# UNIVERSITY of TECHNOLOGY



الجامعة التكنولوجية

Bachelor of Science Honours (B.Sc. Honours) – Computer Science

بكالوريوس علوم - علوم الحاسوب - فرع ادارة الشبكات



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مخرجات تعلم الطالب

الهيئة التدريسية

الاعتمادات والدرجات والمعدل التراكمي

المواد الدراسية

اتصال

# 1. Mission & Vision Statement

### **Vision Statement**

Preparing students to have the capabilities and acquire skills to work as graduates of the branch in the field of programming network and Internet applications, designing and programming websites, in addition to learning the basics of designing and connecting networks, communications.

#### **Mission Statement**

Providing computer network technicians and computer programming who are able to design and create different types of computer networks. Teaching modern and advanced curricula for computer networks. Provide a laboratory environment that ensures the application of all scientific experiments related to computer networks and the Internet.

# 2. **Program Specification**

Program code:	NMB-Computer Science	ECTS	240
<b>Duration:</b>	4 levels, 8 Semesters	Method of Attendance:	Full Time

Computer science is a wonderfully wide-ranging subject. The emphasis of the program is the whole organism to which everything is related, the degree is popular - for some, it's the breadth of the subject

that appeals, for others it's a path to specialization. All students have the opportunity to transfer onto our specialist degrees in software, computer, and programming at the end of the first year.

Level 1 exposes students to the fundamentals of computer networks, suitable for progression to all network material within computer networking.

fundamental-networks subjects core topics are covered at Level 2 preparing for research-led subject specialist modules at Levels 3 and 4. A computer science graduate is therefore trained to appreciate how research informs teaching, according to the University and School Mission statements. At Levels 2, 3 and 4 students are free to choose more than half of their module credits with the proviso a range of modules are selected. This allows students to develop their own wide-ranging interests in computer field and especially computer network design, and networks architecture. Decisions on what to study are made with input from personal tutors.

Academic tutorials are held at Levels 1 and 2 with the same tutor, who is also the personal tutor, providing continuity and progressive guidance. Level 1 and 2 tutorials include a number of workshops, experiments lab. to teach skills, e.g. library use and presentation skills, followed by assessed exercises, e.g. essays and talks, as opportunities to practice these skills in a subject-specific context.

International years and Industrial placements are also offered and individual needs are discussed with the appropriate tutor and accommodated wherever possible.

# 3. **Program Goals**

 To provide a comprehensive education in Computer Science that stresses scientific reasoning and problem solving across the spectrum of disciplines within Computer Science.

- To prepare students for a wide variety of post-baccalaureate paths, including graduate school, professional training programs, or entry level jobs in any area of Computer Science.
- 3. To provide extensive hands-on training in electronic technology, statistical analysis, laboratory skills, and field techniques
- 4. To provide thorough training in written and oral communication of scientific information
- 5. To enrich students with opportunities for alternative education in the area of Computer Science through undergraduate research, internships, and study-abroad

# 4. Student Learning Outcomes

This report contains information about the Computer Science Department, at the University of Technology/ software branch. Since the founding of Section 1983 was called the Computer branch on behalf of the branch name was changed to the software in 2004 - 2005, and it represents knowledge in the understanding and development programs. The graduate works in the area of learning, designing and software developing. It also has expertise in the field of infrastructures and methods of data storage, transfer and implementation of calculation algorithms and methods of object-oriented programming and networking concepts, communication and information transfer. He\she also has expertise in basic structures and methods of object-oriented programming and concepts of networks and communication and information transfer.

#### **Outcome 1**

Identification of Complex Relationships

Graduates will be able to understand, design, and develop network design, Networks Architecture, Network devices, Network topologies, Data communication systems and to build network installation for wire and wireless networks to transfer information over network media.

#### Outcome 2

Oral and Written Communication

Graduates will be able to understand fundamental of networks, its troubleshoots and manipulating solutions. Formally communicate the results of investigations using both oral and written communication skills. Satisfying the requirements by collecting data, executing algorithms, using network structure and IP distributions,

#### Outcome 3

Laboratory and Field Studies

Graduates will be able to perform laboratory experiments and field studies, by using scientific equipment and computer technology while observing appropriate safety protocols.

### Outcome 4

Scientific Knowledge

Graduates will be able to demonstrate a balanced concept of how scientific knowledge develops, including the historical development of foundational theories and laws and the nature of science.

#### Outcome 5

Data Analyses

Graduates will be able to demonstrate scientific quantitative skills, such as the ability to conduct simple network design.

### **Outcome 6**

# Critical Thinking

Graduates will be able to use critical-thinking and problem solving skills to develop a research project and/or paper.

# 5. **Academic Staff**

Lecture name	Degree	Email	Mobile
Raheem abdul sahib	Phd Computer science /Asst. Prof.	Raheem.a.ogla@uotechnology.edu.iq	07715265090
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Israa Tahseen Ali Al-Attar	Phd Computer science/asst. prof	israa.t.ali@uothechnology.edu.iq	07702723461
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Ammar fakhri mahdi	Mcs Computer science /lecturer	110078@uotechnology.edu.iq	07904984479
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Manar Musaan	Msc applied mathematics /lecturer	110132@uotechnology.edu.iq	07735305345
Khitam Abdul nabi salman	Mcs Computer science		
Saja sabeeh azeez	Mcs Computer science/lecturer	110068@uotechnology.edu.iq	07705368207
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# 6. Credits, Grading and GPA

## Credits

Koya University is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester.

1 ECTS is equivalent to 25 student workload, including structured and unstructured workload.

## **Grading**

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

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Group	Grade	التقدير	Marks (%)	Definition
	A - Excellent	امتياز	90 - 100	Outstanding Performance
Success	B - Very Good	جيد جدا	80 - 89	Above average with some errors
Group	C - Good	ختر	70 - 79	Sound work with notable errors
(50 - 100)	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group	FX – Fail	مقبول بقرار	(45-49)	More work required but credit awarded
(0 – 49)	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				

NB Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

## Calculation of the Grade Point Average (GPA)

1. The GPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

GPA of a 4-year B.Sc. degrees:

GPA = [ (1st module score x ECTS) + (2nd module score x ECTS) + .....] / 240

# 7. Curriculum/Modules

## Semester 1 | 30 ECTS

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Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request
PRFU111	programming fundamental	108	92	8.00	В	
MATH112	Mathematics	108	92	8.00	В	
STPR113	statistics and probability	93	57	6.00	В	
INTH114	Information Theory	63	37	4.00	С	
HURD115	Human Rights and Democracy	33	17	2.00	S	
WORK106	Workshops	47	3	2.00	S	

## Semester 2 | 30 ECTS

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
STPR121	Structured Programming	108	92	8.00	В	
DIST122	Discrete Structures	63	62	5.00	В	
COLD123	Logic Design	93	57	6.00	В	
COTE124	Coding Technique	63	37	4.00	С	
PRNE125	Principles of Networks	78	47	5.00	С	
WORK106	Workshop	47	3	2.00	S	

## Semester 3 | 30 ECTS

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request

## Semester 4 | 30 ECTS

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Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request

## Semester 5 | 30 ECTS

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request

# Semester 6 | 30 ECTS

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request

## Semester 7 | 30 ECTS

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request

## Semester 8 | 30 ECTS

Code	Module	SSWL	USSWL	ECTS	Туре	Pre-request

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# 8. Contact

Program Manager:

John Smith | Ph.D. in Biology | Assistant Prof.

Email:

Mobile no.:

Program Coordinator:

John Smith | Ph.D. in Biology | Assistant Prof.

Email:

Mobile no.:

