems, business intelligence systems (BI), and decision support tools in Enterprises. Theoretical concepts are applied to real-world applications.

1832527: DATA MANAGEMENT, MINING, AND WAREHOUSING (CR: 3)

PR: 1832502

This course introduces students to fundamentals of data management, data mining, and data warehousing. Topics covered in the course include data modeling for the enterprise, database management systems, data warehousing techniques, data mining principles for extracting information, data visualization. Students will have hands-on training in advanced database management systems. Students will have hands-on training in IT development tools.

1832528: ENTERPRISE-WIDE INFORMATION TECHNOLOGY (CR: 3)

PR: Accumulate a minimum of 6 CR.

This course focuses on workflow management technology, value chain management, enterprise resource planning, and knowledge management. Students will have hands-on training in ERP systems. Student will have hands-on training in IT development tools.

1832529: ETHICS AND LAWS IN INFORMATION TECHNOLOGY (CR: 3)

PR: Accumulate a minimum of 6 CRs

This course focuses on the ethical, social, and legal implications of information technologies. Issues of privacy preservation, personnel security and ethics are covered.

1832530: ECONOMICS OF INFORMATION TECHNOLOGY (CR: 3)

PR: Accumulate a minimum of 9 CRs

This course examines economic theories related to information technologies and systems, IT resources as commodities, Quantitative methods for cost-benefit analysis and return on information technology investment evaluation are introduced. Strategies for measuring cost factors related to information technology implementation within an organization are introduced.

1832531: E-BUSINESS SYSTEMS (CR: 3)

PR: 1832524

This course introduces students to the analysis and design of E-Business Systems. Topics covered include Introduction to e-business, Business models and concepts, Technology Information, E-business design, patterns and architectures, Security and payment, Marketing concepts and communication, Ethical, social and political issues, Online retailing and services, social networks, auctions and portals. Supply chain management, Customer relation management, E-procurement and e-fulfillment Systems, Business intelligence (BI), m-Business, and v-Business.

1832532: E-GOVERNANCE (CR: 3)

PR: Accumulate a minimum of 6 CRs

This course introduces students to the evolving area of E-Government/Governance Topics covered include the nature of government information, the role of information policy in shaping e-government, implications of government efficiency, transparency, communication, service delivery, engagement with citizens, and information provision, collection, and preservation means of evaluating the impacts and successes of e-government, foundations required in designing, delivering, evaluating, managing e-government, ITI Government, and v-Government.

1832550: SPECIAL TOPICS IN INFORMATION TECHNOLOGY I (CR: 3)

PR: Accumulate a minimum of 9 CRs + Consent of Instructor

A set of most-up-to-date topics related to the field of Information Technology will be studied in this course.

1832551: SPECIAL TOPICS IN INFORMATION TECHNOLOGY II (CR: 3)

PR: Accumulate a minimum of 12 CRs+ Consent of Instructor

A set of most-up-to-date topics related to the field of Information Technology will be studied in this course.

1832592: SEMINAR CR 0

1832593: PROJECT CR 3

1832597 I THESIS CR 0

1832598 II THESIS CR 0

2000599 THESIS CR 9

15. SOME IMPORTANT INFORMATION

1. The following grading scale is used for evaluation of student's performance:

Percentage Range	Letter Grade	GPA
95-100	A	4.00 point
90-94	A-	3.67 point
87-89	B+	3.33 point
83-86	B	3.00 point
80-82	B-	2.67 point
75-79	C+	2.33 point
70-74	C	2.00 point
Less than 70%	F	zero point

