



Information Technology Program Specifications

Workshop Participants Committee On 10 March 2022

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May - 2022



1. Program Identification and General Information:

1	Scientific name of the program:	<i>Information Technology (IT)</i>
2	Total credit hours required to award the degree	<i>١٣٠ Credit Hours</i>
3	Number of years needed for completion of the program:	<i>4 Years [8 Academic semesters]</i>
4	The body responsible for granting the degree:	<i>International Malaysian University</i>
5	The body responsible for the program:	<i>Department of Information Technology at Faculty of Engineering & Information Technology</i>
6	Award granted on completion of the program:	<i>Bachelor of Information Technology (IT)</i>
7	Study system:	<i>Regular attendance</i>
8	Study Language of the Program:	<i>English</i>
9	Entry requirements:	<i>Secondary School Certificate (Scientific Section)</i>
10	Departments participating in the program:	<i>All An engineering Departments at Faculty of engineering and Information Technology</i>
11	Starting year of the program:	<i>2022/2023</i>
12	Study methods in the program:	<i>Full time.</i>
13	Location of Delivery:	<i>International Malaysian University, The Faculty of Engineering and Information Technology</i>

14	The program resources:	<i>International Malaysian University</i>
15	Minimum grade requirements:	<i>As per the admission rules made by Ministry of Higher Education and Scientific Research, Republic of Yemen</i>
16	Other admission requirements:	<i>According to the University Rules and Regulations</i>
17	Date of current development of the program:	<i>Sep. 2021 Approved Dec./2021</i>
18	Prepared by:	<i>1. Assistant Prof. Dr. Mukhtar Alwarafi 2. Assistant Prof. Dr. Hager Alsoohbani 3. Assistant Prof. Dr. Arwa Ahmed Kasim</i>
19	Program coordinator:	<i>Assistant Prof. Dr. Hager Alsoohbani</i>

2. Introduction:

International Malaysian University and, The Faculty of Engineering and Information Technology's Vision want to be Excellence in its programs, one of them is Information technology (IT) which studies ways to develop, create and implement computer-based technical systems like software applications and computer Hardwar.

In the last decade; IT has become a fundamental pillar in the development and prosperity of the society. It has evolved over many years to assist a growing portion of the work force devoted to the generation, processing, transmission, storage, retrieval and general use of information. For the important of this program the Ministry of Higher Education and Scientific Research in Yemen launching and the announcement of the national academic reference standard NARS of Information Technology in 2018.

Also, in practice, IT investigates how technology can be applied to solve business

and organizational issues across the board, on a large scale. Those working in IT aim to help others solve and understand tech problems so they may do their jobs better. The IT curriculum prepares graduates for employment as designers, testers, support technicians, administrators, developers, or programmers with organizations that use computers to design, process, manage, and communicate information.

Promising Jobs:

- 1- *IT Specialist.*
- 2- *Chief Information Officer (CIO)*
- 3- *Chief Information Technology Officer (CITO)*
- 4- *Chief Information Security Officer (CISO)*
- 5- *Network Administrator*
- 6- *Technical development*
- 7- *Instructor*

3. University Vision, Mission, Values, Objectives, and Goals:

3.1-University vision:

A university environment that is scientifically distinguished, innovative in research, and socially supportive

3.2-University mission:

Providing a distinguished educational service, to prepare outputs with integrated knowledge and skills, in line with the requirements of the profession and the needs of the labour market, through advanced educational programs, an encouraging learning environment, skilled human resources, and an effective national, Arab and international partnership.

3.3-University Core values:

- 1- Commitment
- 2- Professional
- 3- Quality
- 4- Teamwork
- 5- Transparency and Accountability
- 6- Partnership

3.4-Special University Objectives (Educational):

- 1- *Providing students with the necessary knowledge, skills and values in the medical, engineering, technical, administrative and financial fields required by the local and regional labour market, and evaluating them using modern scientific methods.*
- 2- *Preparing scientific and professional graduates to keep abreast of the knowledge developments in the various fields of sciences in a way that achieves a high level of professional practice in the labour market with all efficiency and competence.*
- 3- *Design students' learning experiences by providing an academic, advising and social environment that supports creativity, distinction, innovation, and refinement of talents, and enriching student services and facilities and meeting their needs in a way that achieves their aspirations and future aspirations*
- 4- *Providing quality education that encourages creativity and innovation by providing a learning and research environment that supports an in-depth and clear understanding of the priority problems in Yemeni society and methods for their solution.*
- 5- *Contributing to the support and development of Yemeni society and its service*

through awareness-raising activities, and providing professional development services, continuing education and counselling to the various sectors related to the university's specializations.

- 6- *Keeping up with the successive developments in information and communication technologies and employing them in the specifications of academic programs in terms of content, teaching methods and evaluation.*
- 7- *Communicate and cooperate in a more effective manner with the community with the aim of increasing local and regional relations in a way that improves Yemen's level and its historical reputation in an international context.*

.3.5-Strategic goals (Strategic):

1. *Expanding the infrastructure, completing the laboratory requirements, the main scientific references, and the electronic administrative and financial systems. Improving the quality and quality of undergraduate and graduate academic programs to meet the needs of the individual and society.*
2. *Attracting, selecting and installing 30% of the faculty members and their assistants in accordance with the conditions and standards, and developing their skills in a professional context. Work to attract qualified academic and administrative human cadres, develop and invest them on a professional and ethical basis in achieving the vision and mission of the university.*
3. *Governance of the university in a way that enhances the principles of transparency, integrity and accountability and contributes to the shift towards decentralization and the consolidation of independence and institutional work. Finding effective and tangible solutions for the infrastructure necessary for the educational process, in a way that ensures its sustainability, in accordance with generally accepted standards.*
4. *Reviewing and developing the scientific departments and their academic and*

engineering programs in light of the market requirements and needs.

