

*Republic of Iraq*  
*Ministry of Higher Education & Scientific Research*  
*Supervision and Scientific Evaluation Directorate*  
*Quality Assurance and Academic Accreditation*

## *Academic Program Specification Form For The Academic*

**University: Middle Technical University**  
**College: Technical Instructors Training Institute.**  
**Department: Technical Electronics**  
**Date of Form Completion: Sep. 2016**

*Dean ' s Name*

*Date :    /    /*

*Signature*

*Dean ' s Assistant For  
Scientific Affairs*

*Date :    /    /*

*Signature*

*Head of Department*

*Date :    /    /*

*Signature*

*Quality Assurance And University Performance Manager*

*Date :    /    /*

*Signature*

## TEMPLATE FOR PROGRAMME SPECIFICATION

### HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

#### PROGRAMME SPECIFICATION

This Programme Specification provides a concise summary of the main features of the programme 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 is supported by a specification for each course that contributes to the programme.

1. Teaching Institution	Middle Technical University/ Technical Instructors Training Institute.
2. University Department/Centre	Technical Electronics
3. Programme Title	Technical Electronics Trainer.
4. Title of Final Award	Diploma in Electronics Techniques and Training
5. Modes of Attendance offered	Annual
6. Accreditation	ABET
7. Other external influences	
8. Date of production/revision of this specification	Sep. 2016
9. Aims of the Programme	
The program aims to prepare a technical trainer able to operate efficiently in laboratories and workshops of the institutes, schools and centers of technical and vocational education and training (TVET) in the areas of operation and maintenance of electronic circuits and medical devices and appliances, audio and video receivers and transmitter circuits microprocessor control coder as well as training of vocational education students and technical competence in the field.	

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

### A. Knowledge and Understanding

- A1. A depth knowledge of the quantities of electrical and electronic field: voltage, current, power, electrical energy.
- A2. Understanding the foundations and the installation of electronic circuits like computers, tablets, cellular devices, television, communication devices, medical devices, electronic processors, as well as programmed control.
- A3. Knowledge of electronic components and elements properties.
- A4. knowledge of the properties of electromagnetic waves and how they are transmitted.
- A5. know the basic principles of medical devices and its sensors.
- A6. knowledge of the foundations of the programming control.

### B. Subject-specific skills

- B1. The trainers will be qualified for the training of vocational education students and students of technical education in their respective fields.
- B2. operation, maintenance and construction of electronic circuits.
- B3. operation, maintenance and repair of audio and video devices.
- B4. operation, maintenance and repair of receivers and transmitters.
- B5. operation and maintenance of the microprocessor circles.
- B6. operation and maintenance of programmed control circuits.
- B7. operation and maintenance of medical devices circuits.

### Teaching and Learning Methods

Theoretically: Lectures, questions and debate, exercises, solve problems, and homework's.

Practically, Offers and perform laboratory experiments and practical training on the installation, maintenance and inspection in the electronic workshops.

C- Other Activities:

- Display Scientific films during classes.
- Scientific views and visits to the constructor's electronic industries.

### Assessment methods

- Daily quiz, quarterly and final test.
- Write reports on the results of laboratory tests.
- Continuous evaluation of the practical performance of the students in the workshops.

### C. Thinking Skills

- C1.
- C2.
- C3.
- C4.

### Teaching and Learning Methods

Assessment methods

D. General and Transferable Skills (other skills relevant to employability and personal development)  
D1.  
D2.  
D3.  
D4.

Teaching and Learning Methods

Assessment Methods

11. Programme Structure				12. Awards and Credits
Level/Year	Course or Module Code	Course or Module Title	Credit rating	
First		Electronics	4	Bachelor Degree Requires ( x ) credits
First		Digital Circuits	4	
First		Electrical Circuits and Measurements	4	
First		Mathematics	3	

First		Computer Applications 1	2	
First		Engineering Drawing	3	
First		Training Techniques 1	4	
First		Human Rights and Democracy	2	
First		Workshops	4	
Second		Mobile Communication Systems	4	
Second		Programmable Control	4	
Second		Electronic Circuit Applications	4	
Second		Medical Electronic Devices	4	
Second		Microcontroller	4	
Second		Computer Application 2	2	
Second		Electronic Devices Maintenance	3	
Second		Training Techniques 2	4	
Second		Project	2	

### 13. Personal Development Planning

### 14. Admission criteria .

15. Key sources of information about the programme