2. The study load of a full-time student ranges between (9-15) credits during each semester.
3. The study load of a part-time student ranges between (6-9) credits during each semester. In exceptional cases a student may, with the approval of both the program director and the CGS, register for less than the specified workload.
4. An employed applicant should submit from the place of work a signed notification of joining the program.
5. A student's final grade can be deferred and a grade of "Incomplete" (I) can be given due to reasons acceptable by the course instructor and approved by the program director. The student has to complete these requirements during the time specified by the CGS, or his/her grade for the course changes to "Fail" (F).
6. A student who studies a course that continues for more than one semester (under semester system), is given a grade of "Continuing Course" (CC). The final grade is recorded only in the last semester of the course. At the end of this semester, it is not allowed to postpone the award of final grade. The course credits (if any) shall be used in computing the student's study load only once.
7. A student who has registered for the thesis, is given a grade of "Satisfactory" (S), or "Unsatisfactory" (U), as long as his/her research is ongoing. The final grade [P/F] is not given until after thesis examination.
8. A student is given one chance to repeat up to a maximum of 2 courses which she/he had previously studied and obtained a grade of B or less. It should be noted that the repetition of a course does not lead to the cancellation of the previously obtained grade. An average of both grades is calculated (See article 18 item 10, CGS by-laws).
9. A student, who is caught cheating or attempting to cheat or helping others to cheat in the exam, will be considered to have failed in all courses registered during the semester in which the cheating occurred.

10. If cheating is repeated, the student is academically dismissed from the CGC and the dismissal is indicated in his/her academic record.
11. If it is confirmed that a student has done anything that violates examination regulations, s/he will be considered to have failed the course for which the examination was taking place when the violation occurred.

16. LIST OF FORMS USED FOR MSIT PROGRAM

The MSIT student has to fill the following forms at different stages as listed in the table below. The required form can be download from CGS website (<http://kuweb.ku.edu.kw/COGS/>) or from Information Science Department Website (<http://www.isc.ku.edu.kw>) or from the Program Director's office.

The forms and their purpose.

Non-Thesis Option		Thesis Option	
AC/1P	Request to register for the Master's project (Non-Thesis option)	AC/1T	Request for Master's Thesis registration
AC/2P	Project research proposal and budget (Non-Thesis option)	AC/2T	Thesis Research proposal and budget
AC/3	Change of Supervisory Committee and change study options in Master's		
		AC/4T	Thesis Examination Committee
		AC/6T	Thesis Examination date
		AC/7T	Thesis Examination result
		AC/3FF	Transfer of approved budget
		AC/8	For Distributing final bound thesis
AC/9	Submitting custody items		
		AC/10	Thesis Binding Allowance
Graduation			

Here are some more details on the forms:

Form No	Form Title	Submission Deadline	Form Filling	Approval	Comments
AC/ 1T	Designation of Supervisory Committee for Master's Thesis	current semester (before the semester in which student intends to register for thesis I)	<ul style="list-style-type: none"> • Student • Supervisor • Co-supervisor (if any) 	<ul style="list-style-type: none"> • Program Director • VDAA-CGS 	<ul style="list-style-type: none"> • Student must earn 12 credits of course work • GPA not less than 2.67
AC/ 2T	THESIS RESEARCH PROPOSAL & BUDGET	the semester in which the student registered Thesis I	<ul style="list-style-type: none"> • Student • Supervisor • Co-supervisor (if any) 	<ul style="list-style-type: none"> • Program Director • VDAA-CGS 	<ul style="list-style-type: none"> • Research proposal must be typed and attached to the AC2 form • In case of requesting a budget, certified quotations must be provided