5. *Graduating national cadres armed with sufficient knowledge and professional skills, and enhancing their scientific and research standing at the local, Arab and international levels.*
6. *Supporting and guiding scientific research in accordance with the research map and the priorities of comprehensive national development.*
7. Finding an effective policy in achieving the scientific, advisory and service partnership at the national, Arab and international levels.

4. Faculty Vision, Mission, Values, and Objectives:

4.1-Vision:

Excellence in engineering education and scientific research locally and regional competition to provide meaningful community service

4.2-Mission:

Providing a distinguished education service to prepare graduation qualified academically, research, professional capable of thinking, creativity and competition through the provision of modern engineering and technical programs in accordance with quality standards and the requirements of the local and regional labour market.

4.3-Values:

1. *Excellence*
2. *Professional*
3. *Lifelong learning*
4. *Work in a team*
5. *Partnership*

4.4-Faculty Objectives (Educational):

- 1. Providing modern and quality programs in accordance with quality standards that keep pace with the rapid development and changing requirements of the labor market in the fields of engineering and information technology to meet the needs of local and regional communities.*
- 2. Preparing creative engineers and programmers who are able to think, innovate and compete in the local and regional labour market and contribute effectively to the development of societies through problem solving, development and scientific research.*
- 3. Continuous development of the college departments by updating programs, plans, courses, educational resources and means to keep pace with educational development in the fields of engineering and information technology.*
- 4. Strengthening the partnership between the college and the community through scientific research, providing training and consulting, and adopting research and applied projects in partnership with relevant institutions.*
- 5. Encouraging and supporting scientific research through the acquisition and provision of scientific periodicals and specialized books, holding workshops, seminars and scientific conferences, and enhancing communication, cooperation and exchange of experiences with corresponding colleges in Yemeni, Arab and international universities.*

5. Department Vision, Mission, Values, and Objectives:

5.1- Department Vision:

Excellence in Education of Information Technology Locally and Regionally.

5.2- Department Mission:

Produce educational service to prepare graduates with scientific and professional competence through providing distinguished academic and research programs in the field of technology and an appropriate academic environment to serve the community and achieve the requirements of the local and regional labor market in accordance with quality and accreditation standards.

5.3- Department Values:

1. *Excellence*
2. *Professional*
3. *Lifelong learning*
4. *Work in a team*
5. *Partnership*

5.4- Department Objectives- :

1. *Providing distinguished academic and research programs in the field of technology that meet the needs of society and the requirements of the labour market.*
2. *Providing the graduates with scientific knowledge and professional skills in the field of technology who are able to compete and innovate locally and regionally.*
3. *Attracting good academic staff, developing their teaching and research capabilities, and encouraging them to work in a team spirit, taking into account the ethics of the profession.*
4. *Providing an appropriate educational and research environment that stimulates creativity, innovation and research excellence.*
5. *Development of values, teamwork spirit, effective communication, leadership, and a sense of legal responsibility and moral commitment among students.*
6. *Providing scientific and technical consultations to serve different sectors through*

awareness, professional development, and continuous learning in the field of technology.

6. Program Mission and Objectives:

6.1- Program Mission:

Preparing graduates with scientific and professional knowledge and continuous learning skills in the field of information technology that keeps pace with the needs of the local and regional labor market, by providing an appropriate educational structure in accordance with quality and accreditation standards.

6.2-Program Objectives- :

- 1. Preparing scientifically and professionally specialized cadres that keep pace with the needs of the local and regional labor market in the field of information technology.*
- 2. Providing students with theoretical knowledge and professional skills that stimulate creativity and innovation locally and regionally in the field of technology.*
- 3. Developing students' skills to enable them to communicate effectively, work in a team spirit, and learn for life in the field of technology.*
- 4. Providing students with leadership skills that enable them to analyze problems and find appropriate technological solutions for them in their organizations while adhering to ethical and professional values.*

7. Program Standards & Benchmarks:

7.1- Program Standards: -

A. Academic Standards:

1. *National Academic Reference Standards (NARS) for Undergraduate Information Technology Program, 2018*
2. *National Accreditation Standards for locally accredited 2021.*
3. *Information Technology Curricula 2017, Curriculum Guidelines for Baccalaureate Degree Programs in Information Technology.*
4. *A Report in the Computing Curricula Series, Association for Computing Machinery (ACM) and IEEE Computer Society (IEEE-CS)*

B. Strategies :-

- 1- *University Strategy .*
- 2- *Faculty Strategy .*

C. Rules and Regulation :-

- 1- *Higher Education rules*
- 2- *Private Education Laws*
- 3- *Student affairs regulation.*

7.2- Program Benchmarks:

