

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 :Electrical Engineering Technical College
Department : Electrical Power Technical Engineering
Date Of Form Completion : 23-11-2016

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 | Electrical and Electronic Technical Engineering |
| 2. University Department/Centre | Electrical Power Technical Engineering |
| 3. Programme Title | Digital Electronics |
| 4. Title of Final Award | BS.c |
| 5. Modes of Attendance offered | Annual |
| 6. Accreditation | |
| 7. Other external influences | |
| 8. Date of production/revision of this specification | |
| 9. Aims of the Programme | |
| To identify for students all basic digital electronics and Logic circuits gates and how its design and used, and how we can design special digital circuits and sequential circuit. | |
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10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

- Number system.
- Digital Logic gate.
- Arithmetic logic circuit
- Comparator, Encoder, decoder, Multiplexer, and Demultiplexer
- Flip flop, shift register, counter
- Introduction of Microprocessor.

B. Subject-specific skills

- Students can handle and be familiar with Logic circuit IC's in Lab. and observe practice results and compare these results with theoretical results.

Teaching and Learning Methods

- Lecture by white board, with explanations, and discussions
- Use data show for represent power point show, some photos, and films.
- Used soft ware program on PC's "Mulltisim".
- Use the logic circuit board in Lab.

Assessment methods

- Discussions between student in side class room.
- Weekly quizzes.
- End of semester exams
- Final exams

C. Thinking Skills

- Encouragement group work specially in Lab. and inside study groups
- Encouragement discussion of different opinion in side class room
- Practice on, and learn use logical thinking to get results.

Teaching and Learning Methods

- White board
- Smart board

- Data show
- Soft ware "Multisim"

Assessment methods

- Discussions and explanations
- Quiz, arrangement exams, monthly and final exams.

D. General and Transferable Skills (other skills relevant to employability and personal development)

- Logical thinking
- Use discussions for insure the right results.
- Be open mind for different opinion
- Questions culture.

11. Programme Structure

| Level/Year | Course or Module Code | Course or Module Title | Credit rating | 12. Awards and Credits |
|------------|-----------------------|------------------------|---------------|------------------------|
| First | | Digital Electronics | 9 | Bachelor Degree |
| | | | | Requires (x) credits |
| | | | | |

13. Personal Development Planning

Study more of digital circuit, and more details about characteristics of each circuit.

14. Admission criteria .

I suggest make some of exams, to insure that students is ready for study electrical engineering

15. Key sources of information about the programme

Thomas L. Floyed "digital fundamentals" eight edition

Curriculum Skills Map

please tick in the relevant boxes where individual Programme Learning Outcomes are being assessed

[illegible]

| 11. Course Structure | | | | | |
|----------------------|-------|------|--------------------------------|-----------------|-------------------|
| Week | Hours | ILOs | Unit/Module or Topic Title | Teaching Method | Assessment Method |
| 30 | 6 | | Number system | | |
| | | | Logic gate | | |
| | | | Combinational Logic circuit | | |
| | | | Sequential logic circuit | | |
| | | | Introduction of Microprocessor | | |

| 12. Infrastructure | |
|---|---|
| Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER | Thomas L. Floyed "digital fundamentals" eight edition |
| Special requirements (include for example workshops, periodicals, IT software, websites) | Thomas L. Floyed "digital fundamentals" eight edition |
| Community-based facilities (include for example, guest Lectures , internship , field studies) | A.K. Vanwasi, G.K. Methal" Pulse and digital electronics" |
| | |

| 13. Admissions | |
|----------------------------|----|
| Pre-requisites | |
| Minimum number of students | 30 |
| Maximum number of students | 40 |