AC/3	CHANGE OF SUPERVISORY COMMITTEE & REQUEST TO CHANGE STUDY OPTION (FOR MASTER'S)	changes or the student changes from thesis to project or visa-versa	<ul style="list-style-type: none"> • Student • Current Supervisor • Current Co-supervisor (if any) • Proposed Supervisor • Proposed Co-supervisor (if any) 	<ul style="list-style-type: none"> • Program Director • VDAA-CGS 	<ul style="list-style-type: none"> • Provide information for change in supervisory committee
AC/4T	THESIS EXAMINATION COMMITTEE	submitting the thesis to CGS for inspection and external evaluation	<ul style="list-style-type: none"> • Student • Supervisor • Co-supervisor (if any) • Convener • Member 	<ul style="list-style-type: none"> • Program Director • VDAA-CGS 	<ul style="list-style-type: none"> • Submit AC/5TM form with AC/4T form filled by Supervisor & Co-supervisor (if applicable)
AC/5TM	THESIS EVALUATION FORM (Examination Committee Members)	Supervisor & Co-supervisor: submit AC/5TM form with AC/4T form Convener & Member: submit AC/5TM form prior to thesis exam	<ul style="list-style-type: none"> • Supervisor • Co-supervisor (if any) • Convener • Member 	<ul style="list-style-type: none"> • Program Director • VDAA-CGS 	<ul style="list-style-type: none"> • Submit of AC/5TM form by Convener & Members prior to thesis exam
AC/5TR	THESIS EVALUATION FORM (External Referee)	submitting the thesis to CGS for inspection and external evaluation	<ul style="list-style-type: none"> • External Referee 		<ul style="list-style-type: none"> • A period of 30 working days is given to complete the modifications to the thesis. This period begins from the date the external referee's report is sent to the program director and supervisor.
AC/6T	THESIS EXAMINATION DATE	No less than two weeks prior to examination date	<ul style="list-style-type: none"> • Student • Supervisor • Co-supervisor (if any) • Convener • Member 	<ul style="list-style-type: none"> • Program Director • VDAA-CGS 	<ul style="list-style-type: none"> • if the exam date is to be changed, a new AC/6T form must be filled.
AC/7T	THESIS EXAMINATION RESULT	45 working days after taking and passing the thesis defense exam are given to make the final amendments to the thesis	<ul style="list-style-type: none"> • Supervisor • Co-supervisor (if any) • Convener • Member • 	<ul style="list-style-type: none"> • Convener • Program Director • VDAA-CGS • 	<ul style="list-style-type: none"> • the student must commit to or address the recommendations of the external referee and the members of the examination committee.

17. TIME LIMIT FOR COMPLETING STUDIES

1- Minimum Time Limit

The minimum time limit for completing the requirements of Master's Degree is twelve months.

2- Maximum Time Limit

A. Full-Time Students:

The student has to complete all the requirements for Master's Degree Program within two years from the date of enrollment. The student may, upon the approval of the CGS, be given a chance to maintain his/her enrollment in the program for an additional period not exceeding two academic years.

B. Part-Time Students

The part-time Student has to complete all the requirements for the Master's Degree Program within three years from the date of enrollment. The student may, upon the approval of the CGS, be given a chance to maintain his/her enrollment in the program for an additional period not exceeding two academic years.

In the case of students who have been admitted after studying graduate courses at Kuwait University or for whom courses studied at other academic institutions have been approved, one semester will be deducted from the normal period for completing Master's degree requirements for every six (6) approved credits and time fractions are ignored.

18. ISC FACULTY MEMBERS' PROFILE

Dr. Abdullah Al Mutairi

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Research Interest: Machine Learning, AI, Deep Learning, Data Mining, Computer Vision, Artificial Neural Networks, Social Network Mining.

Dr. Aseel Al Monaeis

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Research Interest: Web application migration, Web Services, Service-oriented architecture and Security.

Dr. Bader Ali

Email: bader.ali@ku.edu.kw

Research Interest: Large Scale distributed systems, Social networking inspired trusted network systems, Digital Rights management, Digital identity management.

Dr. Bader Al-Khazi

Email: bader.alkhazi@ku.edu.kw

Research Interest: Software Quality and Testing, e-Government, Security, Mobile Computing, Education.

Dr. Dari Alhuwail

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Research Interest: Health Informatics, Information Systems Adoption, Quality Assurance and Performance Improvement, Systems Development, Information and Communication Technologies for Development, Systems Evaluation, Geographical Information Systems, IS Policies and Strategies.

Dr. Eiman T. Al Shammari

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Research Interest: Data Mining, IT applications (Educational/Environmental).

Dr. Fatima Boujarwah

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Research Interest: Human Computer Interaction, Crowdsourcing, Assistive Technologies, Educational Technologies, Autism and Technology.

Dr. Hanady Abdulsalam

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Research Interest: Data mining, Data aggregation in WSN, Data stream management, Data management using cloud and fog computing.

Dr. Helal Al-Hamadi

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Research Interest: Fuzzy Logic, Power Quality, Mobile Adhoc Networks.

Dr. Kalim Qureshi

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Research Interest: Distributed computing, performance measurement of systems, Medical Imaging and IS development.

