**TEMPLATE FOR 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. | |
| Al-Maarif University College | **1. Teaching Institution** |
| Computer Engineering Techniques | **2. University Department/Centre** |
| Workshops | **3. Course title/code** |
| Bachelor in Computer Engineering Techniques | **4. Programme(s) to which it Contributes** |
| Face-to-face and online presence | **5. Modes of Attendance offered** |
| Year | **6. Semester/Year** |
| 90 | **7. Number of hours tuition (total)** |
| 22.06.2021 | **8. Date of production/revision of this specification** |
| **9. Aims of the Course** | |
| * Learn about electronic components and how to use them in building simple circuits and soldering them * How to use measuring devices and caustics, connect resistors and capacitors and how to read them, as well as keys used in the electrical circuit, types of fuses, types of coils, semiconductors, and semiconductor examinations | |

|  |
| --- |
| **10· Learning Outcomes, Teaching ,Learning and Assessment Method** |
| **A. Knowledge and Understanding**  A1. The ability to design electronic circuits and implement them in practice  A2. The ability to apply the principles of industrial security in the field of electronic workshop  A3. Ability to work in applied fields |
| **B. Subject-specific skills**  B1. Ability to work collectively within a multidisciplinary team.  B2. The ability to apply the skills of modern computer matching circuits.  B3. Participation and success in their professional lives through practical training |
| **Teaching and Learning Methods** |
| * Lectures in the manner of presentation and discussion * Practical lectures * Scientific laboratories and summer training |
| **Assessment methods** |
| * Feedback from students * Assignments * Preparing scientific reports * Achievement test |
| **C. Thinking Skills**  C1. Achieving brainstorming capable of creating colors of correct scientific thinking  C2. Refine the student's personality and prepare it to be an effective personality in society |
| **Teaching and Learning Methods** |
| * Science laboratories * Field visits |
| **Assessment methods** |
| * Daily exams, monthly exams * Conduct experiments |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **11. Course Structure** | | | | | |
| **Assessment Method** | **Teaching Method** | **Unit/Module or Topic Title** | **ILOs** | **Hours** | **Week** |
|  |  | Principles of industrial security within the electrical workshops |  | 3 | 1 |
|  |  | How to use different types of welding angles and how to operate lathe |  | 3 | 2 |
|  |  | Used welding, electric transformers, type, and how to fix the penis on the lathe |  | 3 | 3 |
|  |  | How to Use Caustic Sorbent for Welding, Types of Electric Motors |  | 3 | 4 |
|  |  | Printed circuit boards, electrical installations and exercise on plumbing |  | 3 | 5 |
|  |  | Different types of resistors, drawing of two limpers in parallel and the practice of cutting chainsaw |  | 3 | 6 |
|  |  | Work circuit to connect the resistors |  | 3 | 7 |
|  |  | Different types of clocks and identification of electric switches |  | 3 | 8 |
|  |  | Work circles to connect the spaces in parallel |  | 3 | 9 |
|  |  | Different types of switches used in electronic devices |  | 3 | 10 |
|  |  | a flasher used in electronic circuits |  | 3 | 11 |
|  |  |  | 3 | 12 |
|  |  | Different types of semiconductors |  | 3 | 13 |
|  |  | Semiconductor inspection |  | 3 | 14 |
|  |  | Integrated circuits |  | 3 | 15 |
|  |  | Welding used in integrated circuit |  | 3 | 16 |
|  |  | Presentation of a scientific film on how to make electronic components |  | 3 | 17 |
|  |  | How to read electronic maps |  | 3 | 18 |
|  |  | How to design electronic circuits on a printed board |  | 3 | 19 |
|  |  | Different valves |  | 3 | 20 |
|  |  | Building multiple electronic circuits |  | 3 | 21 |
|  |  | Filters |  | 3 | 22 |
|  |  | One-sided engine operation |  | 3 | 23 |
|  |  | Run the engine and change the orientation of the engine cycles |  | 3 | 24 |
|  |  | Training on the work of electrical installations |  | 3 | 25 |
|  |  | Training in the use of gas welding equipment |  | 3 | 26 |
|  |  | Electrical welding |  | 3 | 27 |
|  |  | Training in the use of electric welding equipment |  | 3 | 28 |
|  |  | welding and identification of used devices |  | 3 | 29 |
|  |  |  | 3 | 30 |

|  |
| --- |
| **D. General and Transferable Skills (other skills relevant to employability and personal development)**  D1. The ability to work collectively within a team.  D2. The ability to communicate effectively and enable the Alp for continuous self-development after graduation  D3. Conducting experiments in the laboratory.  D4. Ability to express and convey ideas clearly and confidently |

|  |  |
| --- | --- |
| **12. Infrastructure** | |
| * Electrical Technology Basic Electrical Engineering. Introduction Circuit Analysis. * Basic Electrical Engineering Science. | Required reading:  · CORE TEXTS  · COURSE MATERIALS  · OTHER |
| * IEEE Journal * <http://www.qariya.info/vb/> | Special requirements (include for example workshops, periodicals, IT software, websites) |
|  | Community-based facilities  (include for example, guest  Lectures , internship , field studies) |

|  |  |
| --- | --- |
| 13. Admissions | |
| None | Pre-requisites |
| 8 | Minimum number of students |
| 100 | Maximum number of students |