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: Northern Technical University

College: Technical Engineering College \ Kirkuk

Department: Computer Technology Engineering

Date of form completion: 7/1/2024

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Quality Assessment and performance Assessment Division Manager

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Date: / /

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TEMPLATE FOR PROGRAMME SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

This program specification provides a concise summary of the main features of the program 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	**Technical Engineering College of Kirkuk**
2. University Department/Centre	**Computer Engineering Department**
3. Programme Title	**Computer Engineering**
4. Title of Final Award	Bachelor
5. Modes of Attendance offered	Yearly /courses /bologna
6. Accreditation	Electronic and physical lectures
7. Other external influences	
8. Date of production/revision of this specification	Electronic and physical lectures

9. Aims of the Program

The program aims to graduate students with a specialization in computer technology engineering who will be qualified to work in the fields of computer. He will be graduated by a department after completing four academic years in which he is qualified to obtain a bachelor's degree in computer technology engineering.

10.Learning Outcomes, Teaching, Learning and Assessment Methods

A. Knowledge and Understanding

A1- Aims at knowing computer programs.

A2- It aims to know the operation of computer systems.

A3- It aims to know the interconnection of networks.

A4- It aims to know the analysis of digital signals.

A5- It aims to learn mathematics and engineering analysis.

B. Subject-specific skills

B1 - It aims to learn the skill of operating a computer and working in an organization.

B2 - aims to learn the skill of operating network systems

B3 - aims to learn the skill of designing programs and codes.

Teaching and Learning Methods

Giving theoretical and practical lectures, running laboratories, workshops and summer training during the summer vacation period.

Assessment methods

Daily exams, quarterly exams (theoretical + practical) - discussing periodic reports, discussing graduation research projects

C. Thinking Skills

C 1 - Creating educational cadres that can be relied upon in state institutions within the specialization.

C 2 - Develop solutions to the problems in which institutions and systems specialized in the field of computer fall into.

C 3 - Work to create the requirements of the labor market and raise the economic capacity.

Teaching and Learning Methods

Development courses, periodic seminars, seminars.

Assessment methods

Periodic tests.

Feedback methods.

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

D1 - Communication and conversation skills such as English language and presentation skill.

D 2 - teamwork skills.

D 3- Leadership skills and responsibility.

D 4- Self-education skills and self-reliance.

Teaching and Learning Methods

Lectures, laboratories and workshops, summer training, graduation projects.

Assessment Methods

Daily exams, quarterly exams, and final exams

11. Programe Structure

Level/Year	Course or Module Code	Course or Module Title	Credit Rating	12. Awards and Credits
first	TECK102	Engineering drawings	**6**	Bachelor Degree Requires (x) credits
	TECK101	Differentiation and Integration	**7**	
	COE113	Electrical engineering fundamentals.	**6**	
	COE114	Computer Programming	**7**	
	NTU100	Human rights and democracy	**3**	
	NTU101	English Language	**4**	
	TECK104	Electrical circuits	**4**	
	COE122	Logic circuits	**2**	
	COE123	Computer organization	**2**	

	NTU	Computer applications	4	
second	NTU	Arabic language	6	
	TECK103	Workshops	7	
	NTU200	English language 2	4	
	NTU201	Professional ethics	6	
	1TECK20	Mathematics 3	6	
	2TECK20	Mathematics 4	6	
	3TECK20	Physics	4	
	COE201	Computer Architecture1	2	
	COE202	Computer Architecture2	-	
third	COE203	Computer Programming 2	6	
	11COE20	Object oriented programming	6	
	COE204	Measurements& Sensors	6	
	COE205	Electronics 1	6	
	COE206	Electronics 2	6	
	COE207	Communication Fundamentals1	6	
	COE208	Communication Fundamentals2	6	
	COE209	Operating Systems	2	
	COE210	Data Base Systems	-	
fourth	CET٤1	encryption	6	
	CET٤٢	Networks	6	
	CET٤٣	interfaces	6	
	CET٤٤	Computer graphics	6	
	CET٤٥	advanced software engineering	6	
	CET٤٦	Optimized digital systems	6	
	CET٤٧	control	6	
	CET٤٨	English	2	
	CET٤٩	Final project	4	

13. Personal Development Planning

Courses within the college.

Courses within institutions of higher education and scientific research.

Single or joint scientific research (applied or theoretical)

Scientific seminars and symposia.

14. Admission criteria .

- Scientific section
- the average

15. Key sources of information about the programme

Methodology books.

Auxiliary resources (secondary books)

The Internet, self-education sites, reputable international universities sites, and Iraqi universities sites

Curriculum Skills Map																			
Please tick relevant boxes where individual programme Learning Outcomes are being assessed																			
Programme Learning Outcomes																			
Year/ Level	**Course code**	**Course title**	**Core (c) title or option (O)**	**Knowledge and understanding**				**Subject-specific Skills**				**Thinking Skills**				**General and Transferable Skills (or) Other Skills relevant to employability and personal development**			
				A1	**A2**	**A3**	**A4**	**B1**	**B2**	**B3**	**B4**	**C1**	**C2**	**C3**	**C4**	**D1**	**D2**	**D3**	**D4**
first	TECK102	Engineering drawings	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TECK101	Differentiation and Integration	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE113	Electrical engineering fundamentals.	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE114	Computer Programming	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	NTU100	Human rights and democracy	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	NTU101	English Language	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TECK104	Electrical circuits	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE122	Logic circuits	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE123	Computer organization	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

	NTU	Computer applications	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
second	NTU	Arabic language	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TECK103	Workshops	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	NTU200	**English language 2**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	NTU201	**Professional ethics**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	1TECK20	**Mathematics 3**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	2TECK20	**Mathematics 4**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	3TECK20	**Physics**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE201	**Computer Architecture1**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE202	**Computer Architecture2**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
third	**COE203**	**Computer Programming 2**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	11COE20	**Object oriented programming**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE204	**Measurements& Sensors**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE205	**Electronics 1**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE206	**Electronics 2**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE207	**Communication Fundamentals1**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE208	**Communication Fundamentals2**	c	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

	COE209	**Operating Systems**	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	COE210	**Data Base Systems**	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
fourth	CET41	encryption	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET42	Networks	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET43	interfaces	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET44	Computer graphics	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET45	advanced software engineering	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET46	Optimized digital systems	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET47	control	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET48	English	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	CET49	Final project	**c**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