1. Information Technology, Computer and Information Technology, *Saba University*.
www.saba.edu
2. Information Technology, Computer and Information Technology, *Sana'a University*

www.su.edu.ye

3. Information Technology, Computer and Information Sciences, *King Saud University*

www.ksu.edu.sa

4. Business Information Technology, King Abdullah II School for Information Technology, *Jordan University*

www.ju.edu.jo

5. Information Technology, College of Information Technology Education *Technological Institute of the Philippines*

www.tip.edu.ph

6. Information Technology *Southeastern*, College of Science and Technology

www.southeastern.edu

8. Graduate Attributes:

Upon successful completion of an undergraduate Information Technology program, graduates will be able to:

1. *Demonstrate knowledge of information technology discipline theoretically and practically.*
2. *Identify information technology problems and requirements using computational approaches, modern information technologies, tools and techniques.*
3. *Analyze, design and manage computing-based solutions within the context of information technology discipline to meet the organization's goals and business objectives.*
4. *Use the acquired knowledge to evaluate, select and manage computing*

technologies solutions and resources for integrating and securing various information technology solutions.

5. *Follow the rules of information technology policies development and procedures during the selection, integration, and administration of computer-based systems.*
6. *Describe the impact of information technology competencies on individuals, organizations and society to achieve professionalism.*
7. *Work effectively within a team or individually in planning, implementing, deploying, configuring, maintaining, and managing practices and technology trends of organization's computing infrastructures.*
8. *Use efficiently project management, research capability, leadership, communication, interpersonal relationship and life-long learning skills.*
9. *Demonstrate commitment to ethical, legal, security and social responsibilities as professionals in information Technology.*

9. Program Intended Learning Outcomes (PILOs):

A. Knowledge and Understanding:

Upon successful completion of the undergraduate Information Technology Program, the graduates will be able to:

- A1. *Demonstrate an understanding of appropriate concepts, theories, mathematical foundations, models and techniques related to Information technology discipline.*
- A2. *Identify the computing desired needs for different computer-based systems, components, processes and human factors, and consider them during the selection, integration, and administration technologies to meet the*

organization's goals.

- A3. *Demonstrate knowledge of computer and communication networks, information technology and networks security, distributed and cloud computing, and operating systems of different platforms.*
- A4. *Explain the information technology policies and procedures, project management methods/tools, data and management information systems, network management, and system integration & architecture.*
- A5. *Describe the principals of programming foundations, data and risk management, web and multimedia applications, system administration tools and techniques, human-computer Interaction, and professional communication.*

B- COGNITIVE/INTELLECTUAL SKILLS:

Upon successful completion of the undergraduate Information Technology Program, the graduates will be able to:

- B1 *Propose appropriate information technology-based solutions and integrate them effectively into the user and organization environment.*
- B2 *Analyze the impacts of computing on organizational objectives and customer needs, and consider them during the analytical processing, selection, integration, configuration and administration of computer-based systems.*
- B3 *Explore and integrate computing products and services to improve the performance of secured computing-based solutions.*
- B4 *Evaluate the functions and related issues focusing on information technology solutions to design and develop information technology policies, tools and techniques to achieve administrative policies within a corporate environment.*

C. Practical and Professional Skills:

Upon successful completion of the undergraduate Information Technology Program, the graduates will be able to:

- C1. Employ effectively the concepts, principles of computational approaches, computing systems, communication and modern technologies in the problem-solving process.*
- C2. Perform required information technology policies and procedures and employ technologies to achieve administrative policies within a corporate environment*
- C3. Use information technology infrastructure approaches and tools to specify, design, implement, develop and document appropriate solutions.*
- C4. Administer, control, configure and maintain the organization systems and data security to minimize and handle risks management to enhance organizational performance.*
- C5. Work effectively on IT-project management, programming skills, implementation or simulation tools, operating systems with different platforms, and different applications including web, mobile and multimedia applications.*

D. General and Transferable Skills:

Upon successful completion of the undergraduate Information Technology Program, the graduates will be able to:

- D1. Work effectively within a team or individually to accomplish a common goal*
- D2. Engage in a life-long self-learning, time management, leadership and communicate effectively with specialists as well as non-specialists to solve organization problems.*
- D3. Write and present technical reports and deliverables effectively.*

D4. Demonstrate efficient skills in IT-project management, research capability, creative thinking and interpersonal relationship skills.

D5. Use the governmental and environmental regulations to develop Information technology policies within an organization based on professional ethics, privacy, security and legal responsibility.

D6. Keep up with modern technologies, tools and standards to improve organization performance.

10. Teaching and Learning Strategies:

- *Lectures /Interactive lectures*
- *Discussion*
- *Illustrations*
- *Preparation Seminar/ project/presentation*
- *Tutorials*
- *Brainstorming*
- *Case Studies*
- *Computer lab-based sessions*
- *Directed self-study/ Self-learning*
- *Training*
- *Problem solving*
- *Team work (group learning)*
- *Exercises and home works*
- *Group project*

