### **COMPUTER ARCHITECTURE 2 COURSE SPECIFICATION**

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

## **COURSE SPECIFICATION**

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	Baghdad University / College of Science for Women
2. University Department/Centre	Department of Computer Science
3. Course title/code	Computer Architecture 1/ ۲۱٤ CCA2
4. Programme(s) to which it contributes	
5. Modes of Attendance offered	Actual attendance and There is no real presence of distance learning by applicable laws.

6. Semester/Year	Second year / Semester I
7. Number of hours tuition (total)	60 hours(30 hours Theoretical,30 hours practical
8. Date of production/revision of this specification	18/6/2016

#### 9. Aims of the Course

This article aims to enable the student to know how numbers representation in computer, to identify the method of how CPU communication with memory addresses in the computer's memory, to identify the method of how devices transfer data to CPU, and get knowledge of the different interrupts types.

## 10. Learning Outcomes, Teaching ,Learning and Assessment Methode

## AA- Knowledge and Understanding

- A1. identify to Introduction the structure of modern computer systems and the emphasis on the relationship between the various components, peripherals and Tusiladtha
- A2. The development of modern computer systems and memory organization
- A3. identify to Introduction the group directives
- A4. identify to Introduction the structure of the CPU and the unity of the account
- A5. identify to Introduction the regulation and control unit and its work
- A6. Identify alternative architectures computers A2.
  - B. Subject-specific skills
    - B1. Building Instruction Set Architecture ISA
    - **B2.** Computer Organization

# **B3.** Implementation **Teaching and Learning Methods** give printed lecturer from modern variety of sources direct questions for the students to see how they interact and keep them attentive along lessons. Assessment methods • Laboratory tests on the computer is written to enable the student to the solution without a computer Monthly and quarterly test C. Thinking Skills C1. Introducing a range of solutions to the same problem, discuss and determine how best solution with surrounding defects Other roads. C2. Put forward solutions contain inaccuracies and identifying these mistakes After discussion and processing. C3. Ask questions during the lecture, which will be replaced competition among students to encourage them to participate And thinking properly. **Teaching and Learning Methods**

Discussions that arise in the course and try to involve the largest possible number of students, and touched on things and discussed the details of a substantive debate and targeted.

- •Education: give printed lecturer from modern variety of sources
- •Education: using smart blackboard to the goal of teaching students and explain the steps the solution and extraction results
- •Education: resolving some questions, with intent to contain errors and make students extracting error
- •Learning: asking questions and inquiries and make the student turn into a teaching explanation and solution on the blackboard at that point
- •Learning: questions directly and gradually all students to learn the extent of interaction and the rest to be paid attention to
- •Learning: Each specific group to explain its interaction between students with questions and answers and provide an environment that enables the student to lecture management or debate

#### Assessment methods

- Sudden quizzes.
- Performance of homework.
- Ask questions during a sudden extra ordinary explain the material and reward the student who answers them.
- Laboratory tests on the computer is written to enable the student to the solution without a computer
- Monthly tests.

- D. General and Transferable Skills (other skills relevant to employability and personal development)
  - D1. Prepare reports on specific topics and in groups
  - D2. Alert students to errors in their answers oral and discussed by the rest of the students
  - D3. Alert students to errors in their answers written and clarified
  - D4. giving leadership discussion administration to the group and enable them to lead and manage the dialogue

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	٤	8088 and 8086 microprocessors and their memory and input output interfaces	8088 and 8086 microprocessors and their memory and input output interfaces		
2	٤	Minimum mod address space and maximum mode systems	Minimum mod address space and maximum mode systems		
3	٤	Minimum mode interface signal	Minimum mode interface signal		
4	٤	Maximum mode interface signal	Maximum mode interface signal		
5	٤	Bus cycle and time states	Bus cycle and time states		
6	٤	Hardware organization of memory space	Hardware organization of memory space		
7	٤	Hardware organization of memory space	Hardware organization of memory space		
8	٤	Memory control signals	Memory control signals		

9	٤	Read and write bus cycles	Read and write bus cycles	
10	٤	Read and write bus cycles	Read and write bus cycles	
11	٤	Exam	Exam	

12. Infrastructure	
Required reading:  CORE TEXTS  COURSE MATERIALS  OTHER	The 8088 and 8086 Microprocessor ,forth edition ,2003
Special requirements (include for example workshops, periodicals, IT software, websites)	Software of Pascal programming language
Community-based facilities (include for example, guest Lectures, internship, field studies)	

13. Admissions	
Pre-requisites	Computer architecture1
Minimum number of students	Depending on the size of the classroom, according to the division of the group.

Maximum number of students	Depending on the size of the classroom,
	according to the division of the group