Prof. Kassem Saleh

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Research Interest: Software engineering, distributed systems, programming languages, information security, project management, risk and quality engineering, business analysis.

Dr. Loulwah AlSumait

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Research Interest: Data mining, Deep learning, Text mining, Pattern Recognition, Topic modeling.

Prof. Muhammad Sarfraz

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Research Interest: Intelligent Systems, Information Systems, Computer Graphics, Computer Vision, Pattern Recognition, Soft Computing.

Dr. Naelah Al-Dabbous

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Research Interest: Wireless Communications, Adaptive Signal Processing, Sensor Networks and information system security, Technology and Healthcare.

Dr. Omar Al-Ibrahim

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Prof. Paul Manuel

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Dr. Ranya Al Awadhi

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Dr. Sana BuHamra

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Dr. Shaikha AlDuaij

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Research Interest: Data Mining, Cyber Security, Health Informatics.

Dr. Zainab Al-Jazzaf

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Research Interest: Web Services, Quality of Services, Service-Oriented Architecture, Trust, Cloud Computing, E-governance, E-Learning.

Dr. Zainab Al-Meraj

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Research Interest: Computer Graphics, Human-Computer Interaction (HCI), Usability and Accessibility of Web and Mobile Technologies, Assistive Technologies.

19. CALENDAR OF THE COLLEGE OF GRADUATE STUDIES

Fall Semester 2020/2021*

Day	Date	Details
Monday	12/10/2020	Last day for submitting registration form (AC1) of the Fall 2020/2021 for thesis, project or dissertation. (1)
Sunday	22/11/2020	Beginning of late registration, addition, withdrawal from courses for CGS students.(2)
Thursday	26/11/2020	Last day for late registration, addition, withdrawal from courses for CGS students.
Sunday	29/11/2020	Beginning of registration in closed sections by program directors in the academic colleges.
Sunday	29/11/2020	Sending files of non-degree students asking to be transferred to degree system and beginning of submitting new requests or renewal of scholarships and academic assistantships and the beginning of admission postponement.
Sunday	06/12/2020	Beginning of classes.
Thursday	10/12/2020	Last day for registration in closed sections by program directors in the academic colleges.
Thursday	10/12/2020	Last day for submitting new requests or renewal of scholarships and academic assistantships. Last day for changing student's time status and admission postponement. (3)
Sunday	13/12/2020	Beginning of on-line fees payment for degree and non-degree students.
Sunday	13/12/2020	Beginning of on-line withdrawal from courses for degree and non-degree students and after fees payment. (4) (5)
Thursday	17/12/2020	Last day for posting grades.
Thursday	31/12/2020	Last day for on-line fees payment for degree and non-degree students.
Thursday	07/01/2021	Last day for withdrawn from courses for degree and non-degree students. No courses withdrawn after this date. (5)
Thursday	21/01/2021	Last day for withdrawal from the semester or the program for degree and non-degree students. No withdrawal after this date. (4) The student should continue his/her study and sit for the exams. (5)(6)
Sunday	24/01/2021	Beginning of early registration for the Spring semester 2020/2021
Thursday	28/01/2021	Last day for submitting registration form (AC2) for thesis, project or dissertation.
Thursday	04/03/2021	Last day of study. And claiming fees refunds.
Saturday	06/03/2021	Beginning of final exams.
Wednesday	17/03/2021	Last day of final exams.
Sunday	21/03/2021	Last day for posting grades.
Sunday	21/03/2021	Beginning of the first semester vacation.
Monday	22/03/2021	Last day for submitting registration form (AC1) for thesis, project or dissertation of the Spring Semester 2020/2021. (1)
Wednesday	31/03/2021	Last day of early registration for the Spring Semester 2020/2021.
Saturday	03/04/2021	End of the first semester vacation.

For the most up-to-date version of the calendar, please consult:
<http://kuweb.ku.edu.kw/COGS/UsefulLinks/AcademicCalendar/index.htm>

Spring Semester 2020/2021*

Day	Date	Details
Monday	22/03/2021	Last day for submitting registration form (AC1) for thesis, project or dissertation of the Spring semester 2020/2021.(1)
Sunday	28/03/2021	Beginning of late registration, addition, withdrawal from courses for CGS students.(2)
Sunday	28/03/2021	Beginning of registration in closed sections by program directors in the academic colleges.
Sunday	28/03/2021	Beginning of registration in closed sections by program directors in the academic colleges.
Thursday	01/04/2021	Last day for late registration, addition, withdrawal from courses for CGS students.
Sunday	04/04/2021	Beginning of classes.
Thursday	08/04/2021	Last day for registration in closed sections by program directors in the academic colleges.
Thursday	08/04/2021	Last day for submitting new requests or renewal of scholarships and academic assistantships. Last day for changing student's time status and admission postponement. (3)
Sunday	11/04/2021	Beginning of on-line fees payment for degree and non-degree students.
Sunday	11/04/2021	Beginning of on-line withdrawal from courses for degree and non-degree students and after fees payment. (4) (5)
Thursday	15/04/2021	Last day for posting grades.
Thursday	22/04/2021	Last day for on-line fees payment for degree and non-degree students.
Thursday	29/04/2021	Last day for withdrawn from courses for degree and non-degree students. No courses withdrawn after this date. (5)
Thursday	20/05/2021	Last day for withdrawal from the semester or the program for degree and non-degree students. No withdrawal after this date (4). The student should continue his/her study and sit for the exams. (5)(6)
Thursday	20/05/2021	Last day for submitting registration form (AC2) for thesis, project or dissertation.
Sunday	23/05/2021	Beginning of early registration for the Fall semester 2021/2022
Thursday	01/07/2021	Last day of study and claiming fees refunds.
Saturday	03/07/2021	Beginning of final exams.
Tuesday	17/03/2021	Last day of final exams.
Thursday	15/07/2021	Last day for posting grades.
Sunday	18/07/2021	Beginning of the Spring semester vacation.
Monday	22/03/2021	Last day for submitting registration form (AC1) for thesis, project or dissertation of the Fall Semester 2021/2022. (1)
Wednesday	31/03/2021	Last day of early registration for the Fall Semester 2021/2022.
Saturday	02/10/2021	End of the Spring semester vacation.

For the most up-to-date version of the calendar, please consult:
<http://kuweb.ku.edu.kw/COGS/UsefulLinks/AcademicCalendar/index.htm>

Remarks:

1. The student cannot register in thesis or project or dissertation unless he/she submits the (AC1) form and approved by the Vice Dean of Academic affairs at the College of Graduate Studies. In case of Ph.D. students, an additional requirement of passing qualifying exam should be fulfilled before approving the (AC1) form.
2. A student who is given a provisional admission on the condition of passing undergraduate courses cannot register the conditional courses on-line accordingly; she/he should visit the Registration Division at the CGS during the registration period in the morning.
3. Admission of the regular student who did not register in the same semester he was accepted in can postpone in a period not exceeding an academic year according to the petition of the student and the approval of the program committee and College of Graduate Studies. A student who is given a provisional admission on the condition of passing undergraduate courses cannot withdraw or postpone his admission from the semester.
4. A student cannot withdraw from any course unless s/he pays the fees (please refer to the Registration Guide). Student should print and keep the voucher after on-line fees payment. Fees cannot be refunded after the end of the academic year.
5. A non-degree student cannot withdraw from the program or the semester, yet she/he can withdraw from all the registered courses during the period for courses withdrawal.
6. A grade of (F) is posted in all the registered courses for a student in case s/he did not continue attending classes and taking the final exam. There is no FA, D, D+ or C- grade in the CGS grading scale.
7. Each student will be withdrawn from the semester if the fees are not paid by the time specified above.

** Calendar adjustments may occur, and they are automatically updated on the CGS website.*

20. MORE INFORMATION ON THE PROGRAM

For any other further information on the MSIT program, kindly refer to the CGS website (<http://kuweb.ku.edu.kw/COGS>), the Information Science Department Website (<http://www.isc.ku.edu.kw>) or from the Program Director's office.

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY (MSIT)

2020-2021



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