Teaching Strategy	Description
Lectures /Interactive lectures	<i>These are interactive lectures weekly conducted in the class and supported with variety of teaching formats including, lectures and multimedia presentations, use of whiteboard to solve examples and illustrating different tasks and problems introduced by the presentation, and class discussions, in which concepts, approaches, and case studies are presented, explored, and shown students what they need to know.</i>
Discussion	<i>This is allowing the students ask questions during the lecture or other students for purpose of clarifying the subject of the lecture and increasing the concentration and absorption of the student and attention.</i>
Illustrations	<i>Illustrations performing an activity so that learners can observe how it is done in order to help prepare learner to transfer theory to practical application. Moreover, this strategy involves the teacher showing learners how to do something</i>
Brainstorming	<i>It is a process for generating multiple ideas/options in which judgment is suspended until a maximum number of ideas has been generated. It is a common teaching approach that is often used by organizing a meeting of a group of students in a round circle, so that students combined focus their thinking on solving a problem in creative ways, and this strategy is usually followed in educational meetings and work sessions to stimulate</i>

Teaching Strategy	Description
	<i>students, their thinking and discussion.</i>
Seminar/ project/presentation	<i>In each course, different projects which cover a variety tasks in the course will be prepared by the teacher and assigned to different student's groups. Moreover, the teacher needs to set advance work for a selected number of students, and then have the selected students present their work to the whole group, for discussion, criticism and suggestions for improvement. Seminar sessions and presentations provide an opportunity to address questions, queries and problems.</i>
Tutorials	<i>Tutorial classes are provided to create a stimulating environment for students to work through examples, exercises and case studies. Tutorials include worksheets of carefully-designed questions that make students to think about challenging subjects. They are designed to be used after a brief lecture in which students work in pairs or groups.</i>
Case Studies	<i>To be taken in each subject to be aware regarding the courses.</i>
Computer lab-based sessions	<i>Practical Applications using a variety of software or simulations software before the real design and implementation. The student use programing and applications in the laboratory-based sessions that are required for some courses to balance between theoretical and practical issues. A variety of web-based searches</i>

Teaching Strategy	Description
	<i>students will be assigned to learn how they can search for solutions using the Web.</i>
Directed self-study/ Self-learning	<i>Students are encouraged to undertake independent study to both supplement and consolidate what are being learned. Students are encouraged to undertake independent study in some topics to consolidate what is being learned. Self-learning is required for students to "talk science" and encourage them to teach each other.</i>
Training	<i>The training is used to relate the theoretical aspects with the practical ones. The course of training is a sequence of events that trainer needs it for a particular job or activity.</i>
Problem solving	<i>This allows students to become more active in their learning as they work out which information, they need to find out how to solve a particular problem.</i>
Team work (Group Learning)	<i>The students are assigned to work in a small group as a team on some subjects. Group learning involves a large or small group activity that encourages students to focus on a topic and contribute to the overall project. Students then learn practically the team work skills such as dividing the tasks, sharing knowledge clearly, time, reporting, presenting, and resources management, etc...</i>
Exercises and home works	<i>Students are given special tasks, exercises, puzzles, and activities during the class or at homes.</i>

Teaching Strategy	Description
Group project	<i>As a regard of system of project, students make themselves as a group to do their project.</i>

11. Assessment Methods:
<ul style="list-style-type: none"> • <i>Written examinations</i> • <i>(Mid and final Terms)</i> • <i>Quizzes</i> • <i>Oral exams</i> • <i>Technical/Practical Report/Project/Practical Lab Sessions</i> • <i>Assignments</i> • <i>Coursework Activities</i> • <i>Home works and assignments</i> • <i>Case studies</i> • <i>Presentations.</i> • <i>Problem solving</i> • <i>Individual/Group Project</i>

Assessment Strategy	Description
Written examinations (Mid and final Terms)	<i>Mid. term & Final exams for each course is required for all courses except Graduation Projects. These exams will evaluate the extent in which the student understanding of theoretical and applied subjects</i>
Quizzes	<i>Some points are assigned to multiple choice questions</i>

Assessment Strategy	Description
	<i>and Quizzes in order to asses' student ability to follow the lecturer during the study course. quizzes are related to past as well as topics discussed in the period. This helps students develop self-confidence, readiness, and accuracy in major exams.</i>
Oral exams	<i>Oral exams is useful to evaluate the extent of understanding the different subjects of the course.</i>
Technical/practical Report/Project/Practical Lab Sessions	<i>Assessing students to their ability to write theoretical and lab reports as well as the understanding of organizing the reports. The practical lab sessions are required for some courses.</i>
Assignments	<i>Students are given special tasks, exercises, puzzles, and activities during the class or at homes.</i>
Coursework Activities	<i>Course work Activities is one of the assessment methods by which it can evaluate students.</i>
Home works and assignments	<i>Home works and assignments will evaluate students according to their ability to explain and illustrate the assignments they are given.</i>
Case studies	<i>Assigning case studies to students is very helpful to assess the extent of understanding the topics.</i>
Presentations	<i>It is an assessment of the ability of organizing and the way of presentation.</i>

Assessment Strategy	Description
Individual/Group Project	<i>As indicated in the course specifications</i>
Problem solving	<i>This allows students to become more active in their learning as they work out which information, they need to find out how to solve a particular problem.</i>

12. Alignment of Program Intended Learning Outcomes (PILOs) to Teaching Strategies and Assessment Methods:

PILOs	Teaching Strategy	Assessment Methods
Knowledge and Understanding A1, A2, A3, A4, A5	<ul style="list-style-type: none"> • Lectures /Interactive lectures <ul style="list-style-type: none"> • Discussion • Illustrations • Case Studies • Directed self-study/ Self-learning <ul style="list-style-type: none"> • Exercises 	<ul style="list-style-type: none"> • Written tests (mid and final terms) <ul style="list-style-type: none"> • Quizzes • Oral exams • Assignments
Intellectual Skills B1, B2, B3, B4	<ul style="list-style-type: none"> • Lectures /Interactive lectures <ul style="list-style-type: none"> • Discussion • Illustrations • Preparation Seminar/ project/presentation <ul style="list-style-type: none"> • Tutorials • Brainstorming 	<ul style="list-style-type: none"> • Written examinations <ul style="list-style-type: none"> • (Mid and final Terms) • Quizzes • Oral exams • Technical Report • Assignments

PILOs	Teaching Strategy	Assessment Methods
	<ul style="list-style-type: none"> • <i>Case Studies</i> • <i>Problem solving</i> • <i>Team work (group learning)</i> 	<ul style="list-style-type: none"> • <i>Coursework Activities</i> • <i>Case studies</i> • <i>Presentations.</i> • <i>Problem solving</i>
<p>Professional & practical skills C1, C2, C3, C4, C5</p>	<ul style="list-style-type: none"> • <i>Interactive lectures</i> <ul style="list-style-type: none"> • <i>Discussion</i> • <i>Illustrations</i> • <i>Preparation Seminar/ project/presentation</i> <ul style="list-style-type: none"> • <i>Tutorials</i> • <i>Case Studies</i> • <i>Computer lab-based sessions</i> • <i>Directed self-study/ Self-learning</i> <ul style="list-style-type: none"> • <i>Training</i> • <i>Problem solving</i> • <i>Team work (group learning)</i> <ul style="list-style-type: none"> • <i>Group project</i> 	<ul style="list-style-type: none"> • <i>Written examinations</i> <ul style="list-style-type: none"> • <i>(Mid and final Terms)</i> • <i>Quizzes</i> • <i>Oral exams</i> • <i>Technical/Practical Report/ Practical Lab Sessions</i> • <i>Assignments</i> • <i>Coursework Activities</i> • <i>Case studies</i> • <i>Presentations.</i> • <i>Problem solving</i> • <i>Individual/Group Project</i>
<p>General & Transferable</p>	<ul style="list-style-type: none"> • <i>Preparation and presentation</i> <ul style="list-style-type: none"> • <i>Tutorials</i> 	<ul style="list-style-type: none"> • <i>Technical Report</i> • <i>Coursework</i>

PILOs	Teaching Strategy	Assessment Methods
<p>Skills</p> <p>D1, D2, D3, D4, D5, D6</p>	<ul style="list-style-type: none"> • <i>Case Studies</i> • <i>Directed self-study/ Self-learning</i> • <i>Team work (group learning)</i> • <i>Exercises and home work</i> 	<p><i>Activities</i></p> <ul style="list-style-type: none"> • <i>Case studies</i> • <i>Presentations.</i> • <i>Problem solving</i>

13. Project Assessment:	
Each project will be assessed by a committee of three members as follows:	
Item	Marks Distribution
<i>Research project supervisor</i>	60
<i>Internal examiner: a member of the department teaching staff.</i>	20
<i>External examiner: a qualified external examiner (either from other departments of the faculty or from another university)</i>	20
Total	100

14. Training Course Assessment:
<p><i>The training course will be assessed through:</i></p> <ul style="list-style-type: none"> • <i>Coordinator</i> • <i>Head of department</i> • <i>Manger the place of training</i>

15. Intended Learning Outcomes Mapping:

See below Annexes;

16. Program Structure:

No	Requirements	No. of Courses	Credit Hours	Rational Weight %	
1	University Requirements	Compulsory	8	17	13%
		Elective	--		
2	Basic Requirements	Compulsory	--	--	---%
		Elective	--		
3	Faculty Requirements	Compulsory	2	5	11%
		Elective	--		
4	Department Requirements	Compulsory	16	48	28.%
		Elective	--		
5	Program Requirements	Compulsory	20	00	44%
		Elective	3		
6	Field Training	Compulsory	1	pass	0
		Elective	--		
7	Project Courses	Compulsory	2	6	4.2%
		Elective	--		
Total:			47	130	100%

a. University Requirements

Compulsory Courses (8 courses/ 17 C. Hrs.)

No.	Level -Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1.	1/1	MRU112	Arabic Language I	لغة عربية ١	2	2	0	0	None
2.	1/2	MRU121	Arabic Language 2	لغة عربية ٢	2	2	0	0	MRU112
3.	1/1	MRU114	English Language I	لغة انجليزية ١	2	2	0	0	None
4.	1/2	MRU122	English Language II	لغة انجليزية ٢	2	2	0	0	MRU114
5.	1/1	MRU113	Computer Skills	مهارات الحاسوب	3	1	0	4	None
6.	1/1	MRU111	Islamic Culture	ثقافة إسلامية	2	2	0	0	None
7.	1/2	MRU127	National Culture	الثقافة الوطنية	2	2	0	0	None
8.	1/2	MRU126	Arabic Israel Conflict	الصراع العربي الإسرائيلي	2	2	0	0	MRU111
Total					17	15	0	4	

Elective Courses: None

b. Faculty Requirements

Compulsory Courses (7 courses/ 16 C. Hrs.)

