



**Al-Karkh University of  
Science**

**College of Science**



*First Cycle – Bachelor's degree (B.Sc.) – Department of forensic science*



## Table of Contents | جدول المحتويات

1	<i>Department Vision</i>
2	<i>Department Mission</i>
3	<i>Department Objectives</i>
4	<i>Job description for graduates</i>
5	Program Specification
6	Student Learning Outcomes
7	Academic Staff
8	Credits, Grading and GPA
9	Modules
10	Contact Information

### **1. Department Vision:**

Building and developing an integrated scientific department in the field of forensic science based on modern scientific methods and advanced technologies that keep pace with local and international developments, contribute to achieving justice, support security institutions, and meet the needs of the labor market through distinguished scientific and practical expertise.

### **2. Department Mission:**

Preparing qualified specialists in the field of forensic science through the application of modern scientific and laboratory techniques, distinguished academic programs, advanced forensic laboratories, and experienced teaching staff to provide students with scientific, technical, and investigative skills that contribute to serving society and supporting justice and security institutions.

### **3. Department Objectives:**

Graduating and qualifying specialized cadres in forensic science who are capable of working efficiently in criminal investigation, forensic laboratories, evidence analysis, fingerprint examination, DNA analysis, toxicology, and crime scene investigation. The department also aims to contribute to scientific research, develop modern forensic techniques, and enhance students' administrative, analytical, and professional skills to meet the needs of forensic and legal institutions.

### **4. Job Description for Graduates:**

Forensic Science Specialist / Forensic Laboratory Analyst.

The Forensic department administration seeks to develop laboratories and scientific equipment continuously, provide advanced educational and training facilities, and strengthen

cooperation with security, health, and judicial institutions. It also aims to support scientific research, open postgraduate studies, and enhance scientific communication at both local and international levels.

## **5. Program Specification**

<b>Programme code:</b>	BSc-FOR	<b>ECTS</b>	240
<b>Duration:</b>	4 levels, 8 Semesters	<b>Method of Attendance:</b>	Full Time

## **6. Student Learning Outcomes**

1- Forensic science addresses the scientific investigation of crimes and legal evidence through the application of biological, chemical, physical, and digital analysis techniques used in criminal investigations and judicial processes.

2- The field of forensic science focuses on collecting, preserving, analyzing, and interpreting evidence from crime scenes in order to support justice and identify individuals involved in criminal activities.

3- Forensic science requires extensive knowledge of biology, chemistry, physics, toxicology, genetics, and criminal investigation methods, as well as a thorough understanding of laboratory and field analysis techniques.

4- Forensic specialists must consider several important aspects including evidence collection, chain of custody, laboratory examination, and interpretation of results to ensure accurate and reliable forensic conclusions.

5- The program introduces students to the fundamentals of forensic science along with modern laboratory technologies and investigative tools used in forensic and criminal investigations.

### **Outcome 1**

#### **Identification of Complex Relationships**

Graduates will be able to analyze crime scene evidence, identify relationships between physical and biological findings, and interpret forensic data using scientific methods and modern technologies.

### **Outcome 2**

#### **Oral and Written Communication**

Graduates will be able to professionally communicate forensic investigation results through scientific reports, presentations, and legal documentation using both oral and written communication skills.

### Outcome 3

#### Laboratory and Field Studies

Graduates will be able to perform laboratory experiments and crime scene investigations using scientific equipment, forensic technologies, and computer applications while following proper safety and ethical procedures.

### Outcome 4

#### Scientific Knowledge

Graduates will demonstrate a comprehensive understanding of forensic science principles, including the development of scientific theories, criminal investigation methods, and legal applications related to forensic evidence.

### Outcome 5

#### Data Analysis

Graduates will be able to conduct scientific and statistical analyses of forensic evidence and interpret laboratory results accurately using modern analytical methods and technologies.

### Outcome 6

#### Critical Thinking

Graduates will be able to apply logical and critical thinking skills to solve forensic problems, evaluate evidence objectively, and make scientifically supported decisions during investigations

## 7. Academic Staff

الاسم	الشهادة العلمية	الدرجة العلمية	منصب الاستاذ	الجنس
ا.د. عدي هادي رؤوف	دكتوراه	أستاذ	عميد الكلية	ذكر
ا.د. حسن محمد لعبيي	دكتوراه	أستاذ	المعاون العلمي	ذكر
ا.د. فراس حبيب عبد الرزاق	دكتوراه	أستاذ		ذكر
ا.د. أسماء منصور عبد الرسول	دكتوراه	استاذ		انثى
ا.د. محمد عبد الباسط عبد الجبار	دكتوراه	استاذ		ذكر
ا.د. براق يحيى كاظم	دكتوراه	استاذ		ذكر
ا.م.د. جنان عدنان عبد اللطيف	دكتوراه	استاذ مساعد	رئيس القسم	انثى
ا.م.د. أسماء سامي ابراهيم	دكتوراه	استاذ مساعد		انثى
ا.م.د. حسين كريم ابراهيم	دكتوراه	استاذ مساعد		ذكر
ا.م.د. مروة عبد الرضا كاظم	دكتوراه	أستاذ مساعد		انثى
م.د. زينب محمود لطيف	دكتوراه	مدرس		انثى
م.د. شيماء حيدر عبد الرحمن	دكتوراه	مدرس		انثى

انثى		مدرس	دكتوراه	م.د. اسراء طه ابراهيم
ذكر		مدرس	دكتوراه	م.د. حسن علي محمد
انثى		مدرس	دكتوراه	م.د. الباب فواز ابراهيم
انثى		مدرس	دكتوراه	م.د. براء قاسم محمد
ذكر		مدرس مساعد	ماجستير	م.م. ثامر عبد ربحان
انثى	مقرر القسم	مدرس مساعد	ماجستير	م.م. عائشة عبود احمد
انثى		مدرس مساعد	ماجستير	م.م. حنين رافع علي
انثى		مدرس مساعد	ماجستير	م.م. حوراء محمد علاء الدين
انثى		مدرس مساعد	ماجستير	م.م. عذراء زيد حسين
انثى		مدرس مساعد	ماجستير	م.م. بسمة احمد راتب
انثى		مدرس مساعد	ماجستير	م.م. افراح جبار لازم
انثى		مدرس مساعد	ماجستير	م.م. مروة بكر احمد
ذكر		مدرس مساعد	ماجستير	م.م. محمد مشتاق طالب
انثى		مدرس مساعد	ماجستير	م.م. نور عبد الحسين نعمة
انثى		مدرس مساعد	ماجستير	م.م. منتهى محسن هادي
انثى		مدرس مساعد	ماجستير	م.م. ولاء عبد الجبار محمد
انثى		مدرس مساعد	ماجستير	م.م. رنا شاكر عبد الجبار
انثى		مدرس مساعد	ماجستير	م.م. رعدة عارف موفق
انثى		مدرس مساعد	ماجستير	م.م. حنان جمعة محمد

## **8. Credits, Grading and GPA**

### ***Credits***

Al-Karkh 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 hrs 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:

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

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

CGPA of a 4-year B.Sc. degree:

$$CGPA = [ (1st^{module} \text{ score} \times ECTS) + (2nd^{module} \text{ score} \times ECTS) + \dots ] / 240$$

## 9. Curriculum /Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Module No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite Module(s) Code
					hr/s em	hr/s em	hr/s em			
1	KUS1101	Mathematics	الرياضيات	English	48	77	125	5	S	
2	KUS1102	Fundamental of computer science	اساسيات علم الحاسوب	English	63	12	75	3	S	

3	KUS1103	Democracy and Human Rights	ديمقراطية وحقوق الانسان	Arabic	33	17	50	2	S	
4	SCI1104	General Biology 1	احياء عام 1	English	78	97	175	7	C	
5	SCI1105	General Chemistry	كيمياء عام	English	78	97	175	7	C	
6	FOR1001	Principles of forensic sciences	مبادئ علوم الأدلة الجنائية	English	48	102	150	6	B	
				Total	348	402	750	30		

**Semester 2 | 30 ECTS | 1 ECTS = 25 hrs**

No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite Module(s) Code
					hr/se m	hr/se m	hr/se m			
1	FOR12012	General biology 2	احياء عام 2	English	78	122	200	8	C	
2	FOR12023	Organic chemistry	كيمياء عضوية	English	78	122	200	8	C	
3	FOR12002	Legal regulation of the criminal expert	التنظيم القانوني للخبير الجنائي	Arabic	48	27	75	3	B	
4	KUS12010	Arabic Language	لغة عربية	Arabic	33	17	50	2	S	

5	KUS12011	English Language	لغة انكليزية	English	33	17	50	2	S
6	SCI12012	General Physics	فيزياء عام	English	78	97	175	7	C
				Total	348	402	750	30.00	

**Semester 3 | 30 ECTS | 1 ECTS = 25 hrs**

No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite Module(s) Code
					hr/se m	hr/se m	hr/se m			
1	FOR23003	Crimes Baath Regime in Iraq	جرائم نظام البعث في العراق	Arabic	48	2	50	2	S	
2	MPH21013	Biochemistry	الكيمياء الحياتية	English	78	72	150	6	C	
3	FOR23004	Genetics	الوراثة	English	78	72	150	6	C	
4	FOR23005	Anatomy and physiology	الفسلجة والتشريح	English	78	72	150	6	B	
5	FOR23006	Secretions and vital fluids	سوائل وافرازات حيوية	English	78	72	150	6	B	
6	FOR23007	Statistics and forensic applications	علم الإحصاء والتطبيقات الجنائية	English	48	2	50	2	B	
	FOR23008	crime science	مسرح جريمة	Arabic	48	2	50	2	B	

				Total	456	294	750	30		
--	--	--	--	-------	-----	-----	-----	----	--	--

**Semester 4 | 30 ECTS | 1 ECTS = 25 hrs**

No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite
					hr/sem	hr/sem	hr/sem			
1	FOR24009	Molecular Biology	الاحياء الجزيئي	English	78	97	175	7	B	
2	FOR24010	Analytical Chemistry	الكيمياء التحليلية	English	78	97	175	7	B	
3	KUS24020	Arabic Language 2	لغة عربية 2	Arabic	33	17	50	2	B	
4	KUS24021	English Language 2	لغة انكليزية 2	English	33	17	50	2	B	
5	KUS24022	Applications of Computer Sciences	تطبيقات علم الحاسوب	English	48	27	75	3	S	
6	FOR24011	Laboratory equipment and techniques	اجهزة وتقنيات مختبرية	English	78	72	150	6	B	
7	FOR24012	Investigation and criminal research	التحقيق والبحث الجنائي	Arabic	33	42	75	3	C	
				Total	396	354	750	30		

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite
					hr/sem	hr/sem	hr/sem			
1	FOR35125	Molecular application	التطبيقات الجزيئية	English	78	97	175	7	B	
2	FOR35126	Analytical Chemistry	التحليل الالي	English	78	97	175	7	B	
3	FOR35027	Forensic chemistry	الكيمياء الجنائية	English	78	47	125	5	B	
4	FOR35028	Chemical and microscopic detection methods	طرق الكشف الكيميائي والمجهري	English	78	47	125	5	B	
5	FOR35029	Introduction to explosive materials and booby traps	مقدمة في المواد المتفجرة والكمائن الخداعية	Arabic	33	42	75	3	C	
6	FOR35130	Forensic Psychology	علم النفس الجنائي	Arabic	33	42	75	3	B	
				Total	378	372	750	30		

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite
					hr/sem	hr/sem	hr/sem			
1	FOR36131	Introduction to toxins and drugs	مقدمة في السموم والمخدرات	English	78	97	175	7	B	
2	FOR36032	Trace of forensic	اثار الادلة الجنائية	English	63	37	100	4	B	
3	FOR36033	Criminal insects	الحشرات الجنائية	English	78	97	175	7	B	
4	FOR36034	Genetic statistical analysis and databases	التحليل الاحصائي الوراثي وقواعد البيانات	English	33	67	100	4	C	
5	FOR36035	Inks and dyes and their warnings	الاحبار والاصباغ ومحاذيرها	English	33	67	100	4	C	
6	FOR36036	Tissue , Haier and Fibers science	انسجة وشعر واللياف	English	48	52	100	4	B	
				Total	333	417	750	30		

Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite
					hr/sem	hr/sem	hr/sem			
1	KUMR41037	Methodology Research	منهج بحث	English	18	7	25	1	B	
2	FOR47038	Identify Definition Tools	ادوات تعريف الهويه	English	78	47	125	5	B	
3	FOR47039	Bioinformatics	المعلومات الحيويه	English	78	47	125	5	B	
4	FOR47040	Basics of Fingerprint Analysis and Fonts	اساسيات تحليل بصمة الاصابع والخطوط	English	78	47	125	5	C	
5	FOR47041	Environmental Toxins and Industrial Pollution	السموم البيئية والتلوث الصناعي	English	78	47	125	5	S	
6	FOR47042	Weapons and machine artifacts	الأسلحة واثار الآلات	English	78	47	125	5	C	
7	FOR47043	Cybercrime	الجريمة الالكترونية	English	48	52	100	4	B	
				Total	381	387	750	30		

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

No.	Module Code	Module Name in English	اسم المادة الدراسية	Language	TWSS	TWSSN	TWS	ECTS	Module Type	Prerequisite
					hr/sem	hr/sem	hr/sem			
1	FOR48043	Principles of Medical Jurisprudence	مبادئ الطب الشرعي	English	78	47	125	5	C	
2	FOR48044	Comparing fonts and signatures	مقارنة الخطوط والتوقيعات	Arabic	48	77	125	5	C	
3	KUET007	Ethics of Scientific Research	اخلاقيات البحث العلمي	Arabic	33	17	50	2	s	
4	FOR48046	Forensic Chemistry Applications	تطبيقات الكيمياء الجنائية	English	63	62	125	5	b	
5	FOR48047	Automatic Fingerprint system	نظام البصمة الالي	English	63	62	125	5	C	
6	FOR48048	Graduation Project	مشروع بحث تخرج	English	63	137	200	8	b	
				Total	348	402	750	30		

## 10. Contact Information

Program Manager:

Assist. Prof. Dr. Genan Adnan Abdullateef Al-Bairuty | Ph.D. Histology

Email: galbairuty@kus.edu.iq

Mobile no.:

Program Coordinator:

Assist. Lec. Aeshah Abood Ahmed | MSc. Biotechnology

Email: ayshah.abood@kus.edu.iq

Mobile no.: