



ALMUJADILA (11)

**REPUBLIC OF IRAQ  
MINISTRY OF HIGHER EDUCATION  
AND SCIENTIFIC RESEARCH  
AL-NAHRAIN UNIVERSITY**

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**Prof. Dr. Nabeel Kadim Abid Al-Sahib**  
Al-Nahrain University Vice - Chancellor

Al-Nahrain University was established in 1987. Its name associated with the great rivers Tigris and Euphrates, between them and on their banks the ancient civilizations were raised which learned the humanity the first writing vocabulary; and legislate the first laws that regulate the civil life and human rights. Al-Nahrain University is consistent with the gifts of these two inexhaustible rivers and became an important tributary in enriching the human culture through their scientific, academic and research organizations that are established on the basis of scientific and academic excellence by affiliating elite groups of scientists and staff and enrolling the distinguished students. By this, the university charted an approach that is characterized by scientific excellence supported by distinct infrastructure of staff and laboratories which created a scientific atmosphere that care about type rather than quantity.

The university consists of nine colleges, an institute of higher education, four research centers and several research and consultancy units. These cover medicine, engineering basic sciences, economics, political sciences and law. The future plans of the university are expansion in modern studies that are connected with cutting edge sciences.

Al-Nahrain University has ranked an advanced position within the Iraqi and Arabic university rankings in addition to the number of research papers that are published by the university staff in the international journals and the web of science. For continuous education and development, the employee of the university has joined 105 scholarships, study leaves and fellowships to obtain higher degrees. Furthermore, a large number of staff and students have participated in conferences, workshops and symposiums inside Iraq and abroad.

The university emphasizes its active role in the comprehensive development process in Iraq by providing the governmental and private sectors with specialized graduates in the scientific and humanities fields for promoting the level of performance in relevant fields of specialization in addition to promote senior cadres in the university.

The earnest role of the university in serving the community is apparent through its specialized consulting bureaus in medicine, engineering, law, economics, information engineering, sciences, infertility diagnoses, biotechnology, and renewable energy.

The university started since 2007 the programme of Total Quality Management and it is one of the first Iraqi universities to adopt the Quality Management System according to a timetable that comprise of several stages to achieve the quality of the educational process in the university. It also applies the system of governance based on believe in its basic principles of transparency, integrity and active partnership.

In the administration field, the information communication technologies have become an important criterion that measures the degree of the progress of universities and nations. In this aspect, the university seeks to apply the electronic government system according to a specified timetable which will lead to an improvement in the concepts, methods and performance as a part of achieving the university goal of becoming a modern one. This system will enable the administrative and financial departments in the university as well to help effectively in achieving the ultimate goal.

As we present this guide, I hope that the university becomes a scientific edifice on the national, Arabic and international level backed by its scientific achievements spoken by statistics, photographs and facts. Our success is with aid of Allah.

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OCTOBER 2016

# PRESIDENCY OF AL-NAHRAIN UNIVERSITY



## About Presidency of Al-Nahrain University

Al-Nahrain University was established in 1987. It is considered one of the prominent cultural, scientific and intellectual centers in Baghdad, Iraq. It prides itself to be one of the best higher education institutes in terms of the level of scientific research and academic programs, and in commitment to the standards of systematic self-discipline. The University offers undergraduate and postgraduate education as well as research opportunities. Its stated mission is to prepare scientific staff for the development of intellectual thinking in Iraq and create leaders for a bright future.



# Presidency of Al-Nahrain University



The University Logo refers to some general indicators starting with the half sprocket which represents the engineering, mechanical, dynamic and physical operations. The other side of the logo suggests a serpent-like shape to underline the ancient symbol of the serpent as standing for medical and chemical research and other processes. The center of the logo is occupied by two squares: the red one stands for Ur Ziggurat viewed from above, first, as world monument of ancient human civilization and, second, as an structural design adopted in the architecture and interior decoration of many human civilizations to come such as the Roman, the Greek and others. The double crescents that surround the logo refer to Tigris and Euphrates. The green color at the center of the logo refers to fertility, prodigality and green areas.

## The city of Baghdad

Excavations have shown that Baghdad was in the past an important human home that had come to existence at the Assyrian Age before it was selected as the capital of the Abbasid Caliphate. The Strategic and the geographic importance of Baghdad as a city was also due to the fact that it connected the ancient civilizations in northern Iraq to their counterparts at the south. The first of such ancient southern civilizations was Ur, the capital of the Sumerians. Even the famous city of Babylon in central Iraq was but an extension of the historic cities of Ur, Eridu, and Uruk (Warka). In northern Iraq cities such as Assyria, Calah (Nimrud), Nineveh, and Hatra had a special significance and had

played a real cultural role in Mesopotamia. This geographical significance of Baghdad made possible the development of Man and his cultural and ideological achievements. In pre- as well as post-Islamic conquest, the area was known in Baghdad during the Abbasid era surrounded by strategic cities. Baghdad is situated to the north of the historical Babylon and just a few kilometers to the north-west of the city of (Ctesiphon City) Al-Madda'in built by the Greeks and had been inherited by the Persians, which continued as a major hub for the country until superseded by Baghdad in the eighth century A.C. An important advantage of the geographical location of Baghdad is that it is located midway at the Tigris, which represents a vital transportation line between the ancient cities in northern and southern Iraq. Neighbouring Diyala River Basin, Baghdad enjoyed a great deal of good irrigation and farming. Then Baghdad was at its apex.

Baghdad was built in the Abbasid period by the Abbasid Caliph Abu Jafar Al-Mansur between 762 and 764 A.D. It was named the city of Al-Mansur, Al- Zawra', and the city of peace. It was once the capital of the world, the center of the Islamic Caliphate. Al-Mansour made four gates for Baghdad; namely they are, the gate of Khorasan, the gate of Al-Sham, the gate of Kufa, and the gate of Basra. Al-Mansour had chosen this spot of land on the banks of the Tigris for the present Baghdad. Baghdad reached its ultimate glory during the reign of Harun Al-Rashid. Baghdad today harbors a lot of historical and cultural monuments the most important of which are:

1-School of Al- Mustansiriya.



It was prestigious school founded in the time of the Abbasids in Baghdad in 1233 at the hands of the Caliph Al-Mustansir Billah, and was an important scientific and cultural center. It is located in Rusafa Baghdad and it overlooks the Tigris next to the Caliphate Palace and the regular school. In the center of the school there is a large fountain whose center is in return occupied by a peculiar clock to announce prayer times all the day long. That clock is a witness Arab scientific development at the time.



## 2- The Holy Kadhimiya

Kadhimiya is considered as one of the most famous Islamic architectures in the Islamic world. The Holy Kadhimiya is located at the city center. It embraces the holy shrines of Imams Musa Al-Kadhim and his grandson Mohammed Al-Jawad (peace be upon them). The building of this holy site was constructed in 647 AH (1249 AD) during the reign of the Abbasid Caliph Al-Musta'sim Billah. It is characterized by its architectural beauty as concerning dealing with crystal, gold, silver and pieces of small mirrors as architectural elements. Two lofty domes with four minarets are built above the two Imams' graves enameled with a thin golden layer.



## 3-Al-Rasheed Street

One of the oldest and most famous streets of Baghdad. It was known during the Ottoman rule as, (Khalil Pasha, Road C) to the name of Khalil Pasha, the governor of Baghdad and the commander of the Ottoman army, who expanded and modified the public road from Babil-sharji to Babil-mu'adham districts. It took his name in 1910 AD. The street has historical mosques such as Alhaidarkhana mosque built by Dawood Pasha in 1819, and Hussein Pasha Mosque and the old markets such as a Haraj (low price) market and Al Saraiy market. .

## 4- Al Saraiy and Qishlah

The buildings of Al Saraiy and Qishleh are considered as one of the most important and oldest Ottoman historical in Rusafa on the east bank of the Tigris in the area known as Aljumphuriya streets sector opposite to Al Saraiy mosque next to the libraries market. The Al Saraiy building was occupied by the Ministry of Education and the former General Directorate of police and the Ministry of Interior. Next to this building is Qishleh which was formerly the Ministry of Finance.

## 5- Mosques and religious landmarks in Baghdad

A large number of well-known religious monuments spread in the city of Baghdad.

A. Al-Imam Al-Adham mosque is in the Adhamiya, one of the oldest and most famous suburbs of Baghdad in Rusafa. The mosque is situated at the Tigris bank and includes the shrine of Imam Abu Hanifa ibn Thabit Al-numan, one of the disciples of Imam Jafar Sadiq (Peace be upon him), the founder of the Hanafi Islamic sect.

B. Al-Hadra Al-Qadiriya: The mosque and shrine of Sheikh Abdul Qadir Alkilani (Had-

ra Qadiriya) is one of the important historical shrines in Baghdad, and dates back to the third century AD. It is located in Bab Al-Sheikh in Rusafa, Baghdad. The building is characterized by its Islamic -style of architecture as one of the largest mosques in old Baghdad.

**C. Mosque of the Caliphs:** the Minaret of the mosque is considered one of the most prominent caliphs old minarets in Baghdad. The mosque is located in Al-Jumhuriyah Street next to Rusafa of Baghdad. It was built during the reign of the Abbasid Caliph Muktafi Billah.

**D. Buratha Mosque:** This mosque is located on the road leading from Baghdad to the recorded city of Kadhimiya. Buratha area is one of the oldest places in Baghdad, i.e.; 108 years before the founding of the city. Buratha was a Christian monastery that took the name of its builder. Buratha means in Assyrian language (son of wonders). In Arabic it means (the red soft land). Among other religious monuments are known in Baghdad is Ahmadi mosque and Alhaidarkhana mosque and the shrine of Hussein bin Rooh Al-Nawbakhti.



#### 6-Baghdad Churches:

A number of well-known churches spread in the city of Baghdad. The Church of the Virgin Mary is one of the oldest existing churches in Baghdad, as its construction dates back to the year 1610 AD. This church

is located in Almidan Square in Babilmuadham. It belongs to the Orthodox Armenian Church. It is also known as the Church of Mary Anna or church of Miskinteh.

There are a large number of other churches, such as the Chaldean Church (of Sorrows) in Al- Rashid Street and the Latin Patriarch of Jerusalem, near the famous Shorja market on the one hand the Aljumburia Street and the Syrian Catholic Church and the Church of St. Gregory Losaforich.



#### 7-Baghdad Markets

Old markets in Baghdad occupy the city center, with each of them specialized in selling a different kinds of goods. The most important of these markets is Shorja market which is located between Al-Rashid and Aljumhuriya Streets: It is a large market for selling food stuff, household items and all kinds of clothes. Alsafafer is another Baghdadi market located in Al-Rashid Street: it offers fine copper artifacts decorations, hand-craft and traditional works. Albzazin market which sells fabrics of all kinds is located near Alnahr (River) street. Alghazil market is an interesting place at Aljumhuriya Street near the mosque of caliphs where one can buy or just enjoy looking at different types of live pets, birds and fish.

Al-Sarai market with Al-Mutanabi street near Al-shuhada' (martyrs) bridge in

Rusafa are the two places where one finds books and school supplies. Al-Mutanabi Street also offers printing and binding services.



#### 8-Baghdad Museums

There is a large number of museums in Baghdad with the Iraqi Museum of Antiquities as the most important of them all. It is the largest and oldest museum since 1923, the year this museum was founded. It is located in Allawil Hilla area / Baghdad. The museum contains archaeological collections chronicling the history of Mesopotamia that includes diverse archaeological groups belonging to the Sumerians, Assyrians and Babylonians in addition to a variety of Islamic Arts. There is a large number of other museums such as The National Museum of Modern Arts, the War Museum, the Museum of Iraqi Folklore, Al- Baghdad Museum and the Museum of Natural History.



### About Al-Nahrain University

The Baghdad –based Al-Nahrain University, a leading academic institution, with reputation for education and innovation resonating across Iraq and the Middle East region, was established in 1987. It is the fastest-rising University in the region. The University, which is named after the two rivers of Mesopotamia, The Tigris and The Euphrates, started with two competitive colleges, Medicine and Law, highly selective schools in terms of students' intakes and staff experience. Right from the beginning the Medical School shared best practices in terms of medical syllabus and Medical English with leading medical schools and language centers in the UK.

Apart from the close cooperation with the Baghdad – based British Council, the College of Medicine struck an agreement with Colchester English Study Center in Essex whereby their staff used to run a summer school in Baghdad for almost three successive years. The School of Law followed suit in terms of teaching English and French. Cardiff Medical teachers were regular visiting professors especially in Anatomy and Physiology.

With very strict entry and exit criteria the colleges attracted and retained only aspiring students. In 1988 and 1990 the medical school successively won the first position in Iraq in an academic competition in which all Iraqi medical schools and the college of Medicine in Ireland were involved. It was second to the Irish School. Strikingly interesting, the University, over the years, has become a hub of an ever-expanding network of colleges and centers stretching from its original campus in Kadhimiya city, North of Baghdad to Jadriya strict.

The first campus houses the colleges of



Medicine, Law, Pharmacy, the Teaching Hospital and the High Institute for Infertility Diagnosis and Assisted Reproductive Technologies, Medical Research Unit and, of course, female and male hostels. The area is very rich of history and heritage. In Jadriya, a very fashionable western style area in the south of Baghdad, the University shares Baghdad University the green campus sprawling on the Bank of the River Tigris which divides the Capital into two parts. The campus was originally designed by the Swiss Architect Walter Crombries in 1958.

Jadriya premises house several Colleges and Centers including Colleges of Engineering, Sciences, Information Engineering, Political sciences, Business Economics, Applied Biotechnology.

The research drive in the university was culminated in the establishment of some centers most active of them are Forensic DNA, Biotechnology, Nonrenewable Energy and Electronic Computers. The University staff

are offered good research opportunities which have enabled them to accomplish prolific research at the national and international level. This fashionable Campus also houses the Continuing Education Department, Student Services Center, a kindergarten for staff children, dedicated Students Support services facilities including catering, recreation, accommodation, sports, etc. The University runs various activities for staff and students on both campuses and shares best practices with other Higher education institutions and other Education providers.



### Goals of the University:

**1** Offering scientific research as a tool to serve national development.

**2** Making use of advanced technology, especially information technology.

**3** Developing competitiveness in the field of education and research between Iraqi and Arab universities.

**4** Activating the staff participation in national as well as international, conferences and local seminars.

**5** Establishing strong relations with Arab and foreign universities as well as with professional organizations through partnership, memoranda of understanding and bilateral agreements.

## Successive Vice - Chancellors of Al-Nahrain University

Sq	Name	Degree	Academic Rank	General specialization	Specific Specialization	From - To
1	Muthana A. Shanshal	Ph.D	Prof	Chemistry	Organic Chemistry	1988-1994
2	Laith I. Namik	Ph.D	Prof	Engineering	Civil Engineering	1994-1997
3	Mahmood H. Hammash	Ph.D	Prof	Doctor of Medicine	Autopsy and Embryology	1997-2003
4	Khalid A. Aljudi	Ph.D	Prof	Mechanical Engineering	Solar Energy	2003-2005
5	Adnan S. Al-Janabi	Ph.D	Prof	Physiology	Physiology of Reproduction	2005-2011
6	Mohammed J. Ali	Ph.D	Prof	Education and Psychology	Educational Planning	2011-2013
7	Falah H. Al-Asadi	Ph.D	Prof	History	History of Europe	2013-2014
8	Nabeel K. Abid Al-Sahib	Ph.D	Prof	Mechanical Engineering	Manufacturing and Anti- Erosion	cur- 2014- rent



*Dr. Muthana Abdul-Jabbar Shanshal  
PhD in chemistry  
From Germany  
Vice - Chancellor  
of the University,  
From 1988 up to 1994*



*Prof. Dr. Mahmoud Hayawi Hammash  
Ph.D. in Medicine  
From the U K  
Vice - Chancellor of  
the University from  
1997 up to 2003*



*Prof. Dr. Laith Ismail Namik  
PhD in Civil Engineering  
From the USA  
Vice - Chancellor  
of the University,  
From 1994- 1997*



*Prof. Dr. Khalid Ahmed Aljudi  
PhD in Mechanical Engineering  
From the UK  
Vice - Chancellor of  
the University from  
2003 to 2005*



*Prof. Dr. Adnan  
Saleh Al-Janabi  
PhD in the Physiology  
of Reproduction  
from the U K  
Vice - Chancellor of  
the University from  
2005 up to 2011*



*Prof. Dr. Falah  
Hassan al-Asadi  
PhD in the History  
of Europe  
From the U K  
Vice - Chancellor  
of the University  
2013 until 2014*



*Prof. Dr. Muhammad  
J. Ali  
PhD in Educational  
Planning  
From the USA  
Vice - Chancellor of  
the University from  
2011 up to 2013*



*Prof. Dr. Nabeel  
Khadim Abid Al-Sahib  
PhD in Mechanical  
Engineering  
From Russia  
Vice - Chancellor  
of the University  
From 2014 current*

## The Colleges of Al -Nahrain University

List of the Colleges at Al-Nahrain University and years of their foundations:

.Sq	The College	Year Founded
1	College of Law	1987
2	College of Medicine	1987
3	College of Engineering	1988
4	College of Science	1988
5	College of Political Sciences	1994
6	College of Information Engineering	2002
7	College of Business Economics	2009
8	College of Applied Bio-technology	2012
9	College of Pharmacy	2014
10	The High Institute for Infertility Diagnosis and Assisted Reproduction Technologies	1993
11	Biotechnology Research Center	1999
12	DNA Forensic Research and Training Center	2011
13	Al-Nahrain Nano-renewable Energy Research Center ((NNERC	2014
14	Computer Center	2014

## College of Law

The College of Law was founded in 1987. Alongside with the College of Medicine, the College of Law is considered the mother College of Al-Nahrain University. This College offers a B.A degree in public and private law. The number of students at the academic year 2015/2016 was (534) of both sexes. It also offers M.A degree with a number of (77) students of both sexes at the academic year 2015/2016, and Ph.D. degree with a number of (34) students of both sexes at the same year.



## College of Medicine

The College was founded in 1987 and offers a MBChB degree in medicine and general surgery that cover: anatomy, internal medicine, family and community medicine, pediatrics, physiology and medical physics, pathology and forensic medicine, surgery, gynecology and obstetrics, pharmacology, microbiology, chemistry and biochemistry. The number of students at the academic year 2015/2016 was (710) students of both sexes. The college also awards high diploma in radiology with a number of (7) students of both sexes, MSc degree with a number of (28) students of both sexes and PhD degree with a number of (29) students of both sexes at the academic year 2015/2016.



## College of Engineering

The college was founded in 1988 to offer at its origination BSc. degree covering the branches of Civil Engineering, Electronic Communications, Mechanical Engineering, Chemical Engineering, Computer Engineering, Laser and Optical Engineering, Medical Engineering, Architectural Engineering and artificial body limbs. The number of students at the academic year 2015/2016 was (780) students of both sexes. The College also offers MSc. degree with a number of (148) students of both sexes and PhD degree with a number of (19) students of both sexes at the academic year 2015/2016.



## College of Science

The College of Science was founded in 1988 to offer B.Sc. degree in the departments of Chemistry, Physics, Mathematics,



Computer Applications and Bio technology. Bio- technology department has become the nucleus for an independent college that has been developed in 2012 whose number of students reached (453) of both sexes at the academic year 2014/2015 .The College of Science also offers MSc. degree with a number of (89) students of both sexes and PhD. degree with a number of (58) students of both sexes at the academic year 2015/2016.



### College of Political Science

The College was founded in 1994, to offer B.Sc. degree in the departments covering Strategy, International policy, Political Systems and General Policies International Economic Relations. The number of students at the academic year 2015/2016 was (402) students of both sexes. The College also offers M.A degree with a number of (89) students of both sexes and PhD. degree with a number of (58) students of both sexes at the academic year 2015/2016.



### College of Information Engineering

The college was founded in 2002. It offers BSc. degree in three Departments; namely they are: Information and Communication Engineering, Network Engineering and International Networks Engineering. The number of students at the academic year 2015/2016 was (322) students of both sexes .The College also offers MSc degree with a number of (59) students of both sexes and PhD. degree with a number of (5) students of both sexes at the academic year 2015/2016.



### College of Business Economics

The college was founded in 2009 to offer B.A. degree in the departments of the Economics of Investment and Resources management, Economics of Bank management and Accounting and Financial Audit. The number of students reached (374) students of both sexes at the academic year 2015/2016. The College also offers MSc degree with a number of (14) students of both sexes at the academic year 2015/2016.





### College of Applied Biotechnology

The college was founded in 2012 to offer BSc. degree in the departments of the Molecular and Medical Biotechnology and Plant Biotechnology. The number of students reached (374) students of both sexes at the academic year 2015/2016. The College also offers MSc degree with a number of (14) students of both sexes at the academic year 2015/2016.



ity and assist reproduction. In (2000), the institute had assumed academic, research and treatment responsibilities at the post-graduate level. The Institute consists of the two departments; namely they are the department of Clinical Physiology of Reproduction which offers High Diploma degree equivalent to Master's degree in technology-assisted reproduction and the department of Applied Embryology which offers Master's degree in Applied Embryology. The number of students was (36) of both sexes at the academic year 2015/2016.



### College of Pharmacy

The college was founded in 2014 to offer BSc degree in Pharmacy. The number of students reached (119) students of both sexes at the academic year 2015/2016.



### Research Centers

#### Biotechnology Research Center

The center was founded in 1999 as a step to cope with biotechnology developments to convey and transplant them into Iraq. The center consists of three departments; namely they are, the Department of Medical and Molecular Biotechnology, the Department of plant Biotechnology and the Department of Environment Biotechnology.



### The High Institute for Infertility Diagnosis and Assisted Reproduction Technologies

The High Institute for Infertility Diagnosis and Assisted Reproduction Technologies was founded in 1992 as a means to treat infertile-

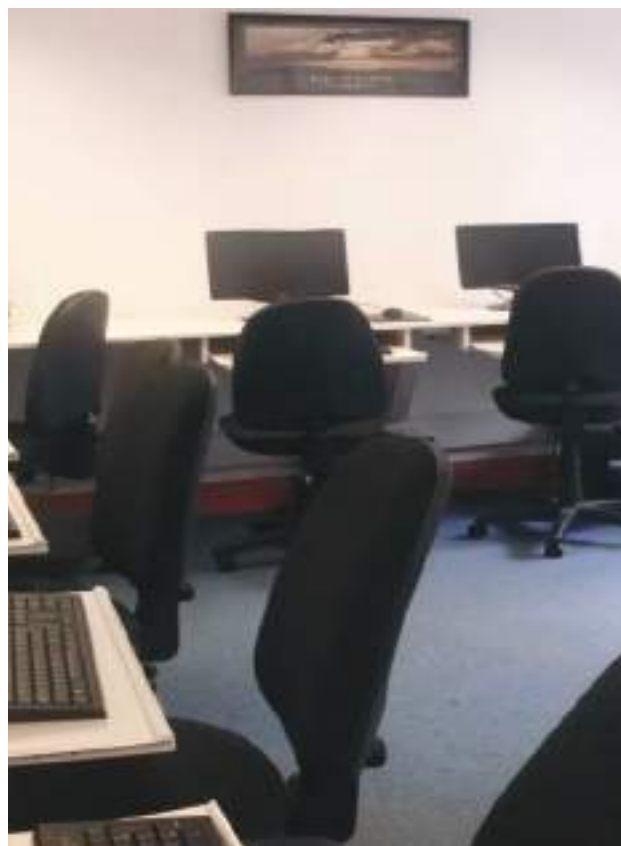
### DNA Forensic Research and Training Center

The DNA Center was established in 2011 as a nucleus for a training center for Iraqi universities and other Iraqi institutions that use the DNA in the identification of unknown mass death victims, criminal cases and paternity placement tests. The center has three departments; namely they are, Training and Development, Gene Bank and Molecular Genetics and DNA.



### Computer Center

The center was established in 2014 to be a specialized center in the construction of centralized databases as the nucleus of the electronic government for all the university facilities and offices. It aims at adopting computer technology all over the university to enhance academic performance. The center contains the following sections: Systems networking, training development, maintenance and Administrative and financial affairs sections.



### Al-Nahrain Nano-Renewable Energy Research Center (NNERC)

The Center was established in 2014 to be a specialized in nano-renewable energy. It combines both nanotechnology and its applications in the fields of renewable energy designs. It includes four departments; namely they are, Solar Energy Research department, Wind Energy Research department, Bio-mass Research department and Energy Management Research department.

## Al-Nahrain University Council for the academic year 2015-2016

Sq.	Name	Administrative position	Academic rank	General Specialization	Specific Specialization	Degree	Date of Joining
1	Nabeel Khadim Abid Al-Sahib	Chancellor	Prof	Mechanical Engineering	Manufacturing and Anti-Erosion	PhD	29/6/2014
2	Ayad Murad Tkhakh	Vice Chancellor	Asst Prof	Mechanical Engineering	Production & Minerals	PhD	21/4/2014
3	Abdul-Jabbar Nema Khalifa	Vice Chancellor	Prof	Mechanical Engineering	Power	PhD	24/8/2014
4	Ali Hadi Attiya	Dean of the College of Law	Prof	Public law	Financial Law	PhD	20/7/2014
5	Alaa Ghani Hussein	Dean of the College of Medicine	Prof	General Medicine and Surgery	Histopathology	PhD	23/1/2013
6	Jassim Abboud Al-Dabbagh	Dean of the College of Engineering	Prof	Architectural Engineering	Specialized Buildings	PhD	/1/4 2013
7	Hadi Mohammed Ali Abboud	Dean of the College of Science	prof	Chemistry	Inorganic chemistry	PhD	19/1/2014
8	Amer Hassan Fayyadh	Dean of the College of Political Science	Prof	Political Science	Political Ideology	PhD	20/10/2011
9	Mohammed Zaki Al-Faez	Dean of the College of Information Engineering	Prof	Electronic Engineering	Control and Computer	PhD	13/6/2013
10	Hajeer Adnan Zaki	Dean of the College of Business Economics	Prof	Economics	International Economy	PhD	1/12/2011
11	Haifa Hadi Hasani	Dean of the College of Applied Bio-Technology	Prof	Microbiology	Human Genetics	PhD	2013 /9 /1
12	Adib Ahmed Kadhim	Dean of the College of Pharmacy	Prof	Pharmaceutical	Pharmacology	Board	28/10/2014
13	Ola Mohammad Reza	Dean of the High Institute for Infertility Diagnosis	Asst prof	General Medicine and Surgery	Surgery Urinary and Genital	Board	29/8/2014
14	Hamoudi Abbas Hamid	Ministry of Industry Scientific Adviser	Prof	Chemistry	Analytic Chemistry	PhD	28/12 2010/
15	Abdul Amir Jassem Mohammed	Teaching Staff Representative	Prof	General Medicine and Surgery	Wholesale Neurological Surgery	PhD	
16	Walid Hamid Youssef	Secretary of the University Council	Prof	Biological Science	Animal Physiology	PhD	/1/9 2014





Al-Nahrain University Council 2015- 2016

### The top students at the University for the Academic Year 2014-2015

Disciplines	.Sq	Full Name	College	Department	Average
Scientific Disciplines	1	Zainab Daa Mo-hamed Ibrahim	Engineering	Computer Engi-neering	89.42
	2	Umaimah Ra>id Kheri Abdul Rah-man	Engineering	Biomedical Engi-neering	88.56
	3	Ayaa Mohammed Makki	Science	biogenic Technology	88.56
Humanities Disciplines	1	Marrem Mah-moud Ahmed Bakr	Political Sci-ence	International Policy	91.07
	2	Sura Mowaf-faq Mohammed Jaafar	Political Sci-ence	International Eco-nomic relations	90.69
	3	Al-Jahra Moham-med Bakr Mu-hammad	Political Sci-ence	Strategy	88.56

### University Publications

.Sq	Title of Issue	Issuing Body	Date of first Release	Publication Period
1	Iraqi Journal of Medical Sciences	College of Medicine	2000	Seasonal
2	Journal of the College of Law	College of Law	1969	Seasonal
3	Journal of the College of Engineering	College of Engineering	1990	Biannual
4	Journal of Al-Nahrain	College of science	1996	Seasonal
5	Journal of Political Issues	College of Political Science	2000	Seasonal
6	Journal of Biotechnology Researches Center	Biotechnology Researches Center	2008	Biannual
7	Iraqi Journal for Research on Embryos and Infertility	The High Institute for Infertility Diagnosis and Assisted Reproduction Technologies	2011	Biannual

### University Media Releases

.Sq	Title of Issue	Issuing Body	Date of first Release	Publication Period
1	Ataa Al-Nahrain magazine	Media and Relations Department	2009	Seasonally
2	Nabdhul Nahrain Newspaper	Media and Relations Department	2014	Monthly
3	Annual Statistical of Al-Nahrain University	Department of Studies and Planning and Follow-up	2014	Annually

## Statistics Bulletin of Al-Nahrain University



## Nabdhul Nahrain Newspaper



## Ataa Al-Nahrain Magazine



## Journal of the College of Law ISSN: 1815-6630



## Journal of College of Medicine ISSN: 1681-5697



## Journal of College of Engineering ISSN: 187X-1812



## Journal of the College of Sci- ence ISSN: 1814-5922



## Journal of the College of Politi- cal Science ISSN: 2070-9250



## Journal of Re- search and Treatment of Em- bryos Infertility ISSN: 2218-0265



## Journal of Biotechnology Researches Center ISSN: 2070-9250





By Our  
Students and  
Popular Crowd  
We Protect and  
Build Iraq

Al-Nahrain twenty-third  
graduation session named



OCTOBER 2016

# COLLEGE OF LAW



## About College of Law:

The college was established in 1987. Its aim is to prepare law graduates and provide them with high educational standards. The college includes two departments: Public Law Department and Private Law Department. The college grants Bachelor, Master, and Doctoral degrees.





### The College of Law, an Overview:

The College of Law was established in 1987 with the message of creating generations of well-qualified graduates in accordance with the best scientific methods of academic preparation. This enables these graduates to occupy posts in the public service in which assigned to their academic classifications. Several brilliant graduates actually lead distinguished government posts.

The study at the college is characterized by its teaching under theoretical as well as practical courses: while students receive the best of academic theoretical courses, they are also engage in practical courses at public court-houses during the years of their study. This is also supported by a graduation research that graduates have to accomplish prior to their graduation. The college keeps a leading place among other Iraqi Colleges of Law.



Deans of the college of law



Prof. Dr. Fawzi Mohammed Sami

1987-1988



Prof. Dr. Mustafa Al-zlami

1988-1989



Prof. Dr. Rushdie Khalid Rasheed

1989-1994

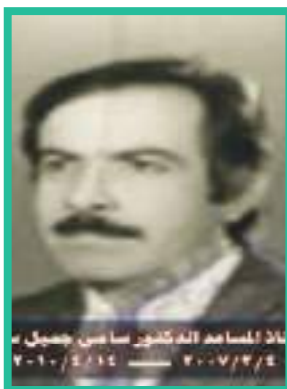


Prof. Dr. Basim Mohammed Saleh

1994-2003



Prof. Dr. Ghazi Faisal Mahdi

2003-2007  
2010-2012

Prof. Dr. Sami Jameel Si-track

2007-2010



Prof. Dr. Awadh Fadhil Ismael

2009-2010



Prof. Dr. Mohammed Aloom Mohammed

2012-2013

Assistant professor Dr.  
Adnan Ajil Ubaid

2013-2014



Prof. Dr. Ali Hadi Atiya

2014-to present



## the Academic Year 2015- 2016

No	The name	position	Scientific Section	Academic Title	General jurisdiction	Specialization	Higher Certificate	Date of joining the job
1	Ali Hadi al- Atyia	Dean of the Faculty of Law	Public Law	profess	Public Law	Financial	Doctorate	20/7/2014
2	Maha Mohammed Ayub	Associate Dean for Academic Affairs	Public Law	Asst.prof	Public Law	Public International	Doctorate	11/9/2014 3/4/2014
3	Ali Ghassan Ahmed	Associate Dean for Administrative Affairs	Private Law	Asst.prof	Private Law	Civilian	Doctorate	11/9/2014
4	Ammar Tarek Abdul Aziz	Head of the Department of Public Law	Public Law	Asst.prof	Public Law	Administrative	Doctorate	5/5/2014
5	Sana Mohammed Sdjan	Head of Department of Private Law	Public Law	Lecturer	Public Law	Financial	Doctorate	5/5/2014
6	Saja Mohamed	Teacher	Public Law	Lecturer	Football	Administrative	Doctorate	13/9/2015



Members of the college council

### The Vision:

The College of Law aspires to occupy a distinctive place among world colleges of law through making the best out of the facilities provided by the Iraqi ministry of higher education. It also looks forward to achieving that place through field work in its society.

### The Message:

The message of the College of Law stems from its belief that law is made up equally of both rights and commitment. Human happiness is attainable by understanding this correlation between rights and commitment. Hence, respect of rights and freedom are likewise understood and supported through

justice and sheer reason.

### Objectives

1. Securing the community needs of lawyers and graduates of law.
2. Pinpointing the research nature which characterizes the college through connecting it to government juridical institutes.
3. Providing legal consultation when needed by other institutes.
4. Following up the updates in the field of law all over the world.
5. Developing the teaching staff skills to secure the best-qualified graduates.
6. Applying high quality assurance criteria.

The Top Three Students at the college for the academic year 2015- 2016

No	The Name	average
1	Ali Raeed Ali Khayun	89.436
2	Ayman Abd Al-Hussain Abdulhassan	87.651
3	Abdullah Khamees Ali Nasry	87.529



The number of graduates for the academic year 2015- 2016

Male	Female
79	109

Top Students at the college for the academic year 2015 / 2016

**Ali** Raced Ali Khayun



**Ayman** Abd Al-Hus-  
sain Abdulhassan



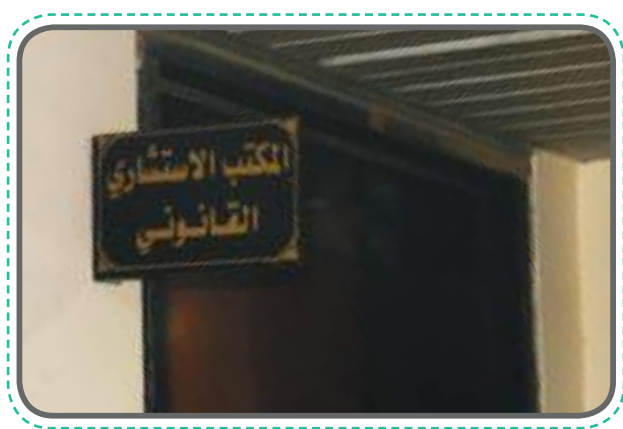
**Abdullah** Khamees Ali  
Nasry



Graduates of the Faculty of Law for the academic year 2015/2014/

### Bureau of Legal Advisory:

The bureau was established in 1999 with a government decree. Since its start, the bureau accomplished a big number of suits at local courthouses, investigative teams, police stations etc. in the Iraqi legislation, a lawyer who is not listed in the lawyer table cannot follow any suit in the Iraqi courthouses. The bureau above does not need such a license due to its having been established under a government decree as mentioned above.



Bureau of Legal Advisory

### The Scientific Departments at the College of Law:

The college consists of two main departments, namely they are; the Department of Public Law and the Department of Private Law. Undergraduate courses cover a range of subjects that are shared by both departments for the B.A. degree in Law. To pursue a study in one of these two specializations, i.e., public or private law is a mission assigned to postgraduate candidates. The degree con-

ferred in this case would be offered in the instance when a student succeeds to in either Public or Private Law. Through these main two departments, the college covers the following areas of legal knowledge:

1. General principles of private laws in the department of Public Law.
2. Juridical applications related to public laws, admin law and government employee discipline.
3. Studying Iraqi Constitution to be compared with other constitutions.
4. Analyzing the scientific knowledge that accompanies Criminal laws such as psychology, forensic medicine etc.
5. Making sure that laws must not contradict the current constitution.
6. Supporting scientific research by teaching its principles and procedures to the students of law at the college departments.
7. Providing the postgraduates with comparative laws to study their relations and counter relations.



#### 1. Department of Public Law

Faculty Members of the department for the academic year 2014- 2015

Sq.	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Ali Hadi Atiya	Prof.	Public Law	Financial Law	PhD.
2	Ghazi Faisal Mahdi	Prof.	Public Law	Admin Law	PhD.

3	Haider Adham Abdulhadi	Prof.	Public Law	Int. Law	.PhD
4	Maha Mohammed Ayoob	Asst. Prof.	Public Law	Int. Law	.PhD
5	Ammar Tarique Abdul-Aziz	.Asst. Prof	Public Law	Admin. Law	.PhD
6	Amal Fadhil Abid	.Asst. Prof	Public Law	Criminal Law	.PhD
7	Zainab Ahmed Awayn	.Asst. Prof	Public Law	Criminal Law	.PhD
8	Haider Talib Mohammed	.Asst. Prof	Public Law	Admin. Law	.PhD
9	Ahmed Gelan Abdullah	.Asst. Prof	Public Law	Criminal Law	.PhD
10	Maysoon Khalaf Hamad	Lecturer	Public Law	Criminal Law	PhD.
11	Salma Talal Abdul-Hameed	Lecturer	Public Law	Admin. Law	PhD.
12	Sara Khalaf Jasim	Lecturer	Public Law	Admin. Law	PhD.
13	Ahmed Abdulrazzaq Hadhum	Lecturer	Public Law	Int. Law	PhD.
14	Rana Mohammed Radhi	Lecturer	Public Law	Admin. Law	PhD.
15	Rana Salam Amanah	Lecturer	Public Law	Int. Law	.PhD
16	Ahmed Saddam Iydaam	.Asst.Inst	Political Science	Political Systems	.PhD
17	Ayat Salman Shuhayeb	Asst.Inst.	Public Law	Constitutional Law	.PhD
18	Saja Mohammed Abbas	.Asst.Inst	Public Law	Admin. Law	.PhD
19	Salwan Jabir Hashim	.Asst.Inst	Public Law	Int. Law	.M.A
20	Shayma Madloul Abbas	.Asst.Inst	Public Law	Admin. Law	.M.A
22	Abdul Jabbar Dhahi	Lecturer	Public Law	Criminal Law	.M.A
23	Zainab Sharssf Ni>ma	.Asst.Inst	Public Law	Constitutional Law	.M.A
24	Alya> Taha Mahmood	.Asst.Inst	Public Law	Criminal Law	.M.A
25	Ahmed Majeed Abdullah	.Asst.Inst	Political science	Political Systems	.M.A
26	Fadheela Abbas Talib	Lecturer	Public Law	Financial Law	M.A.

## 2. Department of Private Law :

Faculty Members of the department for the academic year 2015- 2015

Sq.	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Salam Mun>im Mashal	.Asst. Prof	Private Law	Civil Law	PhD.
2	Ali Ghassan Ahmed	.Asst. Prof	Private Law	Civil Law	PhD.
3	Akram Fadhil Saeed	.Asst. Prof	Private Law	Commercial Law	.PhD

4	Zaman Ghazi Ja'far	.Asst. Prof	Private Law	Commercial Law	.PhD
5	Sana' Mohammed Sadkhan	Lecturer	Public Law	Financial. Law	.PhD
6	Zeena HussienAlwan	Lecturer	Fundamental Law	Financial Law	.M.A
7	Haider Mahdi Nazzal	.Asst. Inst	Private Law	Commercial Law	.M.A
8	Mohammed Nazar	.Asst. Inst	Computer Science	Information security	.M.A
9	Areej Hameed Abbas	.Asst. Inst	Computer Engineering	Network Engineering	.M.A
10	Hadeel Mohammed Hassan	.Asst. Inst	Private Law	Fundamental Law	.M.A
11	Khadhum Hussein Ali	.Asst. Inst	English Language Philology	English Literature	.M.A

## Curricula of public law and private law sections :

First year first semester					First year second semester				
Code	SUB	HrsPerWeek		Units	Code	SUB	Hrs Per Week		Units
		Th.	App.				Th.	App.	
	Constitutional Law	3	0	3		Constitutional Law	3	0	3
	History of Law	2	0	2		Theory of Rights	3	0	3
	Islamic Sharia	2	0	2		Islamic Sharia	2	0	2
	Introduction to Law	3	0	3		History of Law	3	0	3
	English Language	2	0	2		Penalty	2	0	2
	Origins of Legal Research	1	0	1		Human Rights	1	0	1
	Economics	2	0	2		English Language	2	0	2
	Computer	1	1	2		Physical Education	2	0	2
<b>Total</b>		<b>16</b>	<b>1</b>	<b>17</b>	<b>Total</b>		<b>18</b>	<b>0</b>	<b>18</b>

## Approved Electives( a Student has to choose one only):

First year first semester		First year second semester	
SUB	Units	SUB	Units
Sociological Law	2	Independent Institutions	2
Political Ideology	2	Political Economics	2
Legal Formation	2	Criminal Psychology	2
LegalApplications(Constitutional Law)	1	Applied Research	1



Second year first semester					Second year second semester				
Code	SUB	HrsPerWeek		Units	Code	SUB	Hrs Per Week		Units
		Th.	App.				Th.	App.	
	Civil Law	3	0	3		Civil Law	3	0	3
	Admin. Law	3	0	3		Admin Law	3	0	3
	Personal Status Law	2	0	2		Personal Status Law	2	0	2
	Criminal Law	3	0	3		Criminal Law	3	0	3
	Financial Legislation	2	0	2		Taxation and Financial Legislation	2	0	2
	Political Systems	2	0	2		Political Systems	2	0	2
	Constitutional Law in English	2	0	2		Constitutional Law in English	2	0	2
	Arabic Language	1	0	1					
<b>Total</b>		<b>18</b>	<b>0</b>	<b>18</b>	<b>Total</b>		<b>17</b>	<b>0</b>	<b>17</b>

Approved Electives (a Student has to choose one only):

Second year first semester		Second year second semester	
SUB	Units	SUB	Units
Diplomacy	2	Money Market	2
Environment Law	2	Local Administration and Government	2
E-Government	2	Anti-Corruption Legislation	2
Legal Applications (Personal Status Law)	1	Legal Applications( Criminal Law)	1

Third year first semester					Third year second semester				
Code	SUB	HrsPerWeek		Units	Code	SUB	Hrs Per Week		Units
		Th.	App.				Th.	App.	
	International Law	3	0	3		Public Int. Law	3	0	3
	Private Penalty	3	0	3		Private Penalty	3	0	3
	Contracts	3	0	3		Contracts	3	0	3
	Commercial Law	3	0	3		Commercial Law	3	0	3
	Admin. Procedure	3	0	3		Will and Inheritance	3	0	3
	Labor and Social Security Law	3	0	3		Humanitarian Int. Law	3	0	3
	International Law in English	2	0	2		Criminal Law in English	2	0	2

					Arabic Language	1	0	1
					Admin. Procedure	3	0	3
<b>Total</b>		<b>20</b>	<b>0</b>	<b>20</b>	<b>Total</b>	<b>23</b>	<b>0</b>	<b>23</b>

Approved Electives (a Student has to choose one only):

Third year first semester			Third year second semester		
SUB	Units		SUB	Units	
And maritime law	2		Invest mint laws	2	
Juvenile Welfare Act	2		Intellectual property laws	2	
Media and publishing rules	2		Informatics crimes	2	
(Judicial application (Criminal law	1		(Judicial application(international law	1	

Fourth year first semester					Fourth year second semester				
Code	SUB	HrsPerWeek		Units	Code	SUB	Hrs Per Week		Units
		Th.	App.				Th.	App.	
	Rights in Rem	3	0	3		Rights in Rem	3	0	3
	Private Int. Law	3	0	3		Private Int. Law	3	0	3
	Civil Procedure	3	0	3		Civil Procedure	3	0	3
	Commercial Papers	2	0	2		Commercial papers	2	0	2
	Penal Procedure	2	0	2		Penal Procedure	2	0	2
	Criminal investigation Procedure	2	0	2		Islamic Philology Procedure	2	0	2
	Executive Law	1	0	1		Graduation Re-search	1	0	1
	Islamic Philology Pro-cedure	2	0	2		Int. Organizations	2	0	2
	Graduation Research	1	0	1				0	
	Int. Organizations	2	0	2				0	
<b>Total</b>		<b>21</b>	<b>0</b>	<b>21</b>	<b>Total</b>		<b>18</b>	<b>0</b>	<b>18</b>

Approved Electives (a Student has to choose one only):

Third year first semester			Third year second semester		
SUB	Units		SUB	Units	
Philosophy of law	2		Forensic medicine	2	

Judicial laws	2	International relations	2
Civil service laws	2	International Arbitration	2
(Judicial application(civil law	1	Judicial application(the general theory (of law	1

### Postgraduate Studies:

Postgraduate programs were offered of Public and Private Law offer M.A and since 1992 in the College. Both departments PhD. programs for interested candidates.

#### Curriculum for the M.A. degree in Public Law:

Subject	Hours	Units
Criminal Law	2	2
Admin Law Seminar	1	1
Int. Law	2	2
Constitutional Law	2	2
Admin. Law	2	2
Public Finance	2	2
English Language	1	2
Criminal law Seminar	1	1

Course Units	26
Thesis Units	10
Total Units	30

#### Curriculum for the M.A. degree in Private Law:

Subject	Hours	Units
PrivateInt. Law	2	2
Commercial Law	2	2
Islamic Sharia	2	2
Civil Law	2	2
Civil Procedure	2	2
Civil Law Seminar	1	1
Commercial Law Seminar	1	1
Civil Law in English Language	1	1

Course Units	26
Thesis Units	10
Total Units	30

## Curriculum for the M.A. degree in Private Law:

Subject	Hours	Units
Criminal Law	3	2
Admin. Law Seminar	1	2
Int. Law	3	2
Constitutional Law	3	2
Admin. Law	3	2
Public Finance	3	2
English Language	1	1
Criminal Procedure Seminar	1	2

Course Units	39
Thesis Units	36
Total Units	74

## Postgraduates for the academic year 2015- 2016

Departments	PhD			M.A.			Diploma		
	m	f	total	m	f	total	m	f	total
Public Law	1	0	1	20	11	31	0	0	0
Private Law	0	0	0	0	1	1	0	0	0
Totals	1	0	1	20	12	32	0	0	0

## Virtual Court:

It is a learning method utilizing a practical exercise on trials. The subject of the event

was divorce lawsuit on the basis of misunderstanding and the ongoing conflict between the husband and wife.



Virtual Court



### Summer Training:

It is compulsory that junior students of the College of Law should spend one month of their summer vacation at the courthouses to acquire needed experience for their future

profession. This is a graduation requirement for the fulfillment of the B.A degree in Law. 165 students (male and female) joined this summer's activity in the academic year 2015- 2016.



Workshop titled "Law protection against hidden cameras/filming", done by Nawres RasheedTaha.



Virtual Court





There were many achievements in the scientific and cultural side, where the number of thesis and dissertation that have been discussed during this year was eighteen, and efforts are continuing for feeding the scientific institution continues. We are proud to be the people of the first laws began.

### Maintenance and Refurbishing Activities:



### Community Service:



Jurists on the front lines



Blood donation for armed forces



No to sectarianism workshop

## Writing Books

The general theory in the interpretation of the Constitution  
And trends of the Federal Supreme Court



Methods to resolve conflicts  
In the federal state  
Readings in light of the Constitution of Iraq in 2005



Constitutional Law



In-depth studies in constitutional custom



Law Studies



Public administration



The participation of the students of the College of Law in International Arbitration Competition:

A group of the College of Law students

participated in 2015 in the competition on International Arbitration held in Amman/Jordan. The group scored second among other Arab participants.





# COLLEGE OF MEDICINE



## About College of Medicine

The college was established in 1988. Its main goal is to provide medical graduate with high scientific standards and to contribute later in scientific research. The study in the college comprise the following: Anatomy, Medicine, Family and Community Medicine, Pediatrics, Pathology and Forensic Medicine, Surgery, Gynecology and Obstetric, Pharmacology, Microbiology, Chemistry and Biochemistry. The college grants Bachelor, Higher Diploma, Master, and Doctoral degrees.





## About the College

The college of medicine was established in 1987 to seriously contribute to the medical scientific research and to prepare high- level graduates in the field of medicine. The College focuses on the development of teaching methods and curricula through horizontal integration of subjects. Ever since it was founded, the college of medicine focuses on scientific research and academic knowledge of this field as two leading university activities. The college of medicine participated in the evaluation exams for other Iraqi Colleges of Medicine in cooperation with a team of experts from outside the country and under the supervision of the Ministry of Higher Education and Scientific Research. The college was number one in the evaluation of 1989 carried by the College of Medicine- Univer-

sity of Dublin and also the evaluation carried by the Iraqi Ministry of Health in 1997. In the academic year 1995-1996, the certificate of medicine conferred at Al-Nahrain University was recognized officially by the British, the Canadian and the Australian Medical Councils. Besides, the college was listed as part of the WHO official list of recognized colleges.

The college paid a great attention for the scientific research by calling for and holding specialized conferences and seminars in cooperation with various institutions and scientific associations. The college of medicine worked hard to collaborate with other universities and medical colleges inside and outside Iraq as well as with the Iraqi Ministry of Health in the areas of coordination and those areas of developing medical education programs. It also encouraged delegations of teaching staff members as a cornerstone in their development.



Prof. Dr. Rafi Muhammed  
Khalil Al-Rawi

1997-2001



Prof. Dr. Mahmoud Hayawi  
Hamash

1987-1997



Prof. Dr. Riad Abdul Sattar  
Fadhil Al-Ani

2002 – 2003



Prof. Dr. Tariq Ibrahim Al-  
Jubouri

2003-2005



Prof. Dr. Hikmat Abdul-  
Rasool Hatim

2005 2009



Prof. Dr. Faiza Aftan  
Zghaier Al-Rawi

2009-2010



Prof. Dr. Adnan Abdul Kha-  
shan Anuz

2010-2013



Prof. Dr. Alaa Ghani Hus-  
sein

2013-CURRENT



## Council of the College of Medicine 2015-2016

No.	Name	position	Scientific Department	Aca- demic Rank	General Specializa- tion	Specific Special- ization	de- gree	Date
1	Alaa Ghani Hussein	Dean of the Col- lege of Medicine	Pathology and Forensic Medicine	Prof.	Medicine and General Surgery	Histopa- thology	Board	01/23/ 2013
2	Farqad Badr Hamdan	Vice Dean for Academic Af- fairs	Physiology and medical physics	Prof.	Medicine and General Surgery	Neuro- physiol- ogy	PhD	02/24/ 2013
3	Hussain Salih Hasan	Vice Dean for Administrative Affairs	Physiology and medical physics	Asst. Prof.	Sciences	Medical physics	PhD	10/2/2016
4	Shatha Hus- sain Ali	Head, depart- ment of Pediat- rics	Pediatrics	Prof.	Medicine and General Surgery	Nephrol- ogy	PhD	32/12/2014
5	Subuh Salim Abdul-Lateef	Head, depart- ment of pathol- ogy & forensic medicine	Pathology and forensic medicine	Prof.	Medicine and General Surgery	Pathology hematol- ogy	PhD	3/9/2015
6	Waseem Fad- hil Moham- med	Head, depart- ment of internal medicine	Internal medicine	Prof.	Medicine and General Surgery	Hematol- ogy	Board	2/9/2015
7	Atheer Jawad Abdul Amir	Head, depart- ment of Family and Community Medicine	Department of family and commu- nity medi- cine	Asst. Prof.	Medicine and General Surgery	The health of mother and child	Board	23/05/ 2010
8	Omar Farouk Abdul- Ra- sheed	Head, depart- ment of Chemis- try And Bio- chemistry	Chemistry and Bio- chemistry	Asst. Prof.	Chemistry Science	Clinical Chemis- try	PhD	06/03/ 2014
9	Haider Sabah Kadhum	Head, depart- ment of microbi- ology	microbiol- ogy	Asst. Prof.	Medicine and General Surgery	Virology	PhD	2/04/ 2013
10	Yasir Mo- hammed Hasan	Head, depart- ment of surgery	Surgery	Asst. Prof.	Medicine and General Surgery	Neurosurg- ery	Board	01/30/ 2013
11	Ahmad Rahmah Ali	Head, depart- ment of pharma- cology	pharmacol- ogy	Asst. prof.	Medicine and General Surgery	pharma- cology	PhD	29/1/2015
12	Muthanna Abdul-Ameer Al-Kaabi	Head, depart- ment of Anatomy	Anatomy	Asst. Prof.	Medicine and General Surgery	Anatomy	PhD	1/9/2015
13	Ali Fuad Hadi	Head, depart- ment of the Physiology and medical physics	Physiology	Asst. Prof.	Medicine and General Surgery	Physiol- ogy of reproduc- tion	PhD	02/24/ 2013

14	Hala Abdul-Qadir Abdul-Lateef	Head, department of gynecology and obstetrics	Gynecology and obstetrics	Asst. Prof	Medicine General Surgery	Gynecology and obstetrics	Board	02/21/2013
15	Ihssan Subhi Nema	Lecturer representative	Surgery	Asst. Prof.	Medicine and General Surgery	Neurosurgery	Board	1/9/2015

### Council of the College of Medicine 2015-2016



#### Vision:

The college is to be an advanced scientific centre. It seeks to ensure the provision of high quality scientific personnel that have the ability for creativity and innovation to make the college a tool to reach a state of scientific integration, and a mean to develop the life-style in the society through reaching the international level in the medical education field supported by solid scientific research in a way that serves medical and developmental society issues, and to compete with other medical college (local, regional and international) in the field of provision of the best medical education utilities and seeking to supplement the process march in this country.

#### The mission:

To fulfill the need of the country for qualified scientific and medical personnel to be suitable future leaders in scientific and medical fields through the preparation of appro-

priate scientific environment needed for the skilled and scientific growth. Moreover, it is to make highly qualified academic programs that can cope with current era development, and also through exploitation of the scientific research to serve the issues of the society in terms of technical and health knowledge. The college seeks to gain its financial, administrative and scientific independence.

#### The message:

The college aims to create a model institute to achieve a high level of scientific research as well as to create competent physicians and scientists. These physicians and scientists are to obtain the scientific and medical backgrounds and clinical research skills that enable them to exercise their jobs safely and effectively. The college human output must also be able to cope with the knowledge and technical progress in the medical fields.



### Top Three Students of the College of Medicine at the academic Year 2015- 2016

No	Name	Average
1	Zainab Abdul Hameed Mudaher	78.724
2	Safa Audai Hatem	78.609
3	Hadeer Maitham Jasim	78.079

### Top Students at the college for the academic year 2014/2015

Zainab Abdul Ha-  
meed Mudaher

Safa Audai Hatem

Hadeer Maitham  
Jasim

Graduates of the College of Medicine for the academic year 2015/2016

### Medical research unit

This unit is responsible for scientific research run by a group of teaching staff members and researchers. It is supervised by the dean of the college to achieve the following tasks:

1. Conducting research.
2. Teaching and training graduate and post graduate students and supervising theses and dissertations.
3. Providing scientific and technical advice.
4. Participation in scientific conferences and seminars held inside and outside Iraq. This unit also works to activate scientific research in it and defines its scientific achievements.
5. Contribute to the development of administrative and technical staffs programs through continuing education theory and practice sessions in the various scientific disciplines

to develop their abilities and efficiency of their performance.



Laboratory and Medical Research Unit

### Continuing Education Unit

Introducing scientific and medical seminars, workshops, administrative and legal courses are of the most important activities of the unit. In addition, the unit provides



courses in the use of computers and the use of the internet and postal correspondence as well as maintenance courses and engineering workshops.

### Iraqi Journal of Medical Sciences

Iraqi Journal of Medical Sciences is a referred scientific journal issued by the College of Medicine / University of Al-Nahrain. It is a quarterly magazine of medical competence. The first issue was in 2000. The journal publishes scientific medical articles with a high level of quality written in English language. It publishes research dealing with the areas of academic research and clinical medicine focusing on topics relevant to our country and the Middle East. The journal accepts international participations.

Iraqi Journal of Medical Sciences publishes original articles, and medical conditions report, letters to editors in all scientific and medical fields. It has editorials too. The journal issues number reached 46 by now.



Iraqi Journal of Medical Sciences

### College Library

**1. Technical Services Section:** This section includes the two divisions of books and periodicals which provided the library with books, periodicals, reports, letters, dissertations and other documents that are organized, indexed and categorized according

to (WINISIS) index card. The library allows book borrowing and issues the bibliographic bulletin for new books. The library contains (36630) medical books and (2099) medical journals.

**2. Information Department:** It includes the automated research division on the basis of (Medline) for medical topics and contains extracts of published research papers since 1966. The other division is that of CDs which has about 1085 CDs for various medical topics, books, periodicals and other documents.



College of medicine library

### Arabic language Unit, democracy and human rights Unit

This unit teaches Arabic language for first grade students and the development of the spirit of democracy human rights among students.

### Language English Unit

This unit teaches English for undergraduate as well as postgraduate students by giving lectures in addition to the use of language laboratory to enable the students to speak English fluently. The unit also translates official correspondence and the college news issued at its online web page.

### Computer Unit

This unit teaches the use of computer for

undergraduate as well as postgraduate students to strengthen the students' skills in using computer as a tool for advanced learning.

### Physical Activity Unit

This unit is introduced to create the atmosphere of sport, art and culture for college students to be a magnet for students on the one hand and to provide opportunities to meet and competition the areas of sport, artistic and cultural skills. The unit includes outdoor sport fields and indoor halls, a painting hall, a chess club and a photography studio. The unit organizes indoor sport meetings among various college students, university students and other universities as well.

## Scientific departments

### 1- Anatomy

Anatomy department was established in 1988 and it includes sections of anatomy, histology and embryology, biology and the unit of electronic microscope.

The department teaches first and second year medical students and the second and third year biomedical engineering students. Besides, it also provides teaching for postgraduate students.

### 2- Chemistry and biochemistry

Chemistry and biochemistry department consists of medical chemistry and biochemistry. It provides and displays the most important foundations for understanding the relationship of the functions of the body chemistry that occur within the body during normal and pathological conditions. The department aims at creating graduate doctors of medicine who are able to transform the quality of the environment in which they work. The students studying at this department are the first and the second year un-

dergraduate in addition to the postgraduate students.

### 3- Physiology and medical physics

The department was established in 1989 to cover an important area in the field of basic medical science. The department is responsible for teaching medical physics for first year undergraduate and radiology postgraduate candidates. It also teaches theoretical & practical medical physiology for first and second year undergraduates and postgraduate students including clinical neurophysiology Iraqi board candidates. It also supervises and evaluates scientific research contributing to the basic medical sciences field.

### 4- Microbiology

Microbiology department was established in 1989 to teach microbiology to undergraduate as well as postgraduate students. It includes the following specializations, bacteriology, virology, immunology, parasitology, and medical mycology

### 5- Pharmacology

The department covers a range of activities beside its participation in delivering teaching to graduate and postgraduate students. It for instance calls for and holds various scientific symposia and also offers advice for several community institutions.

### 6- Pathology and Forensic Medicine

Pathology department was established in 1989 to teach a course of pathology for juniors and another course in clinical pathology for fifth year students. It also teaches histopathology, cytology or cellular screening and hematology for postgraduate students. The department consists of educational laboratories for students and a museum which

contains several models. The department has the forensic medicine section which teaches forensic medicine for fourth year undergraduate besides a course in medical ethics for fifth year students. The section has three lecture halls in addition to a special hall for autopsy, two laboratories, and a museum.

### 7- Community and Family Medicine

The department is interested in preparing qualified doctors of medicine to provide primary health care, family health services and to work in the epidemiological investigation and control of communicable diseases, nutrition, occupational health and the environment.

### 8- Internal Medicine

The internal medicine department teaches juniors, seniors, third, fourth, fifth and sixth year students through both lecturing and practical clinical training in the teaching hospitals. It also participates in conducting researches related to on modern medical science in cooperation with other Departments. The department supervises postgraduate students too.

### 9- Surgery

The surgery department teaches juniors, seniors, third, fourth, fifth and sixth year students to enable them to view and evaluate the most important surgical symptoms, diagnosing them and devising the best surgical treatment which must guarantee the patient's recovery and the elimination of any later complications. The branch as such aims at addressing the most important surgical problems and injuries that a patient may have to go through. The surgery department includes the following sections:

- Cardiothoracic surgery.

- Neurosurgery
- Radiology
- General surgery.
- Urology.
- Orthopedic surgery.
- Anesthesiology.
- Ophthalmology.
- Otolaryngology.

### 10- Gynecology and Obstetrics

The gynecology and obstetrics department teaches seniors, fourth, fifth and sixth year students through both lecturing and clinical practice at Al-Imamain Al-Kadhimiyan Medical City to prepare a high level generation of medical doctors. The branch staff participates also in advisory clinics of gynecology and obstetrics and conducts operations for patients at the gynecology and obstetrics hospital.

### 11- Pediatrics

Pediatrics department was founded with the establishment of the college of Medicine in 1987. It is considered one of the main department in the college. The branch teaches seniors, fourth, fifth and sixth year students. It offered vocational diploma from 1991 until 2001. Besides, the department offers teaching for postgraduate students (Iraqi and Arab Council students of medicine within Al-Nahrain Medicine Centre.

## Teaching Staffs for the academic year 2015-2016:

### Microbiology

No	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Haider Sabah Kadhim	Asst. Prof.	Medicine & General Surgery	Virology	PhD
2	Nidhal Abdul-Mohaimen Mohammed	Professor	Biology	Immunology	PhD
3	Azhar Abdul-Fatah Ibrahim	Prof.	Biology	Mycology	PhD
4	Ahmed Abdul-Hassan Abbas	Asst. Prof.	Veterinary Medicine	Immunology	PhD
5	Ahmed Sahib Abdulamir	Asst. Prof.	Medicine & General Surgery	Molecular Biology	PhD
	Mayssa Abdulrazzaq Dhahi	Asst. Prof.	Biology	Bio- technology	PhD
6	Huda Dhahir Hadhal	Asst. Prof.	Biology	Parasitology	PhD
7	Haider Faisal Ghazi	Lecturer	Veterinary Medicine	Immunology	PhD
8	Arwa Mujahid Abdullah	Lecturer	Biology	Virology	PhD
9	Thanaa Rasheed Abdulrahman	Lecturer	Veterinary Medicine	Bacteriology	PhD
10	Asmaa Baqir Salim	Lecturer	Medicine & General Surgery	Microbiology & Virology	PhD
11	Fadi Fouad Yaqoob	Lecturer	Medicine & General Surgery	Microbiology	PhD
12	Jabbar Salman Hassan	Lecturer	Medical Technology	Mycology	PhD
13	Haleemah Salman Salih	Asst. lecturer	Biology	Microbiology	MSc
14	Quds Wamedh Jamal	Asst. lecturer	Biology	Microbiology	MSc
15	Worood Abdulsalam Kadhim	Asst. lecturer	Veterinary medicine	Immunology	MSc
16	Mohammed Razzaq Ali	Asst. lecturer	Medicine & General Surgery	Microbiology	MSc



## Internal Medicine

SQ	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Waseem Fadil Mohammed	Professor	& Medicine General Surgery	Hematology	Board
2	Hashim Mahdi Hashim	Professor	& Medicine General Surgery	Respiratory Diseases	FRCP
2	Nadheer Ahmed Matloob	Professor	& Medicine General Surgery	Dermatology	Board
3	Arif Sami Malik	Professor	& Medicine General Surgery	Nephrology	Board
4	Hasan Azeez Hasan	Professor	& Medicine General Surgery	Neurology	Board
5	Jawad Kadhém Manuti	Asst. Prof.	& Medicine General Surgery	Nephrology	Board
6	Uday Khalid Abdul-Jabbar	Asst. Prof.	& Medicine General Surgery	Psychiatry	Board
7	Mahmood Shakir Khudhair	Asst. Prof.	& Medicine General Surgery	Endocrinology	Board
8	Fadhil Abdulla Abdul-Ridha	Lecturer	& Medicine General Surgery	Gastroenterology	Board
10	Iqbal Ghalib Farhood	Lecturer	& Medicine General Surgery	Dermatology	Board
11	Gelal Abid Ali Hamoodi	Lecturer	& Medicine General Surgery	Internal medicine	Board
12	Hasan Nasir Mohsen	Lecturer	& Medicine General Surgery	Dermatology	Board
13	Haidar Abdul-Hameed Ra-sheed	Lecturer	& Medicine General Surgery	Respiratory Disease	Board
14	Rafid Bashir Hashim	Lecturer	& Medicine General Surgery	Cardiology	Board
15	Abdul-Kareem Kadhim Jaber	Lecturer	& Medicine General Surgery	Neurology	Board
16	Ali Samir Musa	Lecturer	& Medicine General Surgery	Internal Medicine	Board
17	Mkhola Hussein Kasim	Lecturer	& Medicine General Surgery	Psychiatry	Board
18	Moueyd Bashir Hamde	Lecturer	& Medicine General Surgery	Cardiology	Board

### Family and Community Medicine

No	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Atheer Jawad Abdul-Ameer	Asst. Prof	& Medicine General Surgery	Mother and Child Health	Board
2	Maysaloun Muhammad Abdulla	Asst. Prof	& Medicine General Surgery	Mother and Child Health	Board
3	Ali Abd Ali Sahib	Asst. Prof	& Medicine General Surgery	Occupational and Environmental Medicine	Board
4	Sabah Ghani Qaddoori	Lecturer	& Medicine General Surgery	Medical Rehabilitation	PhD
5	Nibras Alaa Hussain	Lecturer	& Medicine General Surgery		
6	Berq Jafer Hadi	Lecturer	& Medicine General Surgery		

### Physiology and Medical Physics

No	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Ali Fuad Hadi	Asst. Prof.	Medicine & General surgery	Reproductive Physiology	PhD
2	Farqad Bader Hamdan	Professor	Medicine & General surgery	Neurophysiology	PhD
3	Abbas Fadhil Abdul-Wahab	Asst. Prof.	Medicine & General surgery	Cardiophysiology	PhD
4	Hasna Obied Abedali	Asst. Prof.	Medicine & General surgery	Blood physiology	PhD
5	Siham Sabah Abdullah	Asst. Prof.	Physics	Medical physics	PhD
6	Hussain Saleh Hasan	Asst. Prof.	Physics	Lenses	PhD
7	Majid Hameed Ahmed	Lecturer	Medicine & General surgery	Endocrine physiology	PhD
8	Zeinab Hasan Hashim	Lecturer	Medicine & General Surgery	Endocrine physiology	PhD
9	Hussein Ghani Qaddoori	Lecturer	Medicine & General Surgery	Neurophysiology	PhD
10	May Fedheel Estephani	Lecturer	Physics	Medical Physics	MSc
11	Ibrahim Abdullah Mahmoud	Asst. lecturer	Medicine & General Surgery	Physiology	MSc
12	Jenan Hussein Taha	Asst. Prof.	Science	Medical Physics	MSc
13	Rowaida Abdul-Ameer Mustaff	Asst. lecturer	Physics	Medical Physics	MSc

## Anatomy

.No	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Muthanna Abdul-Ameer Latif	Asst. Prof.	& Medicine General Surgery	Human Anatomy	PhD
2	Anam Rasheed Abdul-Razak	Professor	& Medicine General Surgery	Applied Embryology	PhD
3	May Fadhil Majid	Professor	& Medicine General Surgery	Histology	PhD
4	Haider Abdul-Rasool Jaafar	Professor	& Medicine General Surgery	Human anatomy	PhD
5	Hayder Jawad Kadhim	Asst. Prof.	& Medicine General Surgery	Embryology	PhD
6	Mohammed Oda Selman	Asst. Prof	& Medicine General Surgery	Clinical anatomy	Board
7	Hayder Hammadi Abdul-Ameer	Asst. Prof.	& Medicine General Surgery	Clinical anatomy	Board
8	Thaer Mahmoud Farhan	Asst. Prof.	& Medicine General Surgery	Clinical anatomy	Board
7	Elham Abood Mohammed Ali	Asst. Prof.	Biology	Molecular Biology	PhD
8	Taha Shawy Murad	Asst. Prof.	Biology	Immunological Physiology	PhD
9	Huda Rasheed Kareem	Lecturer	& Medicine General Surgery	Histology	PhD
10	Mazen Kamel Hamid	Lecturer	Physics	The physics of Materials	PhD
11	Hussein Abbas Jarullah	Lecture	& Medicine General Surgery	Anatomy	PhD
12	Sarmad Emad Mohammed	Asst. lecturer	& Medicine General Surgery	Anatomy	MSc
14	Ali Hussein Ali	Lecturer	& Medicine General Surgery	Anatomy	MSc
15	Ali Hani Abed	Asst. lecture	Veterinary medicine	Anatomy	MSc
16	Maysoon Abdul-Ameer Ahmed	Lecturer	Biology	Cytology	MSc
17	Shaza Mahmoud Hassan	Lecturer	Biology	Biology	MSc
18	Rusel Hameed Hasan	Asst. lecturer	Biology	Zoology	MSc
19	Lamyaa Hadi Mohammed	Asst. lecture	Biology	Biology	MSc

## Surgery

.No	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Yasir Mohammed Hasan	Asst. Prof.	General Medicine & Surgery	Neurosurgery	Board
2	Abd Ali Muhsin Shaya	Prof.	Medicine & General Surgery	Orthopedics	Board
3	Mohammed Abd Kadhim	Prof.	Medicine & General Surgery	Radiology	Board
4	Abdul-Ameer Jasim Mohammed	Prof.	Medicine & General Surgery	Neurosurgery	Board
5	Naser Edan Naser	Prof.	General Medicine & Surgery	Otolaryngology	Board
6	Taqi Saadoon Atiyah	Asst. Prof.	General Medicine & Surgery	General Surgery	Board
7	Wasan Ismail Majeed	Asst. Prof	General Medicine & Surgery	Radiology	Board
8	Anees Khalil Nile	Asst. Prof	General Medicine & Surgery	General Surgery	Board
9	Ihsan Subhi Neama	Asst. Prof	General Medicine & Surgery	Neurosurgery	Board
10	Ahmed Zubar Zain	Asst. Prof	General Medicine & Surgery	Pediatrics Surgery	Board
11	Ahmed Sabeeh Abd Ali	Asst. Prof	General Medicine & Surgery	Orthopedics	Board
12	Ahmed Abdul-Razzaq Abbood	Asst. Prof	General Medicine & Surgery	Plastic surgery	Board
13	Ahmed Majeed Rasheed	Asst. Prof	General Medicine & Surgery	Ophthalmology	Board
14	Sajid Hameed Abd	Asst. Prof	General Medicine & Surgery	General Surgery	Board
15	Ali Farooq Hussein	Asst. Prof	General Medicine & Surgery	Orthopedics	Board
16	Jaafar Mohammed Kadhom	Asst. Prof.	General Medicine & Surgery	Otolaryngology	Board
17	Qahtan Adnan Mhdi	Asst. Prof	General Medicine & Surgery	General Surgery	Board
18	Bashar Abbas Abdul-Hassan	Asst. Prof	General Medicine & Surgery	General Surgery	Board
19	Haider Abdul-Hussein Ahmed	Asst. Prof	General Medicine & Surgery	General Surgery	Board



20	Ula Mohammed Ridha	Asst. Prof	General Medicine & Surgery	Urology	Board
21	Gaith Sa'ib Mo-hammed-Ali	Lecturer	General Medicine & Surgery	General Surgery	Board
22	Zaid Abd Ali Habeeb	Lecturer	General Medicine & Surgery	Orthopedics	Board
23	Zainab Nadom Hamoodi	Lecturer	General Medicine & Surgery	Ophthalmology	Board
24	Zeena Adnan Abd El-Rassul	Lecturer	General Medicine & Surgery	Ophthalmology	Board
25	Sudad Salman Ahmed	Lecturer	General Medicine & Surgery	General Surgery	Board
26	Sameer Ahmed Mohammed	Lecturer	General Medicine & Surgery	Cardiovascular Surgery	Board
27	Alaa Kassar Salih	Lecturer	General Medicine & Surgery	Cardiovascular Surgery	Board
28	Firas Mohammed Abdulghani	Lecturer	General Medicine & Surgery	Orthopedics	Board
29	Nowfal Kamel Khir	Lecturer	General Medicine & Surgery	General Surgery	Board
30	Wasan Abdul-Rahman Khudhair	Lecturer	General Medicine & Surgery	Radiology	Board
31	Yasser Mohammad Hussein	Lecturer	General Medicine & Surgery	Urology	Board
32	Abeer Abdul-Ameer Mohammed	Lecturer	General Medicine & Surgery	Ophthalmology	Board
33	Yasir Amir Isa	Lecturer	Medicine & General Surgery	Cardiovascular Surgery	Board
34	Dhia Mohammad Mir	Lecturer	Medicine & General Surgery	General Surgery	FRCS

### Chemistry and Biochemistry

SQ	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Omar Farouq Abdul-Rasheed	Asst. Prof.	Chemistry	Clinical Chemistry	PhD
2	Najat Abdul-Razzaq Hassan	Prof.	General Medicine & Surgery	Clinical Biochemistry	PhD
3	Firyal Hassan Abdul-Jalil	Prof.	Chemistry	Chemistry	MSc

4	Istabraq Abdul-Raz- zaq Kweery	Asst. Prof.	Chemistry	Clinical Biochemistry	PhD
5	Rhya Sleman Salah Al-deen	Asst. Prof.	Chemistry	Biochemistry	PhD
6	Noor Mustafa Ali	Asst. Prof.	Chemistry	Analytical Chemistry	PhD
7	Faisal Ghazi Jassim	Asst. Prof.	General Medi- cine & Surgery	Clinical Biochemistry	PhD
8	Mohammed Imran Hamzah	Asst. Prof.	Chemistry	Clinical Biochemistry	PhD
9	Raid Jasim Moham- med	Lecturer	Chemistry	Medical Chemistry	PhD
10	Mohammed Abdul- Lateef Mohammed Ali	Lecturer	Medicine & general Surgery	Molecular Biology	PhD
11	Hassan Hussein Taha	Lecturer	Chemistry	Clinical Biochemistry	PhD
12	Shaymaa Zahrao Nida	Lecturer	Chemistry	Clinical Biochemistry	PhD
13	Wasan Taha Saadoun	Lecturer	Chemistry	Organic Chemistry	MSc
14	Zainab Abdul Wahid Naji	Asst. Instructor	Chemistry	Clinical Biochemistry	MSc
15	Zeena Abdul-Iliah Abidali	Asst. lecturer	Chemistry	Biochemistry	MSc

### Pharmacology

.No	Name	Academic Rank	General Specialization	Specific Special- ization	Degree
1	Ahmed Rahmah Ali	Asst. Prof.	& Medicine General Surgery	Pharmacology	PhD
2	Adib Ahmed Kadhum	Professor	& Medicine General Surgery	Pharmacology	PhD
3	Abdul-Kareem Hameed Abd	Asst. Prof.	Veterinary medicine	Pharmacology	PhD
4	Muayad Serbit Abboud	Lecturer	& Medicine General Surgery	Pharmacology	PhD
5	Haider Baha Sahib	Lecturer	Pharmacy	Pharmacology	PhD
6	Haitham Mahmood Kad- him	Lecturer	Pharmacy	Pharmacology	PhD
7	Shihab Abdul-Rahman Shihab	Lecturer	& Medicine General Surgery	Pharmacology	PhD

## Obstetrics and Gynecology

SQ	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Hala Abdul-Qadir Abdul-Lateef	Asst. Prof.	& Medicine General Surgery	Gynecology & obstetrics	Board
2	Liqaa Reyad Mousa	Asst. Prof.	& Medicine General Surgery	Gynecology & obstetrics	Board
3	Enas Adnan Abdul-Rasul	Asst. Prof.	& Medicine General Surgery	Gynecology & obstetrics	Board
4	Sahar Hisham Abdul-Razzaq	Lecturer	Obstetrics & Gynecology	Gynecology & obstetrics	Board
5	Sahar Hassan Mshettat	Lecturer	& Medicine General Surgery	Gynecology & obstetrics	Board

## Pathology and Forensic Medicine

.No	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Subuh Salim Abdul-Lateef	Prof.	& Medicine General Surgery	Hematology	Board
2	Hussam Hassun Ali	Prof	& Medicine General Surgery	Cytology	Board
3	Alaa Ghani Hussein	Prof.	& Medicine General Surgery	Histopathology	Board
4	Raad Jaber Musa	Prof.	& Medicine General Surgery	Hematology	Board
5	Ban Abbas Abdul-Majeed	Prof.	& Medicine General Surgery	Molecular & Histopathology	PhD
6	Muataz Abdul-Majeed Abdul-Azeez	Prof.	& Medicine General Surgery	Forensic Medicine	Board
7	Ban Jumaah Qasim	Asst. Prof.	& Medicine General Surgery	Histopathology	PhD
8	Saad Khadhum kareem	Asst. Prof.	& Medicine General Surgery	Forensic Medicine	Board
9	Bassam Mohammed Hameed	Lecturer	& Medicine General Surgery	Hematology	PhD
10	Hind Shaker Aboob	Lecturer r	& Medicine General Surgery	Hematology	Board

11	Fahem Mohsin Mahmood	Asst. Lecturer	Biology	Microbiology	MSc
12	Ahmed Khairallah Mahdi	Lecturer	Medicine & General Surgery	Histopathology	MSc.
13	Safaa Ibrahim Qadir	Lecturer	Chemistry	Non-organic Chemistry	MSc
14	Qais Amer Abdul-Ameer	Lecturer	Medicine & General Surgery	Hematology	MSc
15	Khalid Waleed Qasim				

### Pediatrics

.No	Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Shatha Hussain Ali	Prof.	& Medicine General Surgery	Nephrology	Board
2	Sawsan Sati Abbas	Prof.	& Medicine General Surgery	Oncology	Board
3	Abdul-Kareem Mohammad Ali	Prof.	& Medicine General Surgery	General Pediatrics	Board
4	Lamia Abdul-Kareem Hamoodi	Asst. Prof.	& Medicine General Surgery	Preterm Infants	Board
5	Hala Sameh Arif	Asst. Prof.	& Medicine General Surgery	Gastroenterology	Board
6	Areej Abdul-Abbas Mohamed	Asst. Prof.	& Medicine General Surgery	General Pediatrics	Board
7	Deia Kadam Kalaf	Asst. Prof.	& Medicine General Surgery	General Pediatrics	Board
8	Sinan Abdul- Razzaq Ibrahim	Lecturer	& Medicine General Surgery	Preterm Infants	Board

### Curriculum:

First Year/ First Semester					First Year/ Second Semester				
code	Sub	Hrs Per Week		Units	code	Sub	Hrs Per Week		Units
		Thrtl	Prtcl				Thrtl	Prctl	
ARBArb-11	Arabic Language	1	-	1	ARBArb-12	Arabic Language	1	0	1
CMRCmr-11	Computer Science	2	2	3	CHMBio-12	Biochemistry	2	3	3.5
ENGEng-11	English Language	1	2	2	CMRCmr-12	Computer Science	1	2	2



HUMHum-11	Human rights	1	0	1	ENGEEng-12	English Language	1	2	2
ANTBio-11	Medical Biology	3	3	4.5	ANTAnt-12	Human Anatomy	3	6	6
CHMMed-11	Medical Chemistry	3	3	4.5	ANTBio-12	Medical Biology	2	3	3.5
PHYPhs-11	Medical Physics	2	3	3.5	PHYPhs-12	Medical Physics	2	3	3.5
Phyphy-11	Physiology	1	-	1	Phyphy-12	Physiology	1	-	1
Total		27		20.5	Total		32		22.5

Second Year/ First Semester					Second Year/ Second Semester				
code	Sub	Hrs Per Week		Units	code	Sub	Hrs Per Week		Units
		Thctl	Prtcl				Thctl	Prtcl	
CHMBio-21	Biochemistry	3	3	4.5	CHMBio-22	Clinical chemistry	2	3	3.5
HUMDec-21	Democracy	1	0	1	ANTEmb-22	Embryology	1	2	2
ANTEmb-21	Embryology	1	2	3	ANTHis-22	Histology	2	2	3
ANTHis-21	Histology	2	2	3	ANTAnt-22	Human Anatomy	3	6	6
ANTAnt-21	Human Anatomy	3	6	6	CHMMol-22	Molecular Biology	2	0	2
Phyphy-21	physiology	3	5	6.5	PHYPhy-22	Physiology	5	3	6.5
Total		31		23	Total		31		23

Third Year /First Semester					Third Year /Second Semester				
code	Sub	Hrs Per Week		Units	code	Sub	Hrs Per Week		Units
		Thctl	Prtcl				Thctl	Prtcl	
MICBac-31	Bacteriology	2	2	3	COMCom-32	Family & Community Medicine	2	2	3
MICImm-31	Immunology	2	2	3	MEDInt-32	Internal Medicine	2	2	4
MEDInt-31	Internal Medicine	2	2	4	MICPar-32	Parasitology	2	2	3
PATPat-31	Pathology	4	3	5.5	PATPat-32	Pathology	3	3	4.5

PHRPhr-31	Pharmacology and Therapeutics	3	2	4	PHRPhr-32	Pharmacology and Therapeutics	3	2	4
					SRGGen-32	Surgery	1	4	3
					MICVir-32	Virology	2	2	3
<b>Total</b>		<b>26</b>		<b>19.5</b>	<b>Total</b>		<b>34</b>		<b>24.5</b>

Fourth Year/ First Semester					Fourth Year/ Second Semester				
code	Sub	Hrs Per Week		Units	code	Sub	Hrs Per Week		Units
		Thtcl	Prtcl				Thtcl	Prtcl	
MEDCar-41	Cardiology	2	0	2	MEDBsc-42	Behavioral sciences	1	0	1
COMCom-41	Family & Community Medicine	3	3	4.5	MEDEnd-42	Endocrinology and metabolism	2	0	2
PATFom-41	Forensic medicine	2	3	3.5	COMCom-42	Family & Community Medicine	2	3	3.5
SRGGit-41	Gastroenterology	3	0	3	PATFom-42	Forensic medicine	2	3	3.5
GYNGyn-41	Obstetrics and Gynecology	2	0	2	MEDHem-42	Hematology	2	0	2
PEDPed-41	Pediatrics	2	0	2	GYNGyn-42	Obstetrics and Gynecology	1	0	1
MEDRes-41	Respiratory	2	0	2	PEDPed-42	Pediatrics	1	0	1
					SRGUro-42	Urology	2	0	2
Total		22		19	Total		19		16

### Clinical Practice

Sub		code	Hours/course				credits
			No. of weeks	No. day/ week	Total Hours		
1	Internal Medicine	MEDGen-4C	2	8	4	64	2
2	Obstetrics and Gynecology	GYNGyn-4C	2	8	4	64	2
3	Pediatrics	PEDPed-4C	2	8	4	64	2
4	Surgery	SRGGen-4C	2	8	4	64	2
Total clinical hours						256	

Fifth Year/ First Semester					Fifth Year/ Second Semester				
code	Sub	Hrs Per Week		Units	code	Sub	Hrs Per Week		Units
		Thrtl	Prtl				Thrtl	Prtl	
MEDDer-51	Dermatology	2	2	2	MEDNeu-52	Neuro-medicine	2	0	2
SRGEnt-51	OTOLARYNGOLOGY	2	2	2	GYNGyn-52	Obstetrics and Gynecology	1	0	1
PATMet-51	Medical Ethics	1	1	1	SRGOpt-52	Ophthalmology	2	0	2
GYNGyn-51	Obstetrics and Gynecology	2	2	2	PEDPed-52	Pediatrics	1	0	1
SRGOrt-51	Orthopedic	3	3	3	SRGRad-52	Radiology	2	0	2
PEDPed-51	Pediatrics	1	1	1	MEDRhe-52	Rheumatology	1	0	1
MEDPsc-51	Psychiatry	2	2	2	SRGSub-52	Surgical Emergency	2	0	2
Total		13		13	Total		11		11

### Clinical Practice

Sub		code Daily	Hours/course				credits
			No. of weeks	No. day/ week	Total Hours		
1	Dermatology	MEDDer-5C	3	3	5	45	1.5
2	Otolaryngology	SRGEnt-5C	3	3	5	45	1.5
3	Nervous System Medicine	MEDNeu-5C	3	3	5	45	1.5
4	Ophthalmology	SRGOpt-5C	3	3	5	45	1.5
5	Orthopedic	SRGOrt-5C	3	3	5	45	1.5
6	Plastic Surgery	SRGPla-5C	3	3	5	45	1.5
7	Psychiatry Medicine	MEDPsc-5C	3	3	5	45	1.5
8	Radiology	SRGRad-5C	3	3	5	45	1.5
9	Surgical Pathology	PATSrg-5C	3	3	5	45	1.5
Total Clinical Hours						405	

### Sixth Year One Year of Clinical Practice only

code	Sub	Hours/course				credits
		Daily	No. of weeks	No. day/week	Total Hours	
MEDMed-6C	Internal Medicine	6	14	5	420	14
GYNGyn-6C	Obstetrics and Gynecology	6	8	5	240	8
PEDPed-6C	Pediatrics	6	8	5	240	8
SRGSrg-6C	Surgery	6	15	5	450	15
Total						45

### MBChB Graduates

#### The Number of MBChB graduates at the college of Medicine 2015- 2016

Male	Female
40	59

### Postgraduates

#### The Number of Postgraduates at the college of Medicine 2015- 2016

PhD		MSc		Higher Diploma	
Male	Female	Male	Female	Male	Female
11	8	9	14	7	4



By Dr. Majid Hameed / Dept. of physiology



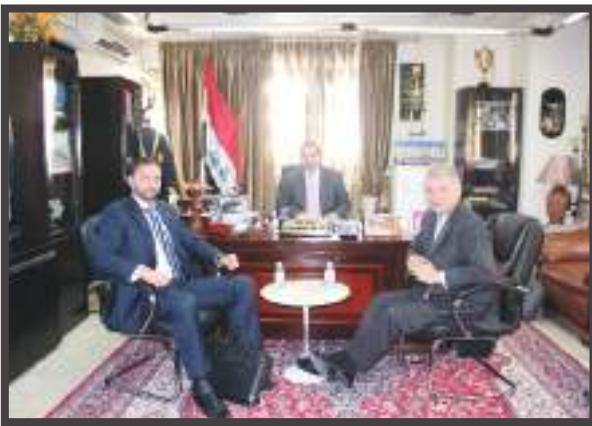
By Dr. Omar F. Abdul-Rasheed / Dept. of Chemistry and Biochemistry





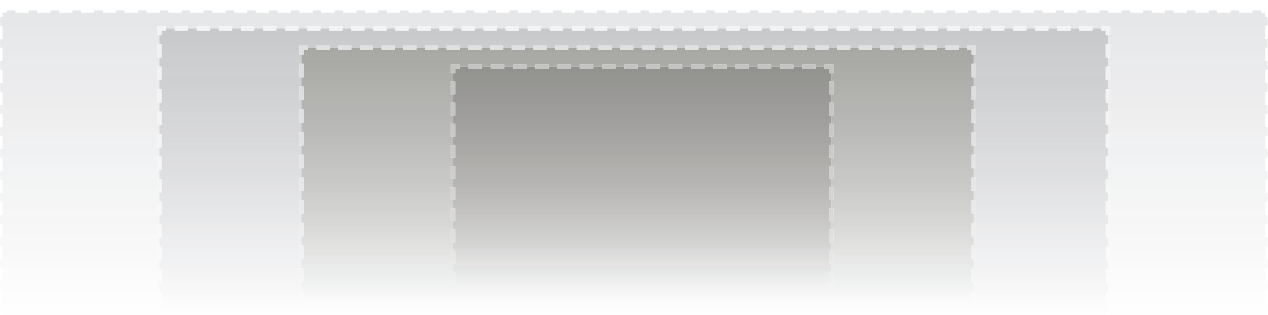
By Prof. Dr. Noor M. Ali / Dept. of Chemistry and Biochemistry

يتم تزويديكم بها بعد حفل التخرج









OCTOBER 2016

# COLLEGE OF ENGINEERING



## About College of Engineering

This college was established in 1988. It aims at preparing specialists in different engineering fields ,it includes the following departments: Civil Engineering, Electronic and Communications Engineering, Mechanical Engineering , Computer Engineering, Laser & Optoelectronic Engineering, Medical Engineering, Architecture Engineering, Chemical Engineering, Prosthetics and Orthotics Engineering. The college grants Bachelor, Master, and Doctoral degrees.





### About the College:

The College of Engineering / Al-Nahrain University is considered one of the distinguished colleges in Iraq in engineering specialties. It graduated many professional and pioneer cadres in engineering fields. The graduates have high scientific abilities and possess the necessary professional skills to obtain the best opportunities in the labor market. The college currently has nine (9) scientific departments, though when it was founded in 1988 it had only three departments; Civil Engineering, Electronic & communications, and Mechanical Engineering. In 1989, the chemical engineering department was added. It was Due to the need for Iraq for more graduates in modern engineering fields. Two new departments were founded in 1994, the Department of Computer Engineering, and the Department of Laser & Optical Electronics Engineering. In 1994, the seventh department, the Biomedical Engineering, was opened. 2001 witnessed the foundation of The Department of Architecture to provide new graduates in the field of Architecture. Finally, the Department of

Prosthetics Engineering was added in 2012 to be one of the distinguished departments in Iraq.

Each academic year, The College admits (20-25) new students in all scientific departments. This is an indicative of the extensive care provided for the students by the faculty members during their years of study. The duration of study in the college to obtain a bachelor's degree is a (4) four years in the departments of Civil Engineering, Engineering & electronic communications, Mechanical engineering, chemical engineering, Computer Engineering, Laser & Optical Electronics Engineering, and prosthetics Engineering. While the duration is five (5) years in departments of Biomedical Engineering and architecture.

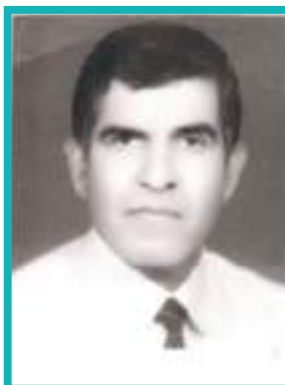
The college provides community services through continuing education for engineers in the various governmental sectors. The engineering consulting bureau provides advisory services to most of the state ministries and governmental sectors, as well as the active investments of the private sector.

### Deans of the College of Engineering



Prof. Dr. Mazen Abdul Hamid Kadhum

1988 - 1992, 1993 – 2003



Prof. Dr. Faiq Jawad Mohammad

1992 – 1993



Prof. Dr. Muhammad Abdul Razaq Al-Awsi

2003



Prof. Dr. Fawzi Mohamed Mounir Al-nemaa

2003-2006

Prof. Dr. Muhsin Jabur  
Jwajj

2006 – 2013

Prof. Dr. Jassim Abboud  
Abbas

2013 - UNTIL NOW

## The College Council for the Academic Year 2015- 2016

No.	Full Name	Academic Status	General	Specialization	Degree
1	Dr. Jassim Aboud Aldabbag	College Dean	Architecture	Architecture	Prof.
2	Dr. Musab Aied Qissab	Asst. Dean for Administrative Affairs	Civil	Structure	Assist. Prof.
3	Dr. Shaimaa Ha-meed Hussein	Asst. Dean for Scientific Affairs	Architecture	Architecture	Assist. Prof.
4	Dr. Asma Thamir Ibraheem	Head of Civil Engineering Department	Civil	Transportation	Assist. Prof.
5	Dr. Manal Jamil Al-Kindi	Head of Electronics and Communication Engineering Department	Electrical	Electronics	Assist. Prof.
6	Dr. Ali Hussein Al-Helli	Head of Mechanical Engineering Department	Mechanics	Applied Mechanics	Assist. Prof.
7	Dr. Naseer Abboud Al Haboubi	Head of Chemical Engineering Department	Chemical	Mass Transfer	Assist. Prof.
8	Dr. Mohammed A. Abdala	Head of Computer Engineering Department			Assist. Prof.
9	Dr. Bassam Ghalib Rasheed	Head of Laser and Optoelectronics Engineering Department	Physics	Nanotechnology	Assist. Prof.
10	Dr. Sadiq Jafer Hamandi	Head of Bio-Medical Engineering Department	Mechanics	Bio- Mechanics	Assist. Prof.
11	Dr. Susan abed hasan	Head of Architectural Engineering Department	Architecture	Architecture	Assist. Prof.
12	Dr. Mahmud Rasheed Ismail Al nassery	Head of Prosthetics and Orthotics Engineering Department	Mechanics	Applied Mechanics	Assist. Prof.



### Members of the college council

#### Vision:

The college seeks to achieve intellectual and professional excellence in the engineering fields according to local, regional and global standards in order to contribute in community service, achieve scientific development, and participate in the preparation of specialized engineering cadres competent with the scientific and economic developments of the labor market.

#### Mission:

The college's mission is to provide high-quality academic programs competent with the scientific and technological development according to local, regional, and global standards as well as actively participate in the development of technology and continuous improvement of the educational and research system of the college through continuous collaboration with those who are working in various engineering fields.

The mission can be illustrated through the following aspects:

**1** Advancement of scientific research.

**2** Intensify the students' scientific reasoning.

**3** Graduate pioneer, qualified, and innovative engineers.

**4** Fill a part of the shortage in the engineering faculty and staff.

**5** Serve the community through continued education and engineering advisory.



### The Names of the Three Top College's Students for the academic year 2014 /2015

#	The Name	Department	Average
1	Hamza Abbas Fadhil Ibrahim	Bio-Medical Engineering Department	86.968
2	Ahmed Aamir Salman Jwamair	Electronics and Communication Engineering Department	86.856
3	Zahraa' Sami Abdul-Amir Ali	Computer Engineering Department	86.593

### The College's Top Students for the Academic Year 2014/2015

Hamza Abbas Fadhil



Ahmed Aamir  
Salman Jwamair



Zahraa' Sami Abdul-  
Amir Ali



## The Scientific Departments

### 1. Department of Civil Engineering:

The Department of civil engineering oversee the planning, designing, construction, and provide all economic plans for public services which include facilities, buildings, bridges, dams, roads, and the processing of drinking water distribution systems. The main objective of the Department's program is to provide a complete background for those who wish to be involved in the all specialties of the civil engineering profession, including working as a faculty member and in research activities associated with civil engineering.

The Department was founded in 1988, providing undergraduate courses. In 1989, the postgraduate of a Master degree in Structural Engineering was opened. Afterwards, Master degrees in Geotechnical Engineering were offered. By 1994, the Department started provid-

ing Ph.D. degrees in Structural Engineering and Geotechnical Engineering.

1. The dept. make engineering designs and engineering construction on sites.
2. Build the spirit of teamwork and communication in graduates.
3. Build leadership and the best possible standard in graduates.
4. Provide the necessary qualifications to be eligible for competitions.
5. Expand the knowledge of graduates to fulfill their academic studies' aspirations and
6. Agree to expand knowledge of what the graduate knows so as to complete his academic studies, and adapt to the ongoing development in the field of civil engineering.
7. Qualifying graduates to be capable of serving his community locally and abroad.

## The Council of the Dept. for the Academic Year 2015-2016

#	Full Name	Academic Status	General	Specialization	Degree
1	Asma Thamir Ibraheem	Asst. prof	Civil Engineering	Roads and Airports	.Ph.D
2	Raid Ramzi Al-Omeri	Prof	Civil Engineering	Geotechnics	.Ph.D
3	Ehsan Ali Saeb	Asst. prof	Civil Engineering	Building and Construction	.Ph.D
4	Adil Abdul Ameer	Asst. prof	Civil Engineering	Structures	.Ph.D
5	Husam Kadhim Resen	Lecturer	Civil Engineering	Structures	.Ph.D
6	Ahmed Faleh Ahmed	Instructor	Civil Engineering	Structures	.Ph.D

## Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 110	University Requirements I	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2
UREQ 112	Computer Programming I	4	3	UREQ 122	Computer Programming II	4	3
MATH 110	Mathematics I	4	3	MATH 120	Mathematics II	4	3
PHYS 110	Physics	4	3	CREQ 120	Engineering Drawing II	4	2
CREQ 110	Engineering Drawing I	4	2	CIER 120	Engineering Mechanics II	4	3
CREQ 111	Workshop Technology	3	1	CIER 121	Materials Technology	4	3
CIER 110	Engineering Mechanics I	4	4	CIER 122	Engineering Geology	3	2
<b>Total</b>		<b>26</b>	<b>19</b>	<b>Total</b>		<b>26</b>	<b>19</b>

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 210	University Requirements II	1	1	UREQ 220	University Requirements III	1	1

UREQ 211	Arabic Language II	1	1	MATH 220	Mathematics IV	3	3
MATH 210	Mathematics III	4	3	CREQ 220	Information Technology	3	2
CIER 210	Mechanics of Materials I	5	4	CREQ 221	Engineering Statistics	3	2
CIER 211	Concrete Technology	5	4	CIER 220	Mechanics of Materials II	4	3
CIER 212	Fluid Mechanics I	5	4	CIER 221	Building Construction	3	3
CIER 213	Surveying I	5	3	CIER 222	Fluid Mechanics II	5	4
				CIER 223	Surveying II	5	3
<b>Total</b>		<b>26</b>	<b>20</b>	<b>Total</b>		<b>28</b>	<b>21</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CIER 310	Engineering Mathematics I	3	3	CIER 320	Engineering Mathematics II	3	3
CIER 311	Soil Mechanics I	3	3	CIER 321	Soil Mechanics II	5	4
CIER 312	Theory of Structures I	4	3	CIER 322	Theory of Structures II	4	3
CIER 313	Reinforced Concrete Design I	4	3	CIER 323	Reinforced Concrete Design II	4	3
CIER 314	Sanitary Engineering I	5	3	CIER 324	Sanitary Engineering II	5	3
CIER 315	Engineering Management & Economy	3	3	CIER 325	Construction Methods	3	2
CIER 316	Hydrology	3	2	CIER 326	Hydraulics	3	2
CIER 317	Traffic Engineering	3	2				
<b>Total</b>		<b>28</b>	<b>22</b>	<b>Total</b>		<b>27</b>	<b>20</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CREQ 410	Project	4	2	CREQ 420	Project	4	2
CIER 410	Elective I	3	3	CIER 420	Elective II	3	2
CIER 411	Foundation Engineering I	3	3	CIER 421	Foundation Engineering II	3	3
CIER 412	Transportation Engineering I	4	2	CIER 422	Transportation Engineering II	4	3

CIER 413	Reinforced Concrete Design III	4	3	CIER 423	Reinforced Concrete Design IV	4	3
CIER 414	Steel Design I	4	3	CIER 424	Steel Design II	4	3
CIER 415	Numerical Analysis	3	2	CIER 425	Computer Application in Civil Engineering	3	2
CIER 416	Quantity Surveying	3	3				
<b>Total</b>		<b>28</b>	<b>21</b>	<b>Total</b>		<b>25</b>	<b>18</b>

The Three Top Students in the Dept. for the Academic Year 2014 /2015

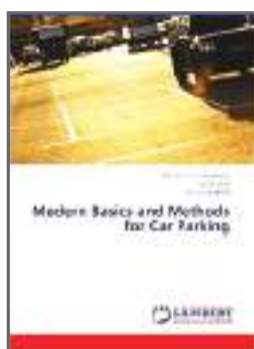
#	The Name	The Section	average
1	Ali Duraid Hamdi	Civil Engineering	82.2
2	Ali Omer Khalil	Civil Engineering	81.8
3	Hashim Dhyaa Hasan	Civil Engineering	78.3

Number of Graduates of the Dept. for the Academic Year 2014/2015

Male	Female
14	06

### Books:

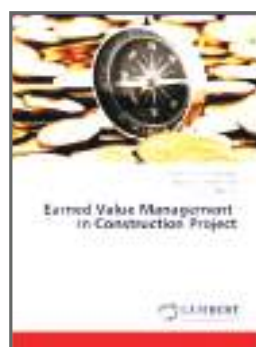
1. Asst. Prof. Dr. Asma Thamir Ibraheem



### Laboratories of the Department



2. Asst. Prof. Dr. Faiq M. Sarhan Alzwayny





## 2. Electronic and Communications Engineering Department

The Electronic and Communications Engineering department was founded in 1988. The department provides the students with scientific and engineering methods to deepen cognitive ability and research. Graduate students were admitted to obtain the master's degree in 1989, and the doctoral degree in 1994.

**The Department continues to implement academic programs within the courses, which cover the following aspects:**

1. Study and analysis of the foundations of digital and analogue networks, and the installation of

electronic circuits.

2. Antenna Engineering and wave propagation and microwave engineering.

3. Study advanced digital communication systems Engineering.

4. Study and analysis of secure communication networks and optical communication systems.

5. Computer Architecture and micro-processors structure.

6. Analysis and design of digital signal processing systems.

7. Satellite Communication Engineering and mobile phones.

8. Study and analysis of the electronic measurement technology and integrated circuit devices.

9. Digital and analogue control Engineering.

### The Council of the Dept. for the Academic Year 2015-2016

#	Full Name	Academic Rank	General Specialization	Specialization	Degree
1	Manal Jamil Al-Kindi	Asst. prof	Electronic and Communications Engineering	Digital Signal Processing/ Communications Engineering	.Ph.D
2	Jabir Salman Aziz	.Prof	Electrical Engineering	Communications Engineering	.Ph.D
3	Mohammed Hussein Ali	Lecturer	Electronic and communications Engineering	Tomographic Image Processing	Ph.D.
4	Amina Mahmoud Shakir	Lecturer	Electrical Engineering	Electrical Power and Machines	Ph.D.
5	Qussay Luttfi Al-Dabagh	Lecturer	Electrical Engineering	Power Engineering	Ph.D.
6	Anas Lateef Mohmood	Lecturer	Electronic and communications Engineering	Electronic Engineering	Ph.D.
7	Lubab Ali Salman	Lecturer	Electronic and communications Engineering	Satellite Communications Engineering	Ph.D.
8	Dhrgham Kamal Naji	Lecturer	Electronic and communications Engineering	Communications Engineering	Ph.D.

### Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 110	Human Rights	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2
UREQ 112	Computer Programming I	4	3	UREQ 122	Computer Programming II	4	3

MATH 110	Mathematics I	4	3	MATH 120	Mathematics II	4	3
PHYS 110	Electronics Physics	4	3	CREQ 120	Engineering Drawing II	4	2
CREQ 110	Engineering Drawing I	4	2	CREQ 121	Workshop Technology	3	1*
ECER 110	Engineering Mechanics	3	2	ECER 120	Electronics Materials	3	2
ECER 111	Electrical Circuits I	7	4	ECER 121	Electrical Circuits II	7	4
<b>Total</b>		<b>29</b>	<b>20</b>	<b>Total</b>		<b>28</b>	<b>17</b>

Students are only required to pass by this subject, so its units don't count to the total.

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 210	Management Principles	1	1	UREQ 220	Democracy	1	1
UREQ 211	Arabic Language II	1	1	MATH 220	Mathematics IV	4	3
MATH 210	Mathematics III	4	3	CREQ 221	Network Analysis II	3	2
CREQ 210	Information Technology	3	2	ECER 220	Electronics II	7	4
ECER 210	Electronics I	7	4	ECER 221	Transmission Lines	3	2
ECER 211	Network Analysis I	2	2	ECER 222	Digital Electronics II	6	4
ECER 212	Digital Electronics I	6	4	ECER 223	Electromagnetic Fields II	4	3
ECER 213	Electromagnetic Fields I	4	3				
<b>Total</b>		<b>28</b>	<b>20</b>	<b>Total</b>		<b>28</b>	<b>19</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
ECER 310	Engineering Analysis	4	3	ECER 320	Numerical Analysis	6	4
ECER 311	Transmission Lines	3	2	ECER 321	Digital Communications	7	4
ECER 312	Analogue Communication Systems	7	4	ECER 322	Computer Architecture	3	3
ECER 313	Electronics III	7	4	ECER 323	Electronic instrumentation	3	2

ECER 314	Wave Propagation	3	2	ECER 324	Antennas	3	2
ECER 315	Microprocessor	5	3	ECER 325	Electronic Communication	3	2
ECER 316	Industrial Management	1	1	ECER 326	Integrated Electronics	3	2
<b>Total</b>		<b>30</b>	<b>19</b>	<b>Total</b>		<b>28</b>	<b>19</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CREQ 410	Project	4	2	CREQ 420	Project	4	2
ECER 410	Information Theory and Coding	3	2	ECER 420	VLSI Technology	3	2
ECER 411	Microwave Engineering	3	3	ECER 421	Satellite Communications	3	2
ECER 412	Digital Signal Processing I	3	3	ECER 422	Digital Signal Processing II	6	4
ECER 413	Digital System Design	6	4	ECER 423	Wireless and Mobile Communications	3	3
ECER 414	Control Systems I	3	3	ECER 424	Control Systems II	6	4
ECER 415	Networks and Communication Protocols	3	3	ECER 425	Optical Communications	2	2
<b>Total</b>		<b>25</b>	<b>20</b>	<b>Total</b>		<b>27</b>	<b>19</b>

The Three Top Students in the Dept. for the Academic Year 2014 /2015

#	The Name	The Section	Average
1	Ahmad Riad Fadhil Jawad	Electronic and Communications Engineering	86.21
2	Zaid Mohammed Ibrahim Aziz	Electronic and Communications Engineering	83.03
3	Muhannad Mohammed Khalaf Hasan	Electronic and Communications Engineering	79.11

Number of students graduating from the department for the academic year 2014/2015

Male	Female
14	10



### 3. Department of Mechanical Engineering:

The Department of Mechanical Engineering was founded in 1988. The Master's degree program was offered for the first time in the academic year of 1989-1990.

Mechanical Engineering is considered one of the important links in the field of engineering for dealing with prominent specialized agencies, such as capacity and power plants, cooling and heating, and projects related to industrial machineries.

The high efficiency in the teaching and research programs of the dept. empower the graduate engineers to be compe-

tent to work in various industrial, productive, and development institutions. The department of Mechanical Engineering has three major basic disciplines which are: applied mechanics, thermal energy, and materials' engineering.

The Mechanical Engineering Dept. has graduated many generations of qualified mechanical engineers who are currently working in various fields such as teaching faculty at educational and technical institutions, or in scientific companies and offices, exercising their vital role in building the community.

The Council of the Dept. for the Academic Year 2015-2016

No	Full Name	Academic Rank	General Specialization	Specialization	Degree
1	Abdul-Jabbar Neama Khalifa	prof .Asst	Mechanical Engineering	Thermal Power	.Ph.D
2	Ali Hussein Mohammed	prof .Asst	Mechanical Engineering	Applied Mechanics	.Ph.D
3	Ahmed Waheed Mustafa	prof .Asst	Mechanical Engineering	Thermal Power	.Ph.D
4	Mohammad Kheiraldeen Abbas	prof .Asst	Mechanical Engineering	Aircraft mechanics Engineering	.Ph.D
5	Vinous majeed hameed	prof .Asst	Chemical Engineering	Chemical Engineering	.Ph.D
6	Abdel-Rahman Abdel-star	prof .Asst	Mechanical Engineering	Applied Mechanics	.Ph.D
7	Aqeel Abdula Mohammed	prof .Asst	Mechanical Engineering	Thermal Power	.Ph.D
8	Ahmed Fakhrey Khudheyer	Lecturer	Mechanical Engineering	Thermal Power	.Ph.D
9	Ahmed Riedh Abass Al-Hamaoy	Lecturer	Mechanical Engineering	Applied Mechanics	.Ph.D
10	Ansam Adel Mohammed Al-Zubaidi	Lecturer	Mechanical Engineering	Thermal Power	.Ph.D
11	Ali Sabri Abbas	Lecturer	Mechanical Engineering	Thermal Power	.Ph.D
12	Ghanim Shaker Sadiq Jumaa	Lecturer	Mechanical Engineering	Applied Mechanics	.Ph.D
13	Hala Salman Hasan	Lecturer	Mechanical Engineering	Applied Mechanics	.Ph.D
14	Dunya Abdulsahib Hashim	Lecturer	Physics	Physics	M.Sc.
15	Alaa Ibrahim Elaibi	Asst. Lecturer	Chemical Engineering	Chemical Engineering	M.Sc.
16	Mahmoud Sh. Mahmoud Hussain	Asst. Lecturer	Mechanical Engineering	Thermal Power	M.Sc.
17	Mazin Yahya Abdul-Kareem	Asst. Lecturer	Mechanical Engineering	Thermal Power	M.Sc.
18	Noor Yehia Abbas	Asst. Lecturer	Mechanical Engineering	Thermal Power	M.Sc.
19	Suha Kareem Jebir	Asst. Lecturer	Mechanical Engineering	Thermal Power	M.Sc.

## The Labs of the Department

## Thermo-Fluid Laboratory



## Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 110	University Requirements I	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2
UREQ 112	Computer Programming I	4	3	UREQ 122	Computer Programming II	4	3
MATH 110	Mathematics I	4	3	MATH 120	Mathematics II	4	3
PHYS 110	Physics	4	3	CREQ 120	Engineering Drawing II	4	2
CREQ 110	Engineering Drawing I	4	2	CREQ 121	Workshop Technology	3	1
MEER 110	Engineering Mechanics I	5	4	MEER 120	Engineering Mechanics II	5	4
MEER 111	Electrical Engineering I	2	2	MEER 121	Electrical Engineering II	4	3
				MEER 122	Material Science	2	2
Total		26	20	Total		29	21



Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 210	University Requirements II	1	1	UREQ 220	University Requirements III	1	1
UREQ 211	Arabic Language II	1	1	MATH 220	Mathematics IV	4	3
MATH 210	Mathematics III	4	3	CREQ 220	Information Technology	3	2
MEER 210	Engineering Mechanics III	3	2	MEER 220	Engineering Mechanics IV	3	2
MEER 211	Mechanics of Materials I	4	3	MEER 221	Mechanics of Materials II	5	3
MEER 212	Fluid Mechanics I	3	2	MEER 222	Fluid Mechanics II	5	3
MEER 213	Thermodynamics I	5	3	MEER 223	Thermodynamics II	3	2
MEER 214	Mechanical Construction I	4	2	MEER 224	Mechanical Construction II	4	2
MEER 215	Metallurgy	4	3	MEER 225	Manufacturing Processes	2	2
<b>Total</b>		<b>29</b>	<b>20</b>	<b>Total</b>		<b>30</b>	<b>20</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CREQ 311	Engineering Statistics	3	2	MEER 320	Engineering and Numerical Analysis II	3	3
MEER 310	Engineering and Numerical Analysis I	4	3	MEER 321	Heat Transfer II	4	3
MEER 311	Heat Transfer I	3	2	MEER 322	Machine Design II	4	3
MEER 312	Machine Design I	4	3	MEER 323	Internal Combustion Engine II	4	3
MEER 313	Internal Combustion Engine I	2	2	MEER 324	Mechanical Vibration	4	3
MEER 314	Electrical Machines	4	3	MEER 325	Mechanics of Machines II	2	2
MEER 315	Mechanics of Machines I	4	3	MEER 326	Production Engineering	2	2
MEER 316	Industrial Engineering	2	2	MEER 327	Gas Dynamics	4	3
<b>Total</b>		<b>26</b>	<b>20</b>			<b>27</b>	<b>22</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CREQ 410	Project	4	2	CREQ 420	Project	4	2
MEER 410	Elective I	3	2	MEER 420	Elective II	3	2

MEER 411	Control Engineering and Measurements I	3	3	MEER 421	Control Engineering and Measurements II	5	4
MEER 412	Air-Conditioning and Refrigeration I	4	3	MEER 422	Air-Conditioning and Refrigeration II	3	3
MEER 413	Advanced Computer Programming	4	3	MEER 423	Computer Applications	4	3
MEER 414	Power Plant I	2	2	MEER 424	Power Plant II	4	2
MEER 415	Turbo- Machinery	4	3	MEER 425	Machines Systems Design	4	3
<b>Total</b>		<b>24</b>	<b>18</b>	<b>Total</b>		<b>27</b>	<b>19</b>

### The Three Top Students in the Dept. for the Academic Year 2014 /2015

#	The Name	The Section	Average
1	Weyaam Mohammed Qais Abdul Salam	Mechanical engineering	73.31
2	Hassanein Saleh Hussein Ali	Mechanical engineering	71.98
3	Samah Falah Hassan Mohammed	Mechanical engineering	71.83

Number of students graduating from the department for the academic year 2014/2015

Male	Female
6	10

#### 4. Department of Chemical Engineering:

The Department continues to implement its plan of study in order to:

1. Graduate engineers with the best ability of scientific and practical management of industrial processes in various fields such as chemical and petrochemical industries, oil industry and pharmaceutical industry.
2. Graduate researchers and academics with the degrees of the masters and PhDs in various disciplines such as mass transfer, heat transfer, transport phenomena, fluid flow, petrochemical,

corrosion, electrochemical and control operations engineering.

3. Build leadership possibilities for graduates to enable them to work and manage industrial projects in their various size and complexity.
4. Take care of students with high scientific talent and capabilities and develop their capabilities and raise them on patriotism.
5. Follow up with the modern scientific methods in education and development in addition to teach students how to properly deal with the scientific and industrial problems.

### The Council of the Dept. for the Academic Year 2015-2016

#	Full Name	Academic Rank	General Specialization	Specialization	Degree
1	Naseer Abboud Esaa	.Asst. Prof	Chemical engineering	Mass Transfer and Electrochemical	.PhD
2	Kamal Shakir Pak	.Asst. Prof	Chemical engineering	Electrochemical Reactor Design	.PhD

3	Muhannad Abdul Razak Mohammed	.Asst. Prof	Petroleum Engineering	Fluid Flow	.PhD
4	Basem Obaid Hassan	.Asst. Prof	Chemical engineering	Corrosion	.PhD
5	Khaled Mekhleef Musa	.Asst. Prof	Chemical engineering	Mathematical Analysis and Control	PhD.
6	Sarmad Talib Najeem	Instructor	Chemical engineering	Electrochemical and Thermodynamics	.PhD
7	Yasser Emad Abdel-Aziz	Instructor	Chemical engineering	Fluid Flow	PhD.

### Laboratories of the Department



### Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 110	University Requirements I	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2
UREQ 112	Computer Programming I	4	3	UREQ 122	Computer Programming II	4	3
MATH 110	Mathematics I	4	3	MATH 120	Mathematics II	4	3
PHYS 110	Physics	4	3	CREQ 120	Engineering Drawing II	4	2

CREQ 110	Engineering Drawing I	4	2	CHER 120	Organic Chemistry	5	3
CREQ 111	Work Shop Technology	3	1	CHER 121	Principle of Chemical Engineering II	5	4
CHER 110	Analytical Chemistry	4	3	CHER 122	Mechanics	3	2
CHER 111	Principle of Chemical Engineering I	4	3				
<b>Total</b>		<b>30</b>	<b>21</b>	<b>Total</b>		<b>28</b>	<b>20</b>

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 210	University Requirements II	1	1	UREQ 221	University Requirements III	1	1
UREQ 211	Arabic Language II	1	1	MATH 210	Mathematics IV	4	3
MATH210	Mathematics III	4	3	CREQ 220	Mat Lab Engineering	3	2
CREQ 210	Information Technology	3	2	CREQ 221	Engineering Statistics	3	2
CHER 210	Engineering Materials	4	3	CHER 221	Physical Chemistry II	5	3
CHER 211	Physical Chemistry I	5	3	CHER 222	Fluid Mechanics II	6	4
CHER 212	Fluid Mechanics I	4	3	CHER 223	Industrial Safety	2	2
CHER 213	Properties of Petroleum and Natural Gas	5	3	CHER 224	Electrical Engineering	5	2
CHER 214	Pollution	3	2				
<b>Total</b>		<b>30</b>	<b>21</b>	<b>Total</b>		<b>29</b>	<b>19</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CHER 310	Engineering Analysis I	4	3	CHER 320	Engineering Analysis II	4	3
CHER 311	Heat Transfer I	4	3	CHER 321	Heat Transfer II	4	3
CHER 312	Mass Transfer I	4	3	CHER 322	Mass Transfer II	4	3
CHER 313	Reactor Design I	4	3	CHER 323	Reactor Design II	4	3
CHER 314	Thermodynamics I	4	3	CHER 324	Thermodynamics II	4	3



CHER 315	Engineering Economics	3	2	CHER 327	Chemical Industries	4	3
CHER 316	Equipment Design I	3	2	CHER 326	Equipment Design II	4	2
<b>Total</b>		<b>26</b>	<b>19</b>	<b>Total</b>		<b>28</b>	<b>20</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CREQ 410	Project	4	2	CREQ 420	Project	4	2
CHER 410	Elective I	3	2	CHER 420	Elective II	3	2
CHER 411	Transport Phenomena	4	3	CHER 421	Unit Operation	7	4
CHER 412	Process Control I	3	2	CHER 422	Process Control II	6	3
CHER 413	Numerical Methods	4	2	CHER 423	Optimization	3	2
CHER 414	Electrochemical Engineering	3	2	CHER 424	Corrosion Engineering	3	2
CHER 415	Petroleum Refinery	3	2	CHER 425	Petrochemical Engineering	3	2
CHER 416	Biochemical Engineering	3	2				
<b>Total</b>		<b>27</b>	<b>17</b>	<b>Total</b>		<b>28</b>	<b>17</b>

The Three Top Students in the Dept. for the Academic Year 2014 /2015

#	The Name	The Section	average
1	Aaya Nabeel Hameed Sultani	Chemical engineering	75.19
2	Maysaa Basil Abdulrazaq Al-Nassar	Chemical engineering	69.65
3	Haneen Ahmed Jassim Mohammed	Chemical engineering	68.61

Number of Graduates of the Dept. for the Academic Year 2014/2015

Male	Female
6	13

### 5. Department of Computer Engineering:

The year 1997 witnessed the first graduating B.Sc. class from the department, while the first graduating M.Sc. class was in September 1999. The first intake of Ph.D. students was admitted in the academic year 1999/2000. The program of studies in Computer Engineering is comprehensive and balanced. The curriculum of study covers both computer software engineering and computer hardware engineering. Postgraduate

courses cover computer performance, computer networks, internet engineering and numerical analysis. The research activities in the department cover the evaluation of computers connected within working networks and making use of local computer networks

### B.Sc. in Computer Engineering

Applicants for this study should have a secondary school certificate in scientific section. The B.Sc. degree in Computer Engineering is con-

ferred after successfully completing 159 credit units in four years; two semesters per year. The courses include compulsory and elective subjects. On completion of this degree, the graduate will be eligible to work in the field of Computer Engineering or pursue postgraduate studies.

### M.Sc. in Computer Engineering

Applicants for this study should have a B.Sc. degree in Computer Engineering, and the M.Sc. degree is conferred after successfully complet-

ing 36 credit units including 26 units for courses taken in two semesters in addition to a M.Sc. dissertation (10 units) in Computer Engineering. The courses include compulsory and elective subjects. On completion of this degree, the candidate will be eligible to work in the field of Computer Engineering when required levels needed are higher than the B.Sc. in Computer Engineering. It will also make him or her eligible to apply for the degree of Ph.D. in Computer Engineering.

The Council of the Dept. for the Academic Year 2015-2016

#	Full Name	Academic Rank	General Specialization	Specialization	Degree
1	Mohammed Ahmed Abdala	Assistant Professor	Electronics Engineering	Microelectronics Engineering	.Ph.D
2	Raad Sami Fyath	Professor	Electrical Engineering	Electronics and communication Engineering	Ph.D.
3	Anas Ali Hussien	Assistant Professor	Electronics and Communication Engineering	Information Engineering	.Ph.D
4	Firas Abdullah Thweny	Lecturer	Electronics and Communication Engineering	Electronics and Communication Engineering	.Ph.D
5	Amjad Najim Jabir	Lecturer	Electrical Engineering	Communication Engineering	.Ph.D
6	Khalid Hussain Hassoon	Lecturer	Political Science	International Studies	.M.Sc
7	Ali Jwad Abied	Assistant Lecturer	Mechanical Engineering	Mechanical Engineering	.M.Sc

### Curriculum

First Year First Semester						First Year Second Semester					
Code	Sub	Hrs Per Week			Units	Code	Sub	Hrs Per Week			Units
		Th	App	Tut				Th	App	Tut	
UREQ 110	University Requirements I	1			1	UREQ 120	Arabic Language I	1			1
UREQ 111	English Language I	2			2	UREQ 121	English Language II	2			2
UREQ 112	Computer Programming I	2	2		3	UREQ 122	Computer Programming II	2	2		3
MATH 110	Mathematics I	3		1	3	MATH 120	Mathematics II	3		1	3

CREQ 110	Engineering Drawing I	1	3		2	CREQ 120	Engineering Drawing II	1	3		2
PHYS 110	Physics	2	2		3	CREQ 121	Workshop Technology		3		1
CPER 110	Electrical Circuits I	2	3		3	CPER 120	Electrical Circuits II	2	3		3
CPER 111	Logic Circuits I	2	2	1	3	CPER 121	Electronics I	2	3	1	3
<b>Total</b>		<b>15</b>	<b>12</b>	<b>2</b>	<b>20</b>	<b>Total</b>		<b>13</b>	<b>14</b>	<b>2</b>	<b>18</b>
	<b>29</b>						<b>29</b>		<b>18</b>		

Second Year First Semester						Second Year Second Semester					
Code	Sub	Hrs Per Week			Units	Code	Sub	Hrs Per Week			Units
		Th	App	Tut				Th	App	Tut	
UREQ 210	University Requirements II	1			1	UREQ 221	University Requirements III	1			1
UREQ 211	Arabic Language II	1			1	MATH 220	Mathematics IV	3		1	3
MATH 210	Mathematics III	3		1	3	CREQ 220	Information Technology I	1	2		2
CPER 210	Electronics II	3	3	1	4	CPER 220	Electromagnetic Fields	3			2
CPER 211	Logic Circuits II	3	3		4	CPER 221	Microprocessor Programming	2	3		3
CPER 212	CAD	1	3		2	CPER 222	Software Engineering	3	3		4
CPER 213	Computer Architecture	3			3	CPER 223	Electrical Networks	2			3
CPER 214	Structural Programming	1	3		2	CPER 224	Digital System Design	2	3	1	3
<b>Total</b>		<b>16</b>	<b>12</b>	<b>2</b>	<b>20</b>	<b>Total</b>		<b>17</b>	<b>11</b>	<b>2</b>	<b>21</b>
	<b>30</b>						<b>30</b>				

Third Year First Semester						Third Year Second Semester					
Code	Sub	Hrs Per Week			Units	Code	Sub	Hrs Per Week			Units
		Th	App	Tut				Th	App	Tut	
CREQ 310	Engineering Statistics	2		1	2	CPER 320	Operating Systems	3			3
CPER 310	Information Technology II	2	2		3	CPER 321	Microcomputer Interface	3	3		4
CPER 311	Engineering Analysis	3		1	3	CPER 322	Digital Communication	4	3		5
CPER 312	Hardware Engineering	2			2	CPER 323	Numerical Analysis	2	3		3
CPER 313	Communication Theory	4	3		5	CPER 324	Microprocessor Design	2			2
CPER 314	Computer System Design I	2			2	CPER 325	Computer System Design II	2			2
CPER 315	Electronics III	2	3		3	CPER 326	Data Compression	2			2
<b>Total</b>		<b>17</b>	<b>8</b>	<b>2</b>	<b>20</b>	<b>Total</b>		<b>18</b>	<b>9</b>		<b>21</b>

	27			27			
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Forth Year First Semester						Forth Year Second Semester					
Code	Sub	Hrs Per Week			Units	Code	Sub	Hrs Per Week			Units
		Th	App	Tut				Th	App	Tut	
CREQ 410	Project		4		2	CREQ 420	Project		4		2
CPER 410	Elective I	2			2	CPER 420	Elective II	2			2
CPER 411	Control Theory I	4			4	CPER 421	Elective III	2			2
CPER 412	Computer Network I	4			4	CPER 422	Control Theory II	3	3		4
CPER 413	Information Security	3		1	3	CPER 423	Computer Network II	3	3		4
CPER 414	Internet Website Design	2	2		3	CPER 424	Artificial Intelligent	2	2		3
CPER 415	Mobile Communications	2			2	CPER 425	Soft Computing	2			2
<b>Total</b>		<b>17</b>	<b>6</b>	<b>1</b>	<b>20</b>	<b>Total</b>		<b>14</b>	<b>12</b>		<b>19</b>
	<b>24</b>						<b>26</b>				

### Laboratories of the Department



The Three Top Students of the Dept. for the Academic Year 2014 /2015

#	The Name	The Section	Average
1	Zahra Sami Abdulamir	Computer Department	86.593
2	Nabaa Abdulkareem Saleem	Computer Department	77.143
3	Safa Ihsan Matloob	Computer Department	74.468



## Number of Graduates for the Academic Year 2014/2015

Male	Female
4	11

## 6. Department of Laser Engineering and visual electronics:

The Department embarked on the implementation of its initial academic studies which include the following main courses:

- Fundamentals of physics, mathematics, materials science and engineering analyzes.
- Computer Programming science and Information technology.
- Descriptive engineering and engineering drawing, mechanical engineering, electrical and electronic circuits and Digital electronics and electromagnetic fields.
- Principles of laser and laser physics and quantum mechanics and spectroscopy, optics and laser systems.

• Laser design technology and laser applications, Optical fiber

Optical communications and optical engineering systems and optical detectors.

- Specialized Engineering Sciences related, such as control engineering and the design of digital systems and communication networks and computer architecture.

The department of Laser Engineering & optoelectronics is also keen for the implementation of the Academic Program for Graduate Studies/ Master, which includes specialized courses in advanced laser technology and engineering sciences relevant to this technique.

## The Council of the Dept. for the Academic Year 2015-2016

#	Full Name	Academic Rank	General Specialization	Specialization	Degree
1	Bassam Ghalib Rasheed	prof .Asst	laser physics	Laser–Nanotechnology	.Ph.D
2	Anwar Abdul Sattar Abdul Razak	prof .Asst	Laser Engineering	Laser and optoelectronics	.Ph.D
3	Mohammed Abdul Amir Hussain	Instructor	Mechanical Engineering	Manufacturing of laser	.Ph.D
4	Saad Abdul-Aziz Mohammed Saleh	Instructor	Physics Science	Laser and optoelectronics	.Ph.D
5	Ali AdnanKhalil	Instructor	Laser Engineering	Laser and optoelectronics	.Ph.D
6	Mohammed Sabri Salim	Instructor	Laser engineering	Artificial intelligent	.Ph.D
7	Asmaa Hameed Majid	Instructor	Electrical engineering	Communications	.Ph.D
8	Jalal Abdullah Khalaf	Instructor .Asst	Laser Engineering	Laser Applications	M.Sc.

## Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 110	University Requirements I	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2
UREQ 112	Computer Programming I	4	3	UREQ 122	Computer Programming II	4	3
MATH 110	Mathematics I	4	3	MATH 120	Mathematics II	4	3
PHYS 110	Physics	4	3	CREQ 120	Engineering Drawing II	4	2
CREQ 110	Engineering Drawing I	4	2	CREQ 121	Workshop Technology	3	1
LAER 110	Mechanical Engineering I	5	3	LAER 120	Mechanical Engineering II	5	3

LAER 111	Electrical Circuits I	6	3	LAER 121	Electrical Circuits II	6	3
				LAER 122	Laser Principles	2	2
<b>Total</b>		<b>30</b>	<b>20</b>	<b>Total</b>		<b>31</b>	<b>20</b>

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 210	University Requirements II	1	1	UREQ 221	University Requirements III	1	1
UREQ 211	Arabic Language II	1	1	MATH 220	Mathematics IV	4	3
MATH 210	Mathematics III	4	3	CREQ 220	Information Technology	3	2
CREQ 211	Engineering Statistics	3	2	LAER 220	Electronics II	6	3
LAER 210	Electronics I	6	3	LAER 221	Laser Physics II	4	3
LAER 211	Laser Physics I	5	3	LAER 222	Digital Techniques I	6	3
LAER 212	Laser Materials	4	3	LAER 223	Electromagnetic Fields II	3	2
LAER 213	Electromagnetic Fields I	3	2	LAER 224	Computer Aided Design	3	2
LAER 214	Laser Systems	2	2				
<b>Total</b>		<b>29</b>	<b>20</b>	<b>Total</b>		<b>30</b>	<b>19</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
LAER 310	Numerical Analysis	6	3	LAER 320	Engineering Analysis	3	3
LAER 311	Quantum Mechanics	2	2	LAER 321	Wave Propagation	2	2
LAER 312	Digital Techniques II	6	3	LAER 322	Control Theory	3	2
LAER 313	Electronics III	6	3	LAER 323	Communication Theory	3	2
LAER 314	Gas Discharge	2	2	LAER 324	Computer Architecture	5	3
LAER 315	Networks and Communication Networks	2	2	LAER 325	Spectroscopy	4	3
LAER 316	Semiconductor Laser	2	2	LAER 326	Industrial Management	2	2
				LAER 327	Optics	6	3
<b>Total</b>		<b>26</b>	<b>17</b>	<b>Total</b>		<b>28</b>	<b>20</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CREQ 410	Project	4	2	CREQ 420	Project	4	2
LAER 410	Elective I	2	2	LAER 420	Elective III	2	2
LAER 411	Optical System Engineering	3	2	LAER 421	Elective IV	2	2
LAER 412	Control Engineering	6	3	LAER 422	Laser Design Technology	5	3

LAER 413	Laser Applications	2	2	LAER 423	Seminar	1	
LAER 414	Elective II	2	2	LAER 424	Optical Signal Processing	5	3
LAER 415	Laser Detection Systems	5	4	LAER 425	Optical Fibers and Optical Communications	5	3
LAER 416	Image Processing	4	3	LAER 426	Computer Interface	5	3
<b>Total</b>		<b>28</b>	<b>20</b>	<b>Total</b>		<b>29</b>	<b>18</b>

The Three Top Students in the Dept. for the Academic Year 2013 /2014

#	The Name	The Section	Average
1	Sara Sami Ahmed Husain	Department of Laser Engineering and Optoelectronics	78.20
2	Rafael Mahmud Khalil Ibrahim	Department of Laser Engineering and Optoelectronics	78.12
3	Farah Salem Hanash Ali	Department of Laser Engineering and Optoelectronics	76.75

Number of Graduates from the Dept. for the Academic Year 2013/2014

Male	Female
1	16

Laboratories of the Department



Carbon Dioxide Laser System

## 7. Medical Engineering Department:

The biomedical engineering department at Al-Nahrain University was founded in 1997 as one of the sections of the college of Engineering of the University.

1. The study in this section takes about five years to get a bachelor's degree and two years for a master's degree in biomedical engineering sciences.

2. Since the foundation of the section until now, it has graduated (240) biomedical engineers, and

(94) a master's degree in Biomedical Engineering Science holders.

Biomedical engineering is considered as the only specialization of its kind in Iraqi universities. Our graduates are now working in various fields, such as teaching professors at colleges and technical institutes, or as biomedical engineers in hospitals and medical centers, or in scientific companies and offices to exercise their vital role in building the human and community.

### The Council of the Dept. for the Academic Year 2014-2015

#	Full Name	Position	Scientific Degree	Certificate	General / Specific Specialty
1	Dr. Sadiq Jafar Abbas Hamandi	Head of the dept.	Asst. Prof.	Ph.D.	Mechanical engineering/ Biomechanics
2	Rana Ibraheem Mohammed	Rapporteur	Asst. Lecturer	M. Sc.	Biology Science
3	Dr. Alber Ilya Yousif	Faculty member	Prof.	Ph.D.	Mechanical engineering
4	Dr. Ziad Tariq Aldahhan	Faculty member	Prof.	Ph.D.	Electronic engineering/ Thin Films
5	Dr. Jamal Abdul Jabbar Hasaan	Faculty member	Prof.	Ph.D.	Sciences/ Spectrum diffusion
6	Dr. Munqith Saleem Dawod	Faculty member	Asst. Prof.	Ph.D.	Electrical Engineering
7	Dr. Uns Qusay Hashim	Faculty member	Asst. Prof.	Ph.D.	Control Engineering/ Electricity
8	Dr. Eman Ghadhban	Faculty member	Lecturer	Ph.D.	Veterinary medicine/ Physiology
9	Dr. Lugain Qadury Ibraheem	Faculty member	Lecturer	Ph.D.	Materials Engineering
10	Dr. Sufyan Munthir Salih	Faculty member	Lecturer	Ph.D.	Statistics/ Planning Operation Research
11	Dr. Safa' Suood	Faculty member	Lecturer	Ph.D.	Communication engineering
12	Dr. Shaymaa Jaafar Mahmmmed	Faculty member	Lecturer	Ph.D.	MBCHB / Gynecology & Obstetrics
13	Reem Salam Ibraheem	Faculty member	Lecturer	Ph.D.	Physical Education/ Biomechanics
14	Mays Uday Abdul Rasoul	Faculty member	Asst. Lecturer	M. Sc.	Medical Engineering
15	Jasim Mohammed Sahn	Faculty member	Asst. Lecturer	M. Sc.	Electronic Engineering
16	Reem Shaker Mahmood	Faculty member	Asst. Lecturer	M. Sc.	Medical Engineering
17	Hassanein Ali Lafta	Study Leave	Lecturer	M. SC.	Medical Engineering
18	Hadeel Qasim Wadi	Study Leave	Lecturer	M. Sc.	Medical Engineering
19	Aseel Mohammed Ali Hussein	Study Leave	Asst. Lecturer	M. Sc.	Medical Engineering



20	Dunia Tahseen Na'eem	Study Leave	Asst. Lecturer	M. Sc.	Chemistry Science
21	Ahmed Faiq Hassan	Study Leave	Asst. Lecturer	M. SC.	Electrical Engineering
22	Alaa' Aied Jabbar	Study Leave	Asst. Lecturer	M. Sc.	Medical Engineering
23	Salman Majed Salman	Study Leave	Asst. Lecturer	M. SC.	Electronic Engineering
24	Ma'ab Hafidh Yaseen	Study Leave	Asst. Lecturer	M. SC.	Medical Engineering

## Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
UREQ 110	University Re-quirements I	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2
UREQ 112	Computer Pro-gramming I	4	3	UREQ 122	Computer Program-ming II	4	3
MATH 110	Mathematics I	4	3	MATH 120	Mathematics II	4	3
CREQ 110	Engineering Drawings I	4	2	CREQ 120	Engineering Draw-ings II	4	2
CREQ 111	Workshop Tech-nology	3	1	PHYS 120	Physics	4	3
MDER 110	Chemistry	4	3	MDER 120	Bio-Chemistry	5	4
MDER 111	Electrical Circuits I	5	3	MDER 121	Electrical Circuits II	6	4
<b>Total</b>		<b>27</b>	<b>18</b>	<b>Total</b>		<b>30</b>	<b>22</b>

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
UREQ 210	University Re-quirements II	1	1	UREQ 220	University Re-quirements III	1	1
UREQ 211	Arabic Language II	1	1	MATH 220	Mathematics IV	4	3
MATH 210	Mathematics III	4	3	MDER 220	Engineering Mechanics II	4	3
CREQ 210	Information Tech-nology	3	2	MDER 221	Cell Biology	4	3
MDER 210	Engineering Me-chanics I	4	3	MDER 222	Electronics	6	3
MDER 211	Material Science	4	3	MDER 223	Electromag-netic fields	2	2
MDER 212	Basic Electronics	6	3	MDER 224	The Limbs Anatomy	6	4
MDER 213	Structural Pro-gramming	4	2	MDER 225	Network	3	2
<b>Total</b>		<b>27</b>	<b>18</b>	<b>Total</b>		<b>30</b>	<b>21</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
MDER 310	Engineering Analysis	4	3	CREQ 321	Engineering Statistics	3	2
MDER 311	Mechanics of Materials I	3	2	MDER 320	Numerical Analysis	4	3
MDER 312	The Trunk Anatomy	5	3	MDER 321	Mechanics of Materials II	6	3
MDER 313	Physiology I	5	3	MDER 322	Neck & Nervous Anatomy	5	3
MDER 314	General Histology	3	2	MDER 323	Physiology II	5	3
MDER 315	Medical Equipment	5	3	MDER 324	Specific Histology	4	3
MDER 316	Fiber Optics	4	3	MDER 325	Bone Injury and Fractures	2	2
<b>Total</b>		<b>29</b>	<b>19</b>	<b>Total</b>		<b>29</b>	<b>19</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
MDER 410	Biomechanics I	6	3	MDER 420	Biomechanics II	6	3
MDER 411	Biomaterials I	2	2	MDER 421	Biomaterials II	2	2
MDER 412	Communications I	6	3	MDER 422	Communications II	5	3
MDER 413	Medical Instrumentation	5	3	MDER 423	Analytical Mechanics	2	2
MDER 414	Thermo-Fluid Mechanics	5	3	MDER 424	Therapeutic Instrumentation	5	3
MDER 415	Digital Electronics I	5	3	MDER 425	Digital Electronics II	5	3
MDER 416	Pathology	2	2	MDER 426	Mass Transfer	5	3
<b>Total</b>		<b>31</b>	<b>19</b>	<b>Total</b>		<b>30</b>	<b>19</b>

Fifth Year First Semester				Fifth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
CREQ 510	Project	4	2	CREQ 520	Project	4	2
MDER 510	Elective I	2	2	MDER 520	Elective II	3	2
MDER 511	Diagnostic Instrumentation	5	3	MDER 521	Elective III	3	2
MDER 512	Control I	5	3	MDER 522	Control II	6	3
MDER 513	Image Processing	4	3	MDER 523	Computer Network	2	2

MDER 514	Biomedical Sensors	3	2	MDER 524	Bio tribology	2	2
MDER 515	Microprocessor	5	3	MDER 525	Neural Networks	3	2
MDER 516	Hospital System & Design	2	2	MDER 526	Advanced Electronics	3	2
<b>Total</b>		<b>30</b>	<b>20</b>	<b>Total</b>		<b>26</b>	<b>17</b>

## APPROVED ELECTIVES

#	Subjects	No	Subjects
1	Biostatistics	6	Mat. Lab
2	Infrared & Thermal Imaging	7	Human Body Modeling
3	Finite Element Analysis	8	Modern Medical Equipment's
4	Signal and Systems	9	Environmental Engineering
5	Endoscopy	10	Electromechanical Design

## The Three Top Students in the Dept. for the Academic Year 2014 /2015

#	The Name	The Section	average
1	Hamza Abbas Fadhel	Biomedical Engineering	86.968
2	Suhaeb Yarub Gazi	Biomedical Engineering	86.362
3	Shaimaa Kassim Ghanim	Biomedical Engineering	76.396

## Number of Graduates from the Dept. for the Academic Year 2014/2015

Male	Female
8	20

## 8. Department of Architecture:

The Department of Architecture in the College of Engineering at Al-Nahrain University was founded in 2002, as academic, engineering and scientific department. And the fact that the foundation of the department in the College of Engineering at Al-Nahrain University and is solid, (As it has long experience with professors in all areas of architecture and urban planning and design), It is certainly a professional architect entity Capable to Competition process in architecture and urban planning and design, and is superior

to serve local, national and even regional needs.

Our potential progress and evolve as varied include all types of buildings, and we have invented several new architectural styles. The Department can offer integrated architectural advisory service both on the traditional construction approach or advanced technical designs. Although we believe in the rules of the paper design studio, as the basis for designs, we never forget the latest professional uses, and the global scientific and practical progress being an integral part of that evolution.

The Council of the Dept. for the Academic Year 2015-2016

#	Full Name	Academic Rank	General Specialization	Specialization	Degree
1	Haitham Abdel-Hussein Ali	Instructor	Architecture	Philosophy in Architecture	.Ph.D
2	Saad Khudai Mahmoud	Instructor	Architecture	Urban design	.Ph.D
3	Shaima Hamid Hus-sain	Instructor	Architecture	The sustainability of cities	.Ph.D
4	Mohammad Qasim Abdul Ghafoor	Instructor	Architecture	Advanced Strategies	.Ph.D
5	Khalid Abdul Wahab Mustafa	Instructor	Architecture	Sustainability and energy Refit	.Ph.D
6	Nofal Joseph Rozko	Instructor	Architecture	Architectural research methods	.Ph.D
7	Adel Zamel Men-shed	Instructor .Asst	Architecture	Urban design	Master

### Laboratories of the Department



Graphic Laboratory

### Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 110	University Requirements I	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2

UREQ 112	Computer Programming I	3	2	UREQ 122	Computer Programming II	3	2
MATH 110	Mathematics I	3	2	MATH 120	Mathematics II	3	2
CREQ 111	Workshop Technology	3	1	AREQ 120	Architectural Design II	10	6
PHYS 110	Physics	2	2	AREQ 121	Architectural Graphics II	3	2
AREQ 110	Architectural Design I	10	6	AREQ 122	Freehand Drawing II	3	2
AREQ 111	Architectural Graphics I	3	2	AREQ 123	Architectural Appreciation	3	2
AREQ 112	Freehand Drawing	3	2	AREQ 124	Physical Properties of Materials	2	2
<b>Total</b>		<b>30</b>	<b>20</b>	<b>Total</b>		<b>30</b>	<b>21</b>

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 210	University Requirements II	1	1	UREQ 220	University Requirements III	1	1
UREQ 211	Arabic Language II	1	1	AREQ 220	Architectural Design IV	10	6
CREQ 210	Information Technology	3	2	AREQ 221	Architectural Graphics & Descriptive Geometry IV	3	2
AREQ 210	Architectural Design III	10	6	AREQ 222	Freehand Drawing IV	3	2
AREQ 211	Architectural Graphics & Descriptive Geometry III	3	2	AREQ 223	Computer application of Architecture II: ( 3D Max )	3	2
AREQ 212	Freehand Drawing III	3	2	AREQ 224	Building Construction II	4	3
AREQ 213	Computer application of Architecture I»	3	2	AREQ 225	Surveying	3	2
AREQ 214	Building Construction I	4	3	AREQ 226	History of Architecture II	2	2
AREQ 215	Design methodology	2	2				
AREQ 216	History of architecture I	2	2				
<b>Total</b>		<b>32</b>	<b>23</b>	<b>Total</b>		<b>29</b>	<b>20</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
AREQ 310	Architectural Design V	10	6	AREQ 320	Architectural Design VI	10	6
AREQ 311	Structures I: “ Concepts “	2	2	AREQ 321	Structures II :”Concrete Fundamentals”	2	2



AREQ 312	Building Services I: "Plumbing"	2	2	AREQ 322	Building Services II : "Air Conditioning"	2	2
AREQ 313	Computer application of architecture III	4	2	AREQ 323	Computer application of architecture IV	4	2
AREQ 314	Building Construction III	4	3	AREQ 324	Building Construction IV	4	3
AREQ 315	Interior Design	3	2	AREQ 325	Landscape Architecture	3	2
AREQ 316	History of Architecture III	2	2	AREQ 326	History of Architecture IV	2	2
AREQ 317	Urban Planning Theories	2	2	AREQ 327	Preservation Methods	2	2
<b>Total</b>		<b>29</b>	<b>21</b>	<b>Total</b>		<b>29</b>	<b>21</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
CREQ 411	Engineering management & Economy	2	2	AREQ 420	Architectural Design VIII	10	6
AREQ 410	Architectural Design VII	10	6	AREQ 421	Structures IV: « steel Design»	2	2
AREQ 411	Structures III: " Concrete Design"	2	2	AREQ 422	Islamic Architecture II	2	2
AREQ 412	Islamic Architecture I	2	2	AREQ 423	Psychology in Architecture	2	2
AREQ 413	Urban design theories	2	2	AREQ 424	Building Regulations	2	2
AREQ 414	Housing Theory	2	2	AREQ 425	Theory of Architecture II	2	2
AREQ 415	Theory of Architecture I	2	2	AREQ 426	Environment & Architecture II: «Acoustic»	2	2
AREQ 416	Environment Architecture I: «Climate»	2	2	AREQ 427	Advanced Building Technology II	2	2
AREQ 417	Advanced Building Technology I	2	2	AREQ 428	Building Services « » Electrical	2	2
<b>Total</b>		<b>26</b>	<b>22</b>	<b>Total</b>		<b>26</b>	<b>22</b>

Fifth Year First Semester				Fifth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
AREQ 510	Architecture Design(Thesis)	18	12	AREQ 510	Architecture Design(Thesis)	20	14
AREQ 511	Elective	2	2	AREQ 521	Elective	2	2
AREQ 512	Professional Practice	2	2	AREQ 522	Quantities & Specifications	2	2

AREQ 513	Iraqi Local Architecture	2	2				
<b>Total</b>		<b>24</b>	<b>18</b>	<b>Total</b>		<b>24</b>	<b>18</b>

The Three Top Students in the Dept. for the Academic Year 2014 /2015

#	The Name	The Section	average
1	Sarah Kamran Ahsan	Architecture	79.56
2	Doaa Mohammed Najib	Architecture	76.13
3	Mannar Ayad Hussein	Architecture	73.18

Number of Graduates from the Dept. for the Academic Year 2014/2015

Male	Female
3	7

### 9. Department of Prosthetics and Orthotics Engineering

The Department of Prosthetics and Orthotics Engineering was founded in (2012/2013). The first batch of students were enrolled in the academic year (2013/2014).

The establishment of the department came up as a result of the urgent need for such a specialization. It represents one of the important areas in which the community needs, especially those with special needs, who are suffering shortage of body part. Furthermore to supply the prosthetics and orthotic centers which are distributed across Iraq with specialized engineering staff.

After a series of seminars on the development of prosthetic legs in Iraq and a distinct presence of the competent authorities and in response to the recommendations that emerged from these seminars. It has been establishment this important section in the Iraqi public life

The academic program of this department focuses on the future needs of engineering in this field for development, design and manufacturing of industrial limbs .that meets the needs of the community for these devices and materials,

#### Vision:

Our vision is to be one of the famous Prosthetics and Orthotics Engineering program in Iraq and the region. The department aims to graduate engineering and technical staffs that are specialized in this field and in line with the scientific and economic developments in the labor market.

#### The Mission:

The department mission is to provide high qualified prosthetics and orthotics engineers that are able to engage and lead the international program for assists and rehabilitate persons with disabilities

#### Objectives:

1. Graduation of competent engineers and innovators in the field of prosthesis and orthosis.
2. Fill a part of the large shortage in engineering and specialized technical staffs in official and private sectors.
3. Serving society through helping disabled peoples with special needs to be active in the community.
4. Deepen scientific logic of the students in this specialization.
5. Advancement by scientific research.

## Faculty Members of the Dept. for the Academic Year 2015-2016

#	Full Name	Academic Rank	General Specialization	Specialization	Degree
1	Muhsin Jabur Jweeeg	Professor	Mechanical Engineering	Applied mechanics	.Ph.D
2	Jumaa A.Chiad	Assist. prof	Mechanical Engineering	Refractories	.Ph.D
3	Ayad Murad Tkhakh	Assist. prof	Production Engineering	Engineering metals	.Ph.D
4	Mahmud rasheed Ismail	Assist. prof	Mechanical Engineering	Mechanics	.Ph.D
5	Wagdy Sadic Ebad	Instructor	Mechanical Engineering	Applied mechanics	.Ph.D

## Curriculum

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 110	University Requirements I	1	1	UREQ 120	Arabic Language I	1	1
UREQ 111	English Language I	2	2	UREQ 121	English Language II	2	2
UREQ 112	Computer Programming I	4	3	UREQ 122	Computer Programming II	4	3
MATH 110	Mathematics I	4	3	MATH 120	Mathematics II	4	3
PHSY 110	Physics	4	3	CREQ 120	Engineering Drawing II	4	2
CREQ 110	Engineering Drawing I	4	2	POER 120	Engineering Mechanics II	4	3
CREQ 111	Workshop	3	1	POER 121	Anatomy II	4	3
POER 110	Engineering Mechanics I	4	3	POER 122	Material Science	2	2
POER 111	Anatomy I	4	3	POER 123	Electricity	4	3
<b>Total</b>		<b>30</b>	<b>21</b>	<b>Total</b>		<b>29</b>	<b>22</b>

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
UREQ 210	University Requirements II	1	1	UREQ 220	University Requirements III	1	1
UREQ 211	Arabic Language II	1	1	MATH 220	Mathematics IV	4	3
MATH 210	Mathematics III	4	3	POER 220	Prosthetics II	2	2
CREQ 210	Information Technology	3	2	POER 221	Orthotics II	5	3
POER 210	Prosthetics I	6	4	POER 222	Strength of Materials II	5	3
POER 211	Orthotics I	3	3	POER 223	Electronics	6	4
POER 212	Biomaterials	3	3	POER 224	Biomechanics II	2	2

POER 213	Strength of Materials I	4	3	POER 225	Physiology	2	2
POER 214	Biomechanics I	2	2				
<b>Total</b>		<b>27</b>	<b>22</b>	<b>Total</b>		<b>27</b>	<b>20</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
POER 310	Prosthetics III	5	4	POER 320	Prosthetics IV	4	3
POER 311	Orthotics III	4	3	POER 321	Orthotics IV	5	4
POER 312	Biomaterials II	3	2	POER 322	Computer Applications	4	3
POER 313	Numerical Analysis	3	2	POER 323	Mobility and Rehabilitation II	2	2
POER 314	Mobility and Rehabilitation I	4	3	POER 324	Nerve System	4	3
POER 315	Biomechanics III	4	3	POER 325	Pathology II	2	2
POER 316	Pathology I	2	2	POER 326	Tribology I	3	3
CREQ 310	Engineering Statistics	3	2	POER 327	Industrial Engineering	2	2
<b>Total</b>		<b>28</b>	<b>21</b>	<b>Total</b>		<b>26</b>	<b>22</b>

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th , App , Tut				Th , App , Tut	
POER 410	Control Measurements I	5	3	POER 420	Control Measurements II	3	2
POER 411	Prosthetic Clinical Practice I	4	2	POER 421	Prosthetic Clinical Practice II	4	2
POER 412	Orthotic Clinical Practice I	4	2	POER 422	Orthotic Clinical Practice II	4	2
POER 413	Mechanical Design	4	3	POER 423	Artificial Intelligent	5	3
POER 414	Elective I	3	2	POER 424	Elective III	3	2
POER 415	Elective II	3	2	POER 425	Elective IV	3	2
CREQ 410	Project	4	2	CREQ 420	Project	4	2
<b>Total</b>		<b>27</b>	<b>16</b>	<b>Total</b>		<b>26</b>	<b>15</b>

## ELECTIVES

#	Subjects	#	Subjects
1	Histology	9	Digital integrated circuit Design
2	Vibration	10	Introduction to logic design
3	Inspection	11	Composite materials
4	Fluids	12	Nanotechnology

5	Thermodynamics	13	Pneumatic system
6	Corrosion	14	Polymers
7	Robotics	15	CAD/CAM system
8	Laser		

Laboratories of the Department



### Engineering Consulting Bureau

Engineering Consulting Bureau is a government bureau which belongs to the College of Engineering / Al-Nahrain University in Al-Jadriya.

The engineering consulting bureau / college of Engineering / University of Al-Nahrain is the first Advisory Office of the consulting offices which has an annual financial reports for the engineering activity certified by the BSA up to the year 2011.

It is currently working to obtain the ratification of fundamentalism measurements to report the engineering activity of the office for 2013

- The engineering consulting bureau includes Elite of the brightest consultants in various fields of engineering disciplines and who are familiar with and has a long history in the engineering profession. The financial budget has been increased to the bureau in the last four years with

double mutations and the office occupies a Very advanced rank among engineering offices referred to in the above.

- The bureau is one of the most prestigious consulting firms. It has documented contracts with most of the ministries and state institutions and public and private sectors such as The Ministry of Defense /Ministry of Interior /Ministry of Finance /The Ministry of Oil /Ministry of Youth and Sports /The Ministry of Education / Ministry of Health / Ministry of Agriculture /The Ministry of Higher Education and Scientific Research / The Ministry of Industry / Ministry of Construction and Housing/ General Secretariat of the Council of Ministers.

- The bureau is also engaged in representing multiple teams from Consultants Advisory engineering activity in various engineering disciplines in the preparation of designs and audited and calculating the schedules of quantity.

This is in addition to advisory supervision for the implementation of various projects in many provinces across Iraq stretching from Mosul to Basra.

- The engineering consulting bureau is currently doing the implementation of the work and tests and soil investigations for the benefit of several ministries and the private sector in the laboratories of the engineering consulting firm located in Al-Jadriya.

The bureau has prepared designs for many projects in recent years, including:

1. Academy for the Institutes of the Ministry of Agriculture: It includes a laboratory and internal departments, Cultural and social club and building for communications and the Internet in the province of Al-Muthanna.



2. Three Residential camps with investment companies in the provinces of Najaf, Karbala and Babylon.
3. 3 aircraft fuel stations at Baghdad International Airport for the Ministry of Defense.
4. Multiple buildings for the Ministry of Education.
5. The student social Clubs and Central Library and Classrooms  
the presidency of the university buildings and the laboratories buildings  
for research centers of Al-Nahrain University for the benefit of the Ministry of Higher Education and Scientific Research.
6. Kindergarten and nursery school and health center medallion of the rivers for the benefit of the Ministry of Higher Education and Scientific Research.
7. Multiple buildings for the Ministry of the Interior and the leadership of the federal police.
8. Multiple buildings for the Ministry of Youth and Sports Including tile martyrs forum.
9. A multi-purpose building in the province of Al-Najaf.

It also includes business consulting for chemical engineering on the study of corrosion and prevention methods proposing solutions which include:

The study of corrosion in heat exchangers, Cooling towers. corrosion in heat boilers, Corrosion in crude oil storage tanks and Corrosion in the pipe carrying water and chemical resources, corrosion in acidic and basic resources.

Recommending corrosion inhibitors (INHIBITORS) for catholic protection of pipelines and reservoirs of oil and steel structures and reservoirs of oil and steel structures. Study of the sediment in the heat exchanger and processed. Material and energy accounts control of industrial processes, selecting Substances.

- 1-Designing of chemicals and scrubbers.
- 2-The use of engineering software for analysis and the work of mathematical model of her.
- 3-Designing Engineering Equipment.
- 4-Water treatment and the study of pollutants to

water and air and propose solutions.

5-Modern technology to oil refining.

6-The use of Alhaest in simulations and oil refining units. Cofactors in units of oil refining, Purification salts (NACI).

7-Soft drinks industry, Maintenance and operation of boilers ammonia industry. 8-Checking the speculative accounts of the equipment and chemical processes and supervision of the installation and operation of chemical engineering equipment.

The most important projects carried out by the engineering consulting bureau are the completion of water project east of the Tigris (second expansion), the project of Airport Street, the Sports City Street, and the Sports City project in Basra.



Water project east of the Tigris

### Laboratory of Structural Tests

Laboratory includes the following units:

1- A Unit for physical examinations: it conducts many tests, including:

- A. Tests of rigid arsenal, the most important resistance to compression.
- B. Gradation of Fine and coarse aggregates
- c. Tests of cement and plaster physicist and Kashi, bricks and Alsteikr and ceramics.

2-Unit for chemical tests: it conducts chemical analysis for the following materials:

- A. The proportion of soluble salts in the rubble
- B. The proportion of salts, chlorides and sulfates of rubble, soil and gravel
- C. Cement, chemical tests

3-. Unit for tests and soil investigations: it conducts special examinations, acts of soil investigations, the tests of stones and the field tests

4. Unit of laboratory asphalt: it conducts the following examinations:

A. Private tests related to mixed asphalt tests, which include: The examination includes fragility, Penetration, viscosity, density) B. Examination of pulp for Special layers of asphalt.

### Engineering College Journal - Al-Nahrain University

The Engineering College Journal is an academic specialized journal that evaluate and publish scientific papers in all engineering study fields submitted by Iraqi and non-Iraqi researches. The editorial board consists of the college's faculty as well as an advisory board from Iraqi and foreign universities specialized in engineering sciences. The members of the two boards usually hold the scientific titles of Professor and Asst. Professor.

The editorial board holds monthly meetings to follow-up the progress of the submitted papers and the journal affairs as well as the approval or rejection of concluded papers according to the reviews of the selected professional reviewers for each paper whom are selected according to the specialized subject matter of each paper.

The journal was founded in 1988. It is a semi-annual publication in English, issued in Baghdad by the college of engineering with the registration number: SSN 187X- 1812. The journal has its own website which is: nucej.org.

### College Library:

The college of Engineering Library was founded in 2010 on the sidelines of the Second Regional Conference of Science and Engineering. The library contains a large hall with modern scientific books and journals in all engineering disciplines as well as theses and dissertations of the college students and students of other universities. It also contains a large reading

room which is equipped with a large flat-screen displaying titles of books that are found in the library. It is also used for the purpose of presenting some seminars which are related to the library.

The library is also equipped with a place for electronic search for books which are available in the library. This step is considered as a pioneering step in the field of reference search to facilitate the process of research for students.

### The Aim of the library

The library aims to provide the largest possible number of scientific books in engineering disciplines as much as possible to meet the students' requirements by providing the latest scientific books, whether in the hard or electronic copies form.

### The Library Divisions

The library includes several sections:

The First Section: Special tangible books (hard copy) involving (4171) books. It includes books in English and Arabic in the engineering disciplines and some other related disciplines. It also includes magazines and periodicals. The approved program in the search in this section of the library is (WINISIS) program.

The second section: it is special for master dissertations and PhD. thesis and their number is (512 dissertations and 103 theses) title. Furthermore there are dissertations and theses from other universities such as, the University of Baghdad, University of technological, Al-Mustansiriya and the University of Mosul.

The third section: it is special for electronic library, which includes the preparation of modern electronic books (CD) and the number is (1073), with its own search system and is providing services at the level of the entire College of Engineering, where the possibility of any member of the college and graduate students to conduct the initial search for books and download within

the department without the need to go to the college library.

The Fourth section: it is devoted to the periodicals. The number of local scientific journals in the library is (567) Scientific journal in English & Arabic languages.



The Library

### Summer Training

The college of engineering is conducting the training for the third year students and all academic departments and those of the fourth year for the departments of architecture and medical engineering during the summer holidays in the ministries, departments and formations affiliate in addition to the private discreet companies. The first stage start through approaching the students to the training side which is required to be a place which is appropriate for training to the Specialization of the student and after getting approval for training, the second phase starts so as to provide the student with an official letter directed to the concerned party. It is attached with evaluation form and filled by the side in which the student has been trained.

The training period should be for one month, starting from the first of July until the first of August of each year. Through this training, the students gain a lot of skills through inadvertent contact with experienced in their respective fields and can identify problems that they may face during their involvement in the practical side after graduating from college.

The student after the end of the training period should provide a detailed report on the experiment, which was experienced in the training site.

The college has worked over the past years on intensify the efforts during the preparation of the follow-up program for students and hold field visits by college professors to the students training places to identify the problems and obstacles they face and to find out how to take advantage of training.

The college has also trained a number of students in the international oil companies. Over the past two years 20 students have been trained in the (Schlumberger oil) company and our students have proved by the testimony of the company that they are at a high level of skill and scientific background, and our college is seeking to adopt a more sophisticated approach in training students in the coming years.

The number of students who have been trained during the academic year 2013/2014 has reached 164 students.

### Higher Studies

Year Founded: 1989-1990

The certificates granted: MA and Ph.D.

The total number of enrolled: 133 students and the number of students who have graduated in the academic year 2013/2014 is 22 students.

The number of graduate students of the Department of Laser Engineering and visual electronics: 14 Master's students.

The number of graduate students of the Department of Civil Engineering: 36 Master's student and 16 PhD students.

The number of graduate students of the Department of Chemical Engineering: 17 Master's student and 3 PhD students.

The number of graduate students of the Department of Computer Engineering: 10 Master's students.

The number of graduate students of the Department of Medical Engineering: 9 Master students.

The number of graduate students of the Department of Mechanical Engineering: 23 Master's student and one PhD student.

The number of graduate students of the Department of Electronic and Communications Engineering: 22 Master students.

The number of graduate students in the college

.PhD		Master	
Male	Female	Male	Female
8	3	26	29

## Curriculum for postgraduate studies

Department of Mechanical Engineering  
Graduate Studies - Master stage - heat energy

First Semester					Second Semester			
No	Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
			Th , App , Tut				Th , App , Tut	
1	UREQ 710	Technical English I	2	1	UREQ 720	Technical Eng-lish II	2	1
2	MEER 711	Advanced Engineer-ing Mathematics	2	2	MEER 721	Advanced Numerical Analysis and Com-putational Methods	2	2
3	MEER 716	Advanced Fluid Mechanics	3	3	MEER 726	Advanced Ther-modynamics	3	3
4	MEER 717	Heat and Mass Transfer	3	3	MEER 727	Two Phase Flow	3	3
5	MEER 718	Renewable Energy Sources	2	2	MEER 728	Elective II	2	2
6	MEER 719	Elective I	2	2	MEER 729	Elective III	2	2
Total			14	13	Total		14	13

Approved Electives:

#	Subjects	No	Subjects
1	Heat Exchanger	9	Transport phenomena
2	Advanced Gas Dynamics	10	Advanced Power Plant
3	Turbo Machinery	11	Aerodynamics
4	Two-phase heat transfer (boiling and condensation)	12	Tribology
5	Measurements Systems	13	Advanced Engineering Materials
6	Advanced Air-Conditioning and Refrigeration	14	Selected Topics in Thermo-Fluid Science
7	Advanced Automatic Control	15	Nano Technology
8	Computational Fluid Dynamics (CFD)		

## Graduate Studies - Master stage - Applied Mechanics

First Semester					Second Semester				
#	Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units	
			Th , App , Tut				Th , App , Tut		
1	UREQ 710	Technical English I	2	1	UREQ 720	Technical English II	2	1	
2	MEER 711	Advanced Engineering Mathematics	2	2	MEER 721	Advanced Numerical Analysis and Computational Methods	2	2	
3	MEER 712	Engineering Elasticity	3	3	MEER 722	Theory of Plates and Shells	3	3	
4	MEER 713	Engineering Plasticity	3	3	MEER 723	Fracture Mechanics	3	3	
5	MEER 714	Advanced Vibrations	2	2	MEER 724	Elective I	2	2	
6	MEER 715	Advanced Engineering Materials	2	2	MEER 725	Elective II	2	2	
Total			14	13	Total			14	13

## Approved Electives:

No	Subjects	No	Subjects
1	Advanced Automatic Control	7	Advanced Dynamics
2	Energy Method	8	Random Vibrations
3	Measurements	9	Tribology
4	Synthesis and Dynamics of Linkages	10	Structural Dynamics
5	High Energy Rate	11	Selected Topics in Applied Mechanic
6	Mechanics of Composite	12	Nano Technology

## Graduate Studies - PhD - Applied Mechanics

Electronic and Communications Engineering Department  
Graduate Studies - Master's stage

First Semester					Second Semester			
#	Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
			Th , App , Tut				Th , App , Tut	
1	UR 710	Technical English I	2	1	UR 720	Technical English II	2	1
2	ECEB 710	Elective I	2	2	ECEB 720	Elective IV	2	2
3	ECEB 711	Elective II	2	2	ECEB 721	Elective V	2	2
4	ECEB 712	Elective III	2	2	ECEB 722	Elective VI	2	2
5	ECEB 713	Advanced Digital Signal Processing I	3	3	ECEB 723	Advanced Wireless Communications	3	3



6	ECEB 714	Advanced Microwave Engineering	3	3	ECEB 724	Secure Communica-tions	3	3
Total			14	13	Total		14	13

## Approved Electives

#	Subjects	No	Subjects
1	Statistical Communication Theory	13	Discrete Estimation and filtering
2	Optimal Filtering and Prediction	14	Data Communications
3	Information Theory and Coding	15	Computer Communications
4	Advanced Signal Processing II	16	Speech Coding
5	Radar Systems	17	Data Compression
6	Advanced Communication Systems Engineering	18	Coherent Communications
7	Advanced Antennas and Propagation	19	Advanced Optical Communications
8	Spectrum Estimation	20	Image Processing
9	Spread Spectrum Systems	21	Advanced Satellite Communications
10	Digital modulation Techniques and Circuits	22	Approved Electives From Other Related Specializations
11	Data Security	23	(Advanced Selected Topic(s
12	Probability Theory and Random Processes		

Chemical Engineering Department  
Graduate Studies - Master's stage

First Semester				Second Semester				
#	Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
			Th , App , Tut				Th , App , Tut	
1	UREQ 710	English Lan- guage I	2	1	UREQ 725	English Language II	2	1
2	CHER 710	Advanced Fluid Flow	3	3	CHER 720	Advanced Heat Transfer	2	2
3	CHER 711	Advanced Ther- modynamics	3	3	CHER 721	Advanced Mass Transfer	3	3
4	CHER 712	Mathematical Modeling	2	2	CHER 722	Advanced Reactor Design	3	3
5	CHER 713	Elective I	2	2	CHER 723	Elective I	2	2
6	CHER 714	Elective II	2	2	CHER 724	Elective II	2	2
Total			14	13	Total		14	13

## Elective Subjects for M.Sc. Course

#	Subjects	#	Subjects
1	Rheology	12	Composite Technology
2	Advanced Process Control	13	Advanced Non-Newtonian Fluid
3	Mechanical Separation	14	Non-Newtonian Heat Transfer
4	Gas Engineering	15	Topics in Transport Phenomena
5	Process Design	16	Cathodic Protection
6	Energy Conservation	17	Digital Control
7	Advanced Petroleum Refinery	18	Nanotechnology
8	Advanced Corrosion Engineering	19	Non-linear Differential Equations
9	Advanced Engineering Statistics	20	Renewable Energy
10	Exergy	21	.Selected Topics, etc
11	Particulate Technology		

## Graduate Studies - PhD

Selected optional topics for PhD.

- |  |  |
|--|--|
| 1. . Selected Topics Corrosion Engineering | 10. Linear polarization                    |
| 2. Geometric count Advanced                | 11. Advanced Dynamic Engineering Chemistry |
| 3. Moadi selected phenomena transmission   | 12. Phenomena surfaces                     |
| 4. Cathodic protection Advanced            | 13. Water Treatment                        |
| 5. Advanced mathematical modeling          | 14. Advanced Reactor Kahrokimaawi          |
| 6. Digital control                         | 15. Balance whimsical                      |
| 7. Nano-technology                         | 16 minutes technology                      |
| 8. Air and water pollution                 | 17. Transmission of solid material         |
| 9. Absorption processes                    | 18. Catalysts                              |
|  | 19. Selected Topics                        |

Department of Computer Engineering  
Study Plan for Master

First Semester					Second Semester			
#	Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
			Th , App , Tut				Th , App , Tut	
1	CREQ 710	Technical English	2	1	CREQ 710	Technical English	2	1
2	CPER 710	Advanced Com-puter Networks	3	3	CPER 710	Hardware Descrip-tion Languages	3	3
3	CPER 711	Advanced Micro-processors	3	3	CPER 711	Switching and Routing Techniques	3	3
4	CPER 712	Elective I	2	2	CPER 720	Elective II	2	2
5	CPER 713	Elective III	2	2	CPER 721	Elective IV	2	2
6	CPER 714	Elective V	2	2	CPER 722	Elective VI	2	2
Total			14	13	Total		14	13

## Approved Electives

#	Subjects	#	Subjects
1	Advanced Digital Signal Processing	12	Advanced Numerical Computations
2	Advanced Digital Image Processing	13	Digital Control
3	Advanced Parallel Processing Techniques	14	Advanced Security Techniques
4	Advanced Operating Systems	15	Advanced Information Technology
5	Advanced Computer Simulation Techniques	16	Advanced Embedded Systems
6	Modern Control	17	Optimal Control
7	Advanced Expert System Techniques	18	Adaptive Control
8	Advanced Multiprocessor Systems	19	Advanced Real Time Systems
9	Advanced Topics in Engineering Mathematics	20	Advanced Wireless Networks
10	Advanced Soft Computing (ANN, FLC, GA)	21	Advanced Robotics and Automation
11	Advanced Interface Circuits	22	Special Selected Advanced Topic (s)

Biomedical Engineering Department  
Graduate Studies – Master

First Semester					Second Semester				
#	Code	Sub	Hrs Per Week	Units	#	Code	Sub	Hrs Per Week	Units
			.Theo					.Theo	
1	CREQ 710	Technical English	2	1	1	CREQ 710	Technical English	2	1
2	MDER 710	Advanced Mathematics	2	2	2	MDER 720	Advanced Numerical Analysis	2	2
3	MDER 711	Advanced Biomechanics	3	3	3	MDER 721	Advanced Signal Processing	3	3
4	MDER 712	Modern Control	3	3	4	MDER 722	Cardiovascular Mechanics	3	3
5	MDER 712	Elective I	2		5	MDER 722	Elective II	2	2
6	MDER 713	Elective III	2		6	MDER 723	Elective IV	2	2
Total			14	13	Total			14	13

## Approved Electives

#	Subjects	#	Subjects
1.	Bio-Medical Optics and lasers	10.	Advanced Bio-Tribology
2.	Advanced Biomaterials	11.	Advanced Analytical Mechanics
3.	Ultrasonic Bio-instrumentation.	12.	Clinical Engineering.
4.	Human Thermal Balance Systems	13.	Advanced Image Processing.
5.	Tissue Engineering.	14.	Fuzzy Logic Design
6.	Compartmental Analysis.	15.	Advanced Computer Simulation Techniques
7.	Modeling of Physiological System.	16.	Advanced Interface Circuits
8.	Bone Mechanics	17.	Special Selected Advanced Topic(s)
9.	Respiratory Mechanics		

**Books:**

Dr. Asmaa Thamer Ibrahim



**COLLEGE OF  
ENGINEERING**





# COLLEGE OF SCIENCES



College of Sciences Hall

قاعة كلية العلوم

## About College of sciences

This college was established in 1988. Since its earliest days, this college has been committed to innovation and quality in teaching and advance research. It aims at providing students with pure science and technology knowledge on both practical and theoretical basis, it includes the following departments: Chemistry, Physics, Computer Sciences, Mathematics and Computer Applications, and Biotechnology. The college grants Bachelor, Master, and Doctoral degrees.



### About the College:

The College of Science was established with the founding of the University of Al-Nahrain in 1988, with three departments; namely the Department of Chemistry Science, the Department of Physics Science, the Department of Computer Science.

Later the Departments of Mathematics and Computer Science Applications were opened in

1990. The department of Bio-Science Technology was established to become the college of Science of fifth scientific department seeking to formulate a distinguished scientific base for basic science, through distinctive plans and programs of study to fulfill the requirements of the global academic standards to grant the B.A.'s, M.A.'s and Ph.D. degrees in various disciplines.



### Deans of the College of Engineering



Prof. Dr. Jalal Mohammed Saleh

1987 – 1995



Prof. Dr. Falah Abdul-Jabbar Etawi

1995 – 2003



Prof. Dr. Laith Abdul Aziz Alani

2003 – 2011



Prof. Dr. Kholod Mohammed Abboud

2011 – 2014



Prof. Dr. Hadi Mohammed Ali Abood

2014-UNTIL NOW

### Council of the College of Science for the Academic Year 2015-2016

No.	Full name	position	Scientific Section	Academic Rank	General Specialization	Specific Specialization	Degree	Date of joining
1	Hadi Mohammed Ali Abood	Dean of the College	Department of Chemistry	prof.	Chemistry	Inorganic chemistry	Ph.D.	19/1/ 2014
2	Fadhel Subhi Fadhel	Associate Dean for	Department of Mathematics and Computer Applications	Asst.prof.	Mathematics	Dynamic systems	Ph.D.	24/6/ 2015
3	Wisam Kadhum Hummadi	Associate Dean for Academic Affairs	Department of Chemistry	Lecturer	Chemistry	Biochemistry	Ph.D.	6 /10 /2015
4	Nasreen Raheem Jber	Head of Department of Chemistry	Department of Chemistry	Asst.prof.	Chemistry	Organic Chemistry	Ph.D.	10/02/2014
5	Alaa Jabbar Ghazai	Head of the Department of Physics	Department of Physics	Asst.prof.	Physics	Solid State Physics / Thin Film	Ph.D.	10/8/ 2015
6	Ban Nadeem Thannoon	Head of Department of Computer	Department of Computer	prof.	Computer	Discern patterns	Ph.D.	10/4/2016
7	Osama Hameed Mohammed	Head of Mathematics and Computer Applications Division	Department of Mathematics and Computer Applications	Asst.prof.	Mathematics	Approximation theory	Ph.D.	10/8/ 2015
8	Hamid Majid Jasim	Head of Department of Biotechnology	Department of bio-technology	Prof.	Bio-technology	Inheriting molecule	Ph.D.	15/12/2012





Dean of the College



The College Council

## Teaching staffs for the Academic year 2015- 2016

No.	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Hamid Yousif Hameed	Professor	Sport Administration	Bio mechanic	Ph.D.
2	Omar Adnan Khammas	Lecturer	Sharia	Human rights	.M.Sc
3	Bilal Abdul Alsattar Yousif	Lecturer	Physics	Solid state	.M.Sc
4	Mohammed Qasim Ali	Assistant Lecturer	Computer Science	Computer	.M.Sc
5	Zeyad Hameed Abid	Assistant Lecturer	Sport Administration	Marketing and Investment	.M.Sc



6	Shaimaa Hadi Abdul Ridha	Assistant Lecturer	English Language	English Literature	.M.Sc
7	Ammar Abdul Sattar Zghyer	Assistant Lecturer	Physics	Nuclear Physics	.M.Sc
8	Bahaa Abdullah Hamdan	Assistant Lecturer	Language	Persian Language	.M.Sc
9	Raghad Saad Zinad	Assistant Lecturer	Engineering Technology	Material state	.M.Sc
10	Wijdan Thamer Fzaa	Assistant Lecturer	Physics	Laser & Molecular	.M.Sc

### The Mission

The college of science provides programs of study and scientific research system's to achieve the aspirations of the beneficiaries and contribute to be as a centre of scientific expertise in serving the community in technology and industrial, by preparing graduates with the efficiency of high-quality to support national development and to ensure optimum use of public partnership.

### Vision:

The college of science seeks to be a leader in the field of education and research in basic and applied sciences so as to serve the community and become a center of innovation and creativity through the development of high quality educational programs, and within the international standards.

### The Goals

**1** The college of science mobilizes all the energies of faculty, administrative and technical staff to fulfill the overall goal of the foundation in preparing young scientists projects in the terms of reference for chemistry, physics, mathematics, computer technologies and bio-bearing putting every effort and potential interest in the quality and level of scientific graduates.

**2** The college through its department's access to the curriculum in universities discreet to developed the study plans in shape and guaranteed through which to develop the study plans in shape and content in line with the permanent and rapid development in the college specializations and provide graduates with up to date knowledge environment to be able to creative thinking.




**3** Provide materialism support in developing the scientific laboratories, computer labs and English language, and processing with new technologies to increase the efficiency of the students in the practical side.

**4** Provide a university atmosphere among students, through the system by which the college in the follow-up the teaching process, which earned community educational and other institutions confidence.

**5** The development of the teaching staff by providing material support participate in an excellent courses and conference locally and globally.

**6** Preparation of scientific research and the promotion of strategic projects by asking college departments to claim the overall scientific departments to prepare scientific research plans, and encourage strategic projects that are in need to the country and an emphasis on the practical side to follow as much as possible .

Names of the top three students at the college for the academic year 2015-2016

No.	Name	Section		Average
1	Noor Samir Rahmaa	Mathematics and Computer Applications		84.040
2	Ibtihal Abbas Daiem	Computer Science		82.784
3	Marowa Mohammed Khalid abd	Physics		80.527

Number of Students Graduated from the College for the Academic Year 2015-2016

Male	Female
38	62

### The Scientific Advisory Bureau

The scientific advisory bureau the college of science was founded in 1998. It is a technical bureau which advises and provides services to help companies, state departments and institutions of the community and others, as it is designing and hosting web sites on the internet, design and search engine works on data bases. This is in addition to the various softwares by the latest global programs, such programs and databases in the retail and warehouse management sys-

tems, the identities, and electronic access cards and address technical problems, through advisory functions by distinguished scientific staff.





The advisory bureau also introduced a special unit internet service in the middle of 2005. This service is opened to all lecturers and students of the college of science and other colleges of the university of Al-Nahrain. This unit provides browsing and printing services and copying CDs, in addition to the establishment of various courses in the field of computers.

### Division of Quality Assurance and University Performance

The quality assurance division of the college of science was established during the academic year 2008-2009 as a complementing to the department of quality assurance and university performance in the presidency of Al-Nahrain University. It is working on the application of educational quality assurance system in all educational and research activities of the college and other activities to ensure and provide high-quality academic programs and to attempt to achieve excellence in this area.

### Journal of the College of Science:

[alnahrainSciuni@yahoo.com](mailto:alnahrainSciuni@yahoo.com)

Since 1996 the college has been issuing a scientific journal which is specialized court aiming to issue the products of researchers in all disciplines inside and outside the university interested in scientific research, which has never published in English. The college of science, in the first instance, issued one of a number of journal per year until 2003, then since 2004 doubled its activities and increased the number of issued to become every three months. The journal aims

to enrich the knowledge in various fields and research efforts show through scientific articles published, that must be characterized by innovation, novelty and scientific methodology and healthy of language and safety of the method. The journal also works through the editorial staff represented by the dean and heads of the departments of the college to developed the journal and the upgrading it for the better by defining the journal and choosing the serious and distinguished researchers who add a new horizon of



knowledge, and the coordination with the competent authorities about the contributions and applications for membership in the journal, as it has also obtained a private international journal numbering:

ISSN: 1814-592.

Journal of the College of Science

### Unit of Scientific Glass Workshop

The scientific glass workshop was established in 1972 as the first unit in Iraq, and was initially affiliated to the Council of Scientific Research. Then, in 1990, the staff of the unit was transferred to the College of Science / University of Al-Nahrain and started its work by manufacturing and repairing of the scientific glass devices, which are used in the analysis of applied laboratories. In addition to, the workshop manufactures complete systems for research projects submitted by the undergraduate studies and graduated students and according to the quality of demand and planned, such as: Manufacturing capacitors with its three kinds, distilled water devices, extraction devices, the Klvnger and Alvescomitrut device, Trains and test tubes, the capillary tubes and Alphenlatand other devices which are on demand. The unit also provides

services to other universities, in addition to all state offices to train the staff providing consultancy, manufacturing and repair services.



Glass Works

### College of Sciences Library:

The library of the college of science was established in March 2006, which includes more than 4700 sources of knowledge, which include books, reports and modern encyclopedias and references related to all of the terms of reference sections of the college, which would facilitate access to sources of knowledge to university students and faculty members. This includes all services provided by bibliographic information, internal and external borrowing, service and access to information through a computer cylinders. This is in addition to specialized groups in other diverse areas such as medical, engineering, science and technology and other information. It is also common in educational journals and publications in addition to diverse groups of scientific journals.



College of Sciences Library

### The unit of Sports and Artistic Activities

The unit aims at directing physical activities in the college and coordination with colleges and Formations University and the university union, and managing to establish activities, competitions and performances to raise the level and spirit of athletics with university students as an integral aspect of the culture of public education for young people. It is of invaluable use to the newly trained young people who can be of benefit to the schools under the supervision of professors specializing in the field of physical education, in addition to providing all the supplies and sports equipments to the participants in the events.as well as the awarding of prizes to the winning teams in the form of medals and cups with promotional gifts to outstanding players.



Sport Activity

### Artistic Activity

It is responsible for the artistic activities for modern universities by providing them the opportunity to practice hobby painting, sculpture and fine-tune their talents and development, through training at the hands of the creators of specialists in these fields artists and provide all the supplies to them, each according to his tastes and orientations art and establishment of exhibitions to show their products in order to launch their potentials and develop their abilities and creativity.



## Scientific Departments

### Department of Chemistry

The department of Chemistry was established as one of the main academic departments in the College of Science / Al-Nahrain University in 1988. The department aims to train students in the field of chemistry when the student receives a B.A.'s degree in chemistry after completing 144 units according to the general plan of the university. The department also includes a number of faculty members in various disciplines of chemistry and the amount of numbers (20) of Ph.D.

degree holders and (37) of the M.A.'s degree, as well as, technicians and administrators, the section contains a (6) laboratories to teach students and more than (10) research laboratories and modern equipments have been installed.

Graduates of the department of chemistry work in different areas of academic and scientific fields such as in the universities, colleges and institutes as teachers and in factories, laboratories public and private sectors as chemists and analysts as supervisors and chemical processes, as well as, researchers in research centers.

The faculty members of Chemistry Department for the Academic Year 2015-2016

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Hadi Mohammed Ali Abood	Prof.	Inorganic chemistry	Ionic liquids	Ph.D.
2	Hilal Shihab wahhab	prof.	Chemical physics	Theoretical physics	Ph.D.
3	Nasreen Raheem Jber	Asst.prof.	Organic chemistry	Liquid Crystals	Ph.D.
4	Salman Ali Ahmed	Asst.prof	Biochemistry	Metabolism	Ph.D.
5	Emad Abdul Huseen Yousif	Asst.prof	Analytical chemistry	Applied inorganic	Ph.D.
6	Shatha Fadhil Mohammed Hassan	Asst.prof	Physical chemistry	Quantum chemistry	Ph.D.
7	Mehdi Salih Shihab	Asst.prof	Organic chemistry	Theoretical Organic	Ph.D.
8	Taghried Ali Salman	Asst.prof	Physical chemistry	Thermal physics	Ph.D.
9	Jawad Kadhum Shneine	Asst.pro	Biochemistry	Organic Chemistry	Ph.D.
10	Alaa Hussein Jawad	Asst.prof	Biochemistry	Clinical Chemistry	Ph.D.
11	Ahmed Askar Najaf	Asst.prof	Geology	Strata	Ph.D.
12	Firas Abdullah Hassan	Asst.prof	Biochemistry	Clinical Chemistry	Ph.D.
13	Ahmed Abdul Al-Razzaq Ahmed	Asst.prof	Chemistry	Organic	Ph.D.
14	Majid Shannon Khalaf	Asst.prof	Chemistry	Organic Metallic	Ph.D.
15	Ammar Jihad Sadiq	Lecturer	Chemistry	Inorganic chemistry	Ph.D.
16	Dheaa Shamikh Zager	Lecturer	Chemistry	Analytical nuclear	Ph.D.
17	Wisam kadhum hummadi	Lecturer	Chemistry	Biochemistry	Ph.D.



18	Amal Esmaeel Ibrahim	Lecturer	Chemistry	Biochemistry	Ph.D.
19	Atheel Hassan Kadhim	Lecturer	Chemical engineering	Catalyst	.Ph.D
20	Asmaa Yhya	Lecturer	Chemistry	Physical chemistry	.Ph.D
21	Khalidah Obaid Samawi	Lecturer	Chemistry	Physical chemistry	.Ph.D
22	Dina Adil Najeeb	Lecturer	Chemistry	Inorganic chemistry	M.Sc.
23	Farah muaiad Ibrahim	Lecturer	Chemistry	Inorganic chemistry	M.Sc.
24	Wedad Hamad Shaban	Lecturer	Chemical Engineering	Industrial	M.Sc.
25	Abbas Hadi Humedi	Lecturer	Chemistry	Industrial	M.Sc.
26	Rana Abd Hammza	Lecturer	Chemistry	Analytical chemistry	M.Sc.
27	Dhuha Hashem Fadhel	Lecturer	Chemistry	Inorganic chemistry	M.Sc.
28	Sarah Abdul qader Mahdi	Lecturer	Chemistry	Biochemistry	M.Sc.
29	Hamsa Thamer Sadic	Lecturer	Chemistry	Biochemistry	M.Sc.
30	Ekhlas Abdul Khudher Salman	Lecturer	Chemistry	Physical chemistry	M.Sc.
31	Suhad Abdul azeez Ibrahim	Lecture	Chemistry	Biochemistry	M.Sc.
32	Hanan Abdul alteef Ibrahim	Lecture	Chemistry	Inorganic chemistry	M.Sc.
33	Khawla Abd al-kareem Kasar	Lecture	Chemistry	Biochemistry	M.Sc.
34	Zena Ismael Ibrahim	Lecture	Chemistry	Biochemistry	M.Sc.
35	Ahmed Abass Najim	Lecture	Chemistry	Analytical chemistry	M.Sc.
36	Ali Ameen Abd Ali	Lecture	Chemistry	Physical chemistry	.M.Sc
37	Zahraa Sabah Saeed	Lecture	Chemistry	Organic chemistry	.M.Sc
38	Shaymaa Muhsen Ahmed	Lecture	Chemistry	Organic chemistry	.M.Sc
39	Amina Muhsen Abbas	Lecture	Chemistry	Analytical chemistry	.M.Sc
40	Sahar Samir Mohammed	Lecture	Chemistry	Organic chemistry	.M.Sc
41	Osama Bedran Hammod	Lecture	Chemistry	Physical chemistry	.M.Sc
42	Dalia Mahmood Jamil	Lecture	Chemistry	Analytical chemistry	.M.Sc
43	Mohammed Hussein Ali	Lecture	Chemistry	Analytical industry	.M.Sc
44	Abeer Khazaa Shams	Lecture	Chemistry	Physical chemistry	.M.Sc

45	Ahmed Sabeeh Majeed	Lecture	Chemistry	Inorganic chemistry	M.Sc.
46	Khalid Waleed Younus	Lecture	Chemistry	Biochemistry	M.Sc.
47	Rasha Saad Jwad	Lecture	Chemistry	Organic chemistry	M.Sc.
48	Hadeel Adil Abass	Lecture	Chemistry	Biochemistry	M.Sc.
49	Huda Ghalib Salman	Lecture	Chemistry	Organic chemistry	M.Sc.
50	Noora Asaad Baqer	Lecture	Chemistry	Organic chemistry	M.Sc.
51	Evon Akram Abdul Jabbar	Assistant Lecturer	Chemistry	Inorganic chemistry	M.Sc.
52	Fatima Mustafa Abdul Hameed	Assistant Lecturer	Chemistry	Inorganic chemistry	M.Sc.
53	Farah Aqeel Rashid	Assistant Lecturer	Chemistry	Analytical chemistry	M.Sc.
54	Muataz Adnan Ali	Assistant Lecture	Chemistry	Analytical chemistry	M.Sc.
55	Mustafa Sabeh Abdullah	Assistant Lecture	Chemistry	Industrial chemistry	M.Sc.
56	Ahmed Faris Ali	Assistant Lecture	Chemistry	Analytical chemistry	M.Sc.
57	Raghda Saqar	Assistant Lecture	Chemistry	Biochemistry	M.Sc.
58	Saraa Abdul Aziz Ibraheem	Assistant Lecture	Chemistry	Analytical chemistry	M.Sc.
59	Shaymaa Mahmood Ali	Assistant Lecture	Chemical engineering	Chemical engineering	M.Sc.
60	Madeeha Hamid Mahmood	Assistant Lecture	Chemistry	Analytical chemistry	M.Sc.



## Course Syllabus for undergraduate

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CHEM 121	Anal.chem	2, 3, 1	4	CHEM 122	Anal.chem	2, 3, 1	3
CHEM 111	Inorg.chem	2, 3, 1	3	CHEM 112	Inorg.chem	2, -, 1	2
CHEM 131	Org.chem	2,-, 1	2	CHEM 132	Org.chem	2, 3	3
MATH 141	calculus	3	3	MATH 142	calculus	3	3
PHYS 162	Physics	2, 3	3	PHYS 163	Physics	2,3	3
UREQ 151	computer	2, 3	3	UREQ 152	computer	2, 3	3
UREQ 110	English	2	2	UREQ 110	English	2	2
	Total	5	20		Total	5	19

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CHEM 221	Anal.chem	2, 3, 1	3	CHEM 222	Anal.chem	2,3,1	3
CHEM 211	Inorg.chem	2, -, 1	3	CHEM 212	Inorg.chem	2,3	3
CHEM 241	Phys.chem	2, 3, 1	3	CHEM 242	Phys.chem	2,3	3
CHEM 231	Org.chem	2,3,	3	CHEM 232	Org.chem	2, -,1	2
CHEM 251	Bio.chem	2	2	CHEM 252	Bio.chem	2,3,1	3
BIOT 281	Safety	3	3	UREQ 245	calculus	3	3
UREQ 201	Arabic	1	1	UREQ302	Arabic	1	1
	Total	6	18		Total	4	18

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CHEM 331	Org.chem	2	2	CHEM322	Anal.chem	2,-,1	2
CHEM 311	Inorg.chem	3, -, 1	3	CHEM 312	Inorg.chem	2	2
CHEM 351	Bio.chem	2, 3	3	CHEM 352	Bio.chem	2	2
CHEM 341	Phys.chem	2,3,1	3	CHEM 342	Phys.chem	2,3,1	3

CHEM 371	Radiation	2	2	CHEM 362	Inds.chem	2,3	3
CHEM 321	Anal.chem	2,-,1	2	CHEM 382	research project	6	2
UREQ 320	Democracy	1	1	CHEM 332	Org.chem	2,3,1	3
	Total	5	16		Total	10	17




Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CHEM 421	Anal.chem	2, 3	3	CHEM422	Anal.chem	2	2
CHEM 451	Bio.chem	2, 3	3	CHEM 443	Phys.chem	2	2
CHEM 441	Quantum	2	3	CHEM 490-499	elective nanotechnology	2	2
CHEM 481	research-project	6	2	CHEM 432	Org.chem	2,3	3
CHEM 431	identification	2, 6	4	CHEM 412	Inorg.chem	2,3	3
GEOL 491	Geology	2	2	CHEM 462	Inds.chem	2,3	2
				CHEM 479	environmental pollution	2	2
	Total	10	17		Total	8	17

## Course Syllabus for M.Sc.

M.Sc. Year First Semester				M.Sc. Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CHEM511	Advanced inorganic chemistry	3	3		Elective I		
CHEM 521	advanced analytical chemistry	2	2		Elective II		
CHEM 531	advanced organic chemistry	2	2		Elective III		
CHEM 541	advanced physical chemistry	3	3		Applied spectroscopy		
CHEM 551	advanced biochemistry	3	3	CHEM 502	English language	2	1
CHEM 501	English language	3	1	CHEM 510	Seminar and research technique	2	1

Total			Total		
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The top Three Students in the Section for the Academic  
Year 2015-2016

No	The Name	Picture	Average
1	Aya Ahmed AbaalSatta- rAbdalJabar		78.013
2	Dania EmadIbraheem Ali		77.635
3	Balsam Mohammed Ahmed Mohammed		73.613

Number of Students Graduated from the Department for the Academic Year 2015-2016

Male	Female
3	6

Higher Studies

The higher studies was founded in 1990. The number of students who are graduated in the academic year 2015-2016 are as follows:

Male	Female
2	4



## Artistic Activity

### Laboratories

There are six laboratories in the department of chemistry. Students are trained on how to apply what they have taught practically to acquire the necessary skill to turn their theoretical information to reality. The section includes the following laboratories:

1. Laboratory of analytical chemistry and automatic analysis.
2. Laboratory of organic chemistry.
3. Inorganic chemistry laboratory.
4. Laboratory of physical chemistry.
5. Laboratory of biochemistry.
6. Industrial chemistry laboratory and general chemistry.

There is also in the section a number of laboratories used by faculty and graduate students to conduct their special operation. Studies related to their works and researches:

Analytical Chemistry Research Laboratory (three).

Organic Chemistry Research Laboratory and liquid crystals (three).

Inorganic Chemistry Research Laboratory and ionic liquids (three).

Physical Chemistry and Nanotechnology Research Laboratory (four).

Biochemistry research laboratory (two).

Industrial Chemistry Research Laboratory (two).

## Laboratory Equipment

Chemistry department has been providing a number of scientific instruments, including:

1. Infrared spectroscopy (FTIR).
2. UV spectroscopy (UV-VIS).
3. ELECTROPHORESIS.
4. Analysis of CHNSO elements.
5. Thermal Analysis Tg- DTA- DSC.
6. AFM.
7. GC-MASS.
8. Atomic absorption measurement Atomic absorption.
9. Furnace.



IR Laboratory



Chemistry Department 2014–2015

## Department of Physics

The department of Physics was established in 1988 with the foundation of the college in which 6 students only were accepted as a first batch. Over the years, the physics department accepted a largest number of students, under the supervision of a distinguished staff of specialists physicists who always seek to keep pace with the sustainability of the evolving science of physics, and industrial applications that resulted from basic research in this science. So it has focused the bulk of their attention on two areas of teaching and research. As the need in our country to the outstanding young people in science to contribute to the scientific development of the physics department aims to graduate elite group of physicists capable of logical thinking and scientific analysis enhanced by the theoretical side. For this purpose, the curriculum

was developed to include classical physics in all its branches of modern physics and quantity and the fact that the language of mathematics is physics. It had been updated c with lessons in basic maths and advanced technologies. Other scientific topics were introduced for its importance, such as digital importance, such as digital programming, chemistry and electronics. In order to keep abreast of scientific developments, an Introducing a complimentary elective courses in the curriculum of the fourth year of study.

It aims to prepare staff in the field of theoretical and applied physics on advanced levels, where the degree of M.A. is awarded in one of the following special disciplines.

- (1) Optical treatment (5) Thin films  
 (2) The electron optics (6) Theoretical Physics  
 (3) Nuclear physics (7) Quantitative Physics  
 (4) Solid state physics (8) Plasma

Student will select a research project and work on it.

#### The Staff Members of Physics Department for the academic Year 2015-2016

Sq.	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Ayad Abdul Aziz Al-Ani	Prof.	Physics	Digital image processing	Ph.D.
2	Emad Khdiar Al-Shakarchi	Prof.	Physics	Solid state and Superconductivity	Ph.D.
3	Saad Naji Abbod	Prof.	Physics	Theoretical Physics	Ph.D.
4	Ahmad Kamal Ahmad	Prof.	Physics	Electron Optics	Ph.D.
5	Laith Abdul Aziz Al-Ani	Prof.	Physics	Digital image processing	Ph.D.
6	Nada Fadhil Tawfeek	Prof.	Physics	Applied nuclear physics	Ph.D.
7	Mohammed A.Z.Habeeb	Asst. Prof.	Physics	Theoretical Physics	Ph.D.
8	Thamir Abdul-Jabbar Jumaa	Asst. Prof.	Physics	Material Science	Ph.D.
9	Hussain Ali Ahmad	Asst. Prof.	Physics	Applied nuclear physics	Ph.D.
10	Kareem Khalaf Mohammad	Asst. Prof.	Physics	Applied nuclear physics	Ph.D.
11	Khalid Abbas Yahya	Asst. Prof.	Physics	Plasma	Ph.D.
12	Talib Saloom Hammadi	Asst. Prof.	Physics	Solid State Thin Film	Ph.D.
13	Oday Ali Hussein	Asst. Prof.	Physics	Electron Optics	Ph.D.
14	Suha Mousa Khorsheed	Asst. Prof.	Physics	Optical System Design	Ph.D.
15	Zainab Munther Kubba	Asst. Prof.	Physics	Solar Cell System	Ph.D.
16	Qasid A. Al-Sattar	Asst. Prof.	Physics	Material Physics	Ph.D.
17	Alaa Jabbar Ghazai	Asst. Prof.	Physics	Solid State Physics /Thin Film	Ph.D.
18	Ibtisam Muhi Al-Naimi	Asst. Prof.	Physics	Atomic physics	M.Sc.
19	Abdul Jabbar Mohammad	Asst. Prof.	Physics	Thin Films	M.Sc.
20	Adnan Abdul-Lateef	Asst. Prof.	Physics	Nuclear Physics	M.Sc.

21	Wasen Ali Mousa	Asst. Prof.	Physics	Solar Cell	M.Sc.
22	Bashar Jasim Hamad	Lect.	Physics	Digital Image processing	Ph.D.
23	Hassan Nasir Hashim	Lect.	Physics	Plasma	Ph.D.
24	Nissan Soud Oribi	Lect.	Physics	Plasma	Ph.D.
25	Ahmed Abdulrahman Ahmed	Lect.	Physics	Experimental Applied Physics	Ph.D.
26	Alyaa hussain mohammed	Lect.	Physics	Nuclear Physics	Ph.D.
27	Hind Subhi Hussain	Lect.	Physics	Antenna	Ph.D.
28	Sadeem Abbas Fadhel	Lect.	Physics	Material Science	Ph.D.
29	QussyRagib Ali	Lect.	Physics	Laser	Ph.D.
30	Omar Ayad	Lect.	Physics	Nuclear Physics	Ph.D.
31	Bassma Hussain Hamad	Lect.	Physics	Plasma	Ph.D.
32	Rasha Sabeeh Ahmed	Lect.	Physics	Nuclear physics	Ph.D.
33	Ibraheem Abdul Mahdi	Lect.	Physics	Theoretical Physics	Ph.D.
34	Mohammed Tariq	Lect.	Physics	Solid State	M.Sc.
35	Ahmed Aziz	Lect.	Physics	Ionic optics	.M.Sc
36	Zainab Khalid Nasrallah	Lect.	Physics	Applied nuclear physics	M.Sc.
37	Melad Jithlan Ali	Lect.	Physics	nuclear physics	M.Sc.
38	Taghreed Khalid	Lect.	Physics	Laser	M.Sc.
39	Bilal Khalid	Lect.	Physics	Electron Optics	M.Sc.
40	Wasen Ali Khudeir	Asst. Lect.	physics	Solid State	M.Sc.
41	Hala Fadhel Abbas	Asst. Lect.	physics	Optics	M.Sc.
42	Wisam Mohammed Oraibi	Asst. Lect.	physics	Solid State	M.Sc.
43	Wildan Mohammed Awwad	Asst. Lect.	physics	Holograms	M.Sc.
44	Roaa Tahseen	Asst. Lect.	physics	Electron optics	M.Sc.
45	Ahmed Shaker	Asst. Lect.	physics	Signal Processing and Analysis	M.Sc.
46	Jazeel Hussain	Asst. Lect.	physics	Signal Processing and Analysis	M.Sc.
47	Nour Mohammed Hassan	Asst. Lect.	physics	Optics	M.Sc.
48	Narjes Zamel	Asst. Lect.	physics	Laser	M.Sc.
49	Hussein Ali Waheeb	Asst. Lect.	physics	Electron optics	M.Sc.
50	Lutfi Majeed	Asst. Lect.	physics	Plasma	M.Sc.
51	Salam Ismael	Asst. Lect.	physics	Atmospheric Science	M.Sc.

52	Essam Mohammed Rasheed	Asst. Lect.	physics	Applied nuclear physics	M.Sc.
53	ZeenaMowafaq	Asst. Lect.	physics	Electronics	M.Sc.
54	Masara Ahmed	Asst. Lect.	physics	Nanotechnology	M.Sc.
55	Jenan Hussain	Asst. Lect.	physics	Solid State	M.Sc.



Council of the Department Physics

## Course Syllabus for Undergraduate

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UREQ111	English II	2	2	UREQ111	English II	2	2
UREQ151	Programming Fundamentals	5	3	UREQ151	Programming Fundamentals	5	3
MATH142	Calculus II	4	3	MATH142	Calculus II	4	3
PHYS121	Mechanics and Properties of Matter	7	4	PHYS121	Mechanics and Properties of Matter	7	4
PHYS122	Electricity and Magnetism II	7	4	PHYS122	Electricity and Magnetism II	7	4
PHYS123	Geometrical Optics	6	4	PHYS123	Geometrical Optics	6	4
	Total	31	20		Total	31	20

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
MATH211	Vector Analysis	3	3	COMP251	PROGRAMMING I	6	3
PHYS213	Physics of Waves	6	4	MATH225	P.D.E	4	3
PHYS214	Thermodynamics	6	4	PHYS222	Analytical Mechanics	4	4
MATH215	Introduction to Complex Analysis	4	4	PHYS223	Physical Optics	6	4
MATH216	Differential Equations	3	3	PHYS224	Thermodynamics and Statistical Physics	4	3
				PHYS225	Modern Physics	3	2
	Total	22	18		Total	27	19

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UREQ301	Arabic Language	1	1	UREQ302	Arabic Language II	1	1
BIOT382	Biotechnology I	6	3	PHYS321	Quantum Mechanics II	4	3
MATH344	Numerical Methods	7	4	PHYS322	Electronics II	7	4
PHYS363	Electronics I	6	3	PHYS323	Electromagnetic Theory II	4	3
PHYS311	Electromagnetic Theory I	4	3	PHYS324	Atomic Physics	6	3
PHYS312	Quantum Mechanics I	4	3		Elective	2	2
	Elective	2	2		Elective	2	2
	Total	30	19		Total	26	18

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UREQ420	Human Rights	1	1	UREQ421	Democracy	1	1
PHYS412	Nuclear Physics I	7	4	PHYS421	Nuclear Physics II	6	4



PHYS413	Solid State Physics I	7	4	PHYS422	Solid State Physics II	6	4
PHYS414	Laser I	6	4	PHYS423	Laser II	4	3
PHYS415	Project	6	2	PHYS425	Project	6	2
	Elective	3	3		Elective	3	3
	Total	30	18		Total	26	17




## Course Syllabus for M.Sc.

M.Sc. Year First Semester				M.Sc. Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PHYS511	Classical Mechanics	3	3	PHYS521	Electromagnetic theory	3	3
PHYS512	Mathematical Physics	3	3	PHYS522	Seminar	2	1
PHYS513	Advanced Experimental Techniques in Physics	2	2	PHYS523	Advanced Quantum Mechanics	3	3
PHYS514	Advanced Solid State Physics	2	2	PHYS524	Elective	2	2
PHYS515	Advanced Nuclear Physics	2	2	PHYS525	Elective	2	2
UREQ501	English	1	1	PHYS526	Elective	2	2
				UREQ501	English	1	1
	Total	13	13		Total	15	14

## Course syllabus for Ph.D.

Ph.D. Year First Semester				Ph.D. Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PHYS611	Relativistic Quantum Mechanics	3	3	PHYS621	Computational Physics	3	3
PHYS612	Electrodynamics	3	3	PHYS622	Seminar	2	1
PHYS613	Seminar	2	1	PHYS623	Elective	3	3
PHYS614	Elective	3	3	PHYS624	Elective	3	3
PHYS615	Elective	3	3	PHYS625	Elective	3	3
				UREQ601	English	0	0
	Total	14	13		Total	14	13

The top three Students in the section for the academic year 2015-2016

Sq.	The Name	Picture	Average
1	Marowa Mohammed Khalid abd		80.527
2	Elaf Ali rissem		74.749
3	Mustafa Lafta Hamd Fyad		72.782

Number of Students Graduating from the Department for the Academic Year 2014-2015

Male	Female
10	16

### Laboratories

- SEM lab.
- Electron microscope scanner.
- Scanning electron microscope (SEM).

It provides us with an amazing enlarged pictures, where to send a package of electrons above the surface of the sample, so the secondary electrons fretted from the surface. This gives an image of the surface of the thing. Electron microscope scan enlarge things scanner 100,000 times or even up to 10<sup>6</sup> times, but cannot be used to view alive specimens, as is the case for

the transmission electron microscope (TEM).

The word microscope scanner means that the sample is not filmed, but the concentration of electron beam to a small spot of the sample and captures the image and then move to a nearby point and pick them up, and so on consecutive. Microscope does not get the image of the whole sample, but picked up a point-by-point through the computer program "Software" brings comic points to create the final image for the full sample on a computer screen. In addition to the ability to enlarge images of samples, there is an additional

advantages equipped with a device portability disclose the components of the samples examined by checking all (Energy Dispersive X Spectroscopy) known for short (EDX), which gives this examination percentages of the components of the sample.



Solid State Physics Research Laboratory



X-Rays Laboratory

### General Guide Lines for a Demission to the Initial Plan and Higher Studies

The lessons are distributed as (basic les-

sons, secondary and public lessons) (supported on eight semesters, thus, secondary and general lessons are focused on the first two years, where the lessons with competence are given in the third and fourth years, in addition to summer training and graduation project.

### The Higher Studies Include Two Phases

The first is the preparatory year which is divided into two terms (courses) given to the first quarter of the key lessons by four basic lessons in the study of physics in addition to it studying the English language. In the second semester lessons would be given more specialized in the field of the student's choices of the research field. The matter of success and failure and cancelling records are subject to the constraint of the ministry instructions.

### The Qualifications of Graduates and their Specialties and Fields Available for their Work

There are several scientific areas where graduates can do what they are capable of basic preparations, configure, and can be summarized as follows:

1. Research and educational field: The department graduates can do a lot of supported and basic business in the field of education and scientific research.
2. Industrial area: Graduate section can perform all acts of industrial laboratories, as well as quality control laboratories and standardization.
3. The health field: Graduates section can implement an environmental survey and conduct medical examinations through their ability to use technical services examination.
4. Energy: Graduates section can implement specialized works in the field of energy generally and particularly in renewable energy.
5. Oilfield: The department graduates can implement the business field and laboratory in the oil industry.

### The Section Contribution in Community Service

The contribution of the section done by con-

sulting office by making some measurements of electrical, magnetic and optical properties of some materials. It can also be a section of advisory opinion, and provide experts in the field of renewable energies and in the field of materials science and remote sensing.



Physics department 2014 – 2015 batch.

### Department of Computer Science

The year 1988 witnessed the opening of the department of Computer Science. It provides a distinct educational program that enables the graduate students to engage in various fields of working line with technological development in the disciplines of Computer and Informatics. The department offers a B.A.'s degree in computer science after students being enrolled for four years through which he/she is prepared to pursue the field of scientific research and graduate studies.

The teaching staff consists of, (20 lecturers) and (3 research assistants) and (4 technicians) and (1 administrator). Groups of scientific research in the section focus on specialized areas, such as artificial intelligence, networks and calculating multimedia, and calculation distributor, as well "algorithms and theories of computing. Preliminary studies on the section rely on learning program with a high flexibility to respond to the requirements of development and change. The curriculum focuses on the aspects of an advanced qualification in Computer Science.

In addition to other specialized scientific

materials, the students study in their third and fourth stages special advanced materials in line with advances development in computer and information science as the applied practical side present an important part in teaching approach, so as to provide an opportunity for the student to the initiative and creativity and activate their potential through the implementation of practical projects and holding seminars around.

### The Future Plan

The future plan involves working on the opening of new M.A.'s study in section, upgrading professors in the section .and increase the diversity the section references, so as to ensure the diversity of study for students and continued to develop different paths, such as software engineering, multimedia, computer networks and others.



### Vision

Our vision is to represent the section with the college being edifice "educational" research" in its programs and its educational curricula and scientific research.

### The Mission

The mission of the department is to summarize in preparing and rehabilitation of excellence in Computer and Information Sciences and rehabilitation to meet the needs of national development Plan and the labor market, and conduct scientific and applied research, