

EECP 3283	Computer Organization Architecture	3 Credit Hours
Prerequisites:	EECP 3171	
Goal	To provide the fundamental understanding in which the computer works: starting with simple logic and progressing to a simple model of a microprocessor ,to enable an appreciation of low-level programming leading to clear understanding of the key points of machine performance, to make an authoritative evaluation between different machine architectures, to enable an appreciation of basic knowledge of the purpose of operating systems and some elementary operating system processes	
Objectives		Outcomes
<p>The course should enable the student to:</p> <ol style="list-style-type: none"> 1. Evaluate performance of a selected computer system, 2. Employ operating system, 3. Understanding data representation, simple logic and the fetch-execute cycle of a model microprocessor, 4. Write simple working low-level programs 		<p>The students should be able to:</p> <ol style="list-style-type: none"> 1. Select machine components or sub-systems appropriate to a given user requirements, 2. Specify a complete computer system to suit a given task and evaluate the performance of the selected system, 3. Correctly contrast the functions of different types of operating systems, 4. Use and administer a computer operating system and a networked computer system, 5. Correctly convert values to/from various number systems, representation of values as floating point numbers, integers values, modern character codes, and simple bit patterns, 6. Show the relevance of different number systems to common generic applications, 7. Provide examples of possible errors due to inappropriate choice of data presentation, 8. Demonstrate a correct understanding of the fetch execute cycle of a model or idealized microprocessor, 9. Write a working programs in machine and/ or assembly code, 10. Relate the op-codes in a low-level program to the fetch-execute cycle and architecture of a model microprocessor, 11. Demonstrate a critical appreciation of machine performance