N o.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1.		FAC121	Probability and Statistical Fundamentals	مبادئ الإحصاء والاحتمالات	3	2	2	0	
2.		FAC132	Research Methods	طرق بحث	2	2	0	0	
Total					5	4	2	0	

Elective Courses: None

16.3 Department Requirements

Compulsory Courses

No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1.			Programming Fundamentals	اساسيات برمجة	3	2	0	2	Introduction to Computer
2.			Graduation Project (1)	مشروع تخرج (1)	3	3	0	0	
3.			Graduation Project (2)	مشروع تخرج (2)	3	3	0	0	Graduation Project (1)
4.			Mathematics (1)	رياضيات ١	3	2	2	0	--
5.			Mathematics (2)	رياضيات ٢	3	2	2	0	Mathematics (1)
6.			Discreet Mathematics	رياضيات متقطعة	3	2	2	0	Mathematics (1)
7.			Computer Programming	برمجة الحاسوب	3	2	0	2	Programming Fundamentals
8.			Database System	نظم قواعد بيانات	3	2	0	2	Programming

No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
									Fundamentals
9.			Principles of Computer Networks	مبادئ شبكات الحاسوب	3	2	0	2	Introduction to Computer
10.			Web Design	تصميم الويب	3	2	0	2	Programming Fundamentals
11.			Operating Systems Fundamentals	أساسيات نظم تشغيل	3	2	0	2	Computer Organization
12.			Object-oriented Programming	برمجة كائنات موجهة	3	2	0	2	Programming Fundamentals
13.			Data Structures and Algorithms	هياكل وخوارزميات البيانات	3	2	0	2	Computer Organization, Database System
14.			System Analysis and Design	تحليل وتصميم النظم	3	2	0	2	IT Fundamentals
15.			IT project Management	إدارة مشاريع تكنولوجيا المعلومات	3	2	2	0	Introduction to Computer
16.			Mobile Application Programming	برمجة تطبيقات الموبايل	3	2	0	٢	Advance Programing
Total					48	34	8	20	

c. Program Major

Compulsory Courses (41 course / 108 Hrs)

No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1.			Principles of Business Management	مبادئ إدارة الأعمال	2	2	0	0	
2.			IT Fundamentals	أساسيات تكنولوجيا المعلومات	3	3	0	0	Introduction to Computer

No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
3.			Computer Organization	معمارية الحاسوب	3	2	0	2	Introduction to Computer
4.			Web Applications Development	تطوير وتطبيقات الويب	3	2	0	2	Web Design
5.			Database Management	إدارة قواعد بيانات	3	2	0	2	Database System
6.			Ethical and Professional Issues in Computing	القضايا المهنية والأخلاقية في الحوسبة	2	2	0	0	IT Fundamentals
7.			Information Security	أمن المعلومات	3	2	0	2	IT Fundamentals
8.			Computer Network Administration	إدارة شبكات الكمبيوتر	3	2	0	2	Principles of Computer Networks
9.			Visual Programming	برمجة مرئية	3	2	0	2	Object-oriented Programming
10.			System Administration & Maintenance	إدارة وصيانة الأنظمة	3	2	0	2	
11.			Information Security Management	إدارة أمن المعلومات	3	2	0	2	Information Security
12.			Human Computer Interaction	التفاعل بين الإنسان والحاسوب	3	2	0	2	
13.			Advanced Programming	برمجة متقدمة	3	2	0	2	Object-oriented Programming
14.			Information Resources Management	إدارة مصادر المعلومات	3	3	0	0	Introduction to Computer
15.			Microcontroller programming	برمجة المتحكم الدقيق	٢	١	0	٢	
16.			Integrated Technologies for Enterprise Systems	تكنولوجيا متكاملة لأنظمة المؤسسات	3	3	0	0	Information Resources Management
17.			Distributed and Cloud	الحوسبة السحابية	3	2	0	2	

No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
			Computing	الموسعة					
18.			Elective (1)	اختياري (١)	3	0	0	0	
19.			Internet of Things	انترنت الأشياء	3	2	0	2	Integrated Technologies for Enterprise Systems
20.			Elective (2)	اختياري (٢)	3	0	0	0	
21.			Elective (3)	اختياري (٣)	3	0	0	0	
Total					٥٥	38	0	26	

Field Attachments and Training Courses (courses/ Hrs)									
No	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1	sum		Field Training	تدريب ميداني	pass				
Total									

Project Work Courses									
No	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1	4-2		Graduation Project (2)	مشروع تخرج (٢)	3				
2	4-2		Graduation Project (2)	مشروع تخرج (٢)	3				Graduation Project (1)
Total									

Elective Courses (3 Course)									
No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites

1			Digital Forensics	تحقيق الجرائم الرقمي	3	2	0	2	
2			Wireless Networks and Mobile Security	الشبكات لاسلكية أمن الموبايل و	3	2	0	2	
3			Special Topics in IT	مواضيع متخصصة في تكنولوجيا المعلومات	3	3	0	0	
4			Cybersecurity	الأمن السيبراني	3	2	0	2	
5			Multimedia	وسائط متعددة	3	2	0	2	
6			IT Quality Assurance	ضمان جودة تكنولوجيا المعلومات	3	3	0	0	
7			Data Mining	تنقيب البيانات	3	2	0	2	
Total					21	16	0	10	

17. Study Plan:

Level 1

Semester 1

No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1.	1 - 1		English Language I	لغة انجليزية ١	2	2	0	0	
2.	1 - 1		Computer Skills	مهارات الحاسوب	3	1	0	4	
3.	1 - 1		Arabic Language I	لغة عربية ١	2	2	0	0	
4.	1-1		Principles of Business Management	مبادئ إدارة الأعمال	2	2	0	0	
5.	1 - 1		Mathematics (1)	رياضيات (١)	3	2	2	0	
6.	1 - 1		Arabic Israel Conflict	الصراع العربي الاسرائيلي	2	2	0	0	
7.	1 - 1		Islamic Culture	ثقافة اسلامية	2	2	0	0	
Total					١٦	13	2	4	

Semester 2

No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1.	1 - 2		English Language II	لغة انجليزية ٢	2	2	0	0	English Language I
2.	1 - 2		Discreet Mathematics	رياضيات متقطعة	3	2	2	0	Mathematics (1)
3.	1 - 2		Arabic Language II	لغة عربية ٢	2	2	0	0	Arabic Language I
4.	1 - 2		Mathematics (2)	رياضيات (٢)	3	2	2	0	Mathematics (1)
5.	1 - 2		IT Fundamentals	أساسيات تكنولوجيا المعلومات	3	3	0	0	Introduction to Computer
6.	1 - 2		Programing Fundamentals	أساسيات البرمجة	3	2	0	2	Introduction to Computer
7.	1 - 2		National Culture	الثقافة الوطنية	2	2	0	0	
Total					١٨	١٥	٤	2	

Level 2

Semester 1									
No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1.	2-1		Probability and Statistical Fundamentals	مبادئ الإحصاء والاحتمالات	3	2	2	0	-
2.	2-1		Computer Programming	برمجة الحاسوب	3	2	-	2	Programming Fundamentals
3.	2-1		Database System	نظم قواعد بيانات	3	2	-	2	Programming Fundamentals
4.	2-1		Computer Organization	معمارية الحاسوب	3	2	-	2	Introduction to Computer
5.	2-1		Principles of Computer Networks	مبادئ شبكات الحاسوب	3	2	-	2	Introduction to Computer
6.	2-1		Web Design	تصميم الويب	3	2	-	2	Programming Fundamentals
Total					18	12	٢	١٠	

Semester 2									
No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1	2-2		Fundamental of Operating Systems	أساسيات نظم تشغيل	3	2	-	2	Computer Organization
2	2-2		Object-oriented Programming	برمجة كائنات موجهة	3	2	-	2	Programming Fundamentals
3	2-2		Data Structures and algorithms	هياكل وخوارزميات البيانات	3	2	-	2	Computer Organization, Database System
4	2-2		Web Applications Development	تطوير وتطبيقات الويب	3	2	-	2	Web Design
5	2-2		Database Management	ادارة قواعد بيانات	3	2	-	2	Database System
Total					١٥	١٠	٠	١٠	

Level 3

Semester 1									
No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1	3-1		Ethical and Professional Issues in Computing	القضايا المهنية والأخلاقية في الحوسبة	2	2	-	-	
2	3-1		Information Security	أمن المعلومات	3	2	-	2	Principles of Computer Networks
3	3-1		System Analysis and Design	تحليل وتصميم النظم	3	2	-	2	IT Fundamentals
4	3-1		Computer Network Administration	إدارة شبكات الحاسوب	3	2	-	2	Principles of Computer Networks
5	3-1		Visual Programming	برمجة مرئية	3	2	-	2	Object-oriented Programming
6	3-1		Research Method	طرق بحث	2	2	-	-	
Total					16	12	-	8	

Semester 2									
No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1	3-2		System Administration & Maintenance	إدارة وصيانة الأنظمة	3	2	-	2	
2	3-2		Information Security Management	إدارة أمن المعلومات	3	2	-	2	Information Security
3	3-2		Human Computer Interaction	التفاعل بين الإنسان والحاسوب	3	2	-	2	
4	3-2		Advanced Programming	برمجة متقدمة	3	2	-	2	Object-oriented Programming
5	3-2		IT project Management	إدارة مشاريع تكنولوجيا المعلومات	3	2	2	-	Introduction to Computer
6	3-2		Information Resources Management	إدارة مصادر المعلومات	3	3	-	-	Introduction to Computer
7	3-2		Mobile Application Programming	برمجة تطبيقات الموبايل	3	2	-	٢	Object-oriented Programming
Total					٢١	15	2	10	

Level 4

Semester 1									
No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1	4-1		Integrated Technologies for Enterprise Systems	تكنولوجيا متكاملة لأنظمة المؤسسات	3	3	0	0	Information Resources Management
2	4-1		Distributed and Cloud Computing	الحوسبة السحابية الموسعة	3	2	0	2	
3	4-1		Microcontroller programming	برمجة المتحكم الدقيق	٢	١	0	٢	
4	4-1		Elective (1)	اختياري (١)	3	3	0	0	
5	4-1		Graduation Project (1)	مشروع تخرج (١)	3	3	0	0	
Total					١٤	12	0	٤	

Semester 2									
No.	Level-Sem.	Course Code	Course Name	اسم المقرر	Cr. Hrs.	L	T	P	Prerequisites, Co-requisites
1	4-2		Internet of Things	انترنت الأشياء	3	2	-	2	Integrated Technologies for Enterprise Systems
2	4-2		Elective (2)	اختياري (٢)	3	3	-	-	
3	4-2		Elective (3)	اختياري (٣)	3	3	-	-	
4	4-2		Graduation Project (2)	مشروع تخرج (٢)	3	3	-	-	Graduation Project (1)
Total					١٢	11	0	٢	

Summary

Level	Sem.	No. of Courses	Cr. Hrs.	L	T	P
1	1	٧	١٦	13	2	4
	2	٧	١٨	١٥	٤	2
2	1	٦	١٨	12	٢	١٠
	2	٥	١٥	١٠	٠	١٠
3	1	٦	١٦	12	٠	8
	2	٧	٢١	15	2	10
4	1	٥	١٤	12	0	٤
	2	٤	١٢	11	0	٢
Total		٤٧	١٣٠	100	10	50

Requirements	No. of Courses	Cr. Hrs.	L	T	P
University Req.	8	17	15	0	4
Faculty Req.	2	5	4	2	0
Department Req.	١٦	٤٨	34	8	20
Program Req.	٢١	٦٠	38	0	26
Training	١	pass	0	0	0
Graduation Project	٢	6	-	-	-
Electives (3c.)	7	21	16	0	-
Total	47	130	100	10	50

18. Distribution of Total Credit Hours:

Level	Term	University Requirements		Faculty Requirements		Program Requirements		Training		Project		Total Cr. Hrs.		Total Cr. Hrs./ Level
		No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	No. of Courses	Credit Hours	
First	First											7	16	26%
	Second											7	١٨	
Second	First											6	18	25%
	Second											٥	١٥	
Third	First											6	16	28%
	Second											7	21	
Fourth	First											5	14	21%
	Second											4	12	
Total:												٤٧	١٣٠	100%
Percentage:														

19. Admission Requirements:

1. Admissions to the program shall be made as per the admission rules set by the Ministry of Higher Education and Scientific Research as well as **Malaysian International University** admission guidelines.
2. General Secondary school certificate (Science Section) or any equivalent certificate with grade as specified in the admission rules made by Ministry of Higher Education and Scientific Research.
3. Pass the aptitude test and personal interview if any.
4. Any necessary requirement for specialization, decided by the Faculty.

20. Attendance and Graduation Requirements:

1. Student attendance should not be less than 75%.
2. Student will graduate after successfully passing all program requirements.
3. Total credit hours for the program is (١٣٠) credit hours.
4. Minimum score for any student to pass any credit hours course is 50% marks.

21. Grading System:

1. From 90% to 100% of total marks	2. Excellent
3. From 80% to less than 90%	4. Very Good
5. From 65% to less than 80%	6. Good
7. From 50% to less than 65%	8. Pass
9. Less than 50%	10. Poor/Fail

22. Facilities Required for Running the Program:

1. *Sufficient Classrooms furnished with all necessary pieces and equipment.*
2. *Labs as per the course's specifications.*
3. *Computer Labs.*
4. *Academic and administrative staff offices.*

23. Program Assessment:

	Type of the Sample who Assess the program	Instruments used	Sample
1	<i>Final year assessment</i>	<i>Questionnaire</i>	<i>Random</i>
2	<i>External examiner evaluation</i>	<i>Report</i>	<i>Random</i>
3	<i>Graduated student evaluation</i>	<i>Follow-up</i>	<i>By graduation club</i>
4	<i>External evaluator</i>	<i>Report</i>	<i>Random</i>
5	<i>Council for Accreditation and Quality Assurance in Yemen</i>	<i>Report</i>	

24. Program Quality Standards:

- *Continuous evaluation*
- *Workshops*

25. Internal and external training to satisfy program standards::

- *Internally: - training in well-equipped labs*
- *Externally: -Training in hospital controlled by logbook*

26. Program Policies:

Based on University Regulations

- 1. (Class Attendance) :**
A student should attend not less than 75 % of total hours of the subject; otherwise he/she will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic. If the absent is more than 25% of a course total contact hour, student will be required to retake the entire course again.
- 2. (Tardy) :**
For late in attending the class, the student will be initially notified. If he repeated lateness in attending class, he/she will be considered as absent.
- 3. (Exam Attendance/Punctuality) :**
A student should attend the exam on time. He/she is permitted to attend an exam half one hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.
- 4. (Assignments & Projects) :**
Assignments and projects are given as per course specification; the student has to submit all the assignments for checking on time, mostly one week after given the assignment
- 5. (Cheating) :**
For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study the student will be disengaged from the Faculty.

6.	<p>(Plagiarism) :</p> <p><i>Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed a plagiarism of a student, he/she will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Council Affair of the university or according to the university roles.</i></p>
7.	<p>(Other policies) :</p> <p><i>Mobile phones are not allowed to use during a class lecture. It must be closed; otherwise the student will be asked to leave the lecture room.</i></p> <p><i>Mobile phones are not allowed in class during the examination.</i></p> <p><i>Lecture notes and assignments might be given directly to students using soft or hard copy.</i></p>

Aunexes:

1. NARS Doc. Of (IT) Ed. (1) 2018.
2. Workshop of Program Specification.
3. C.V for Committee