

# Computer Systems

## Module Information

2022.01, Approved

### Summary Information

|                     |                                  |
|---------------------|----------------------------------|
| Module Code         | 4501SDLBHG                       |
| Formal Module Title | Computer Systems                 |
| Owning School       | Computer Science and Mathematics |
| Career              | Undergraduate                    |
| Credits             | 20                               |
| Academic level      | FHEQ Level 4                     |
| Grading Schema      | 40                               |

### Teaching Responsibility

|                                   |
|-----------------------------------|
| LJMU Schools involved in Delivery |
| LJMU Partner Taught               |

### Partner Teaching Institution

|                   |
|-------------------|
| Institution Name  |
| Beaconhouse Group |

### Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Online               | 22    |
| Practical            | 22    |

### Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| SEP-PAR      | PAR      | September   | 12 Weeks                      |

## Aims and Outcomes

|      |   |
|------|---|
| Aims | To provide an understanding of the underlying computing platform (hardware, operating systems, network) upon which applications are developed and hosted. |
|------|---|

**After completing the module the student should be able to:**

### Learning Outcomes

| Code | Number | Description   |
|------|--------|---|
| MLO1 | 1      | Explain the fundamental principles underlying the operation of modern computer systems. |
| MLO2 | 2      | Demonstrate a knowledge of the structure and organization of computer systems.          |
| MLO3 | 3      | Explain the role and the functions of an operating system.                              |
| MLO4 | 4      | Explain the fundamental concepts involved in computer networking.                       |

## Module Content

|                        |  |
|------------------------|--|
| Outline Syllabus       | Data:Data representationFiles and filesystems Devices:Architecture MemoryInput/output devicesEmbedded systemsStorage and RAIDOS:Processes/threadsScheduling Concurrency/concurrency controlMemory management Command line and shell Networks:Infrastructure IP networksIP addressing Wireless networks |
| Module Overview        |  |
| Additional Information | This module is intended to provide basic knowledge in relation to the computing platform (hardware, operating systems, networks), which students will need as support knowledge for subsequent modules at FHEQ 5 and 6.  |

## Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|-----------------|--------|--------------------------|---------------------------------|
| Portfolio           | Series of Tasks | 50     | 0                        | MLO2, MLO3                      |
| Exam                | Examination     | 50     | 2                        | MLO1, MLO3, MLO4                |

## Module Contacts

### Module Leader

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
| Syed Naqvi   | Yes                      | N/A       |

### Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
|--------------|--------------------------|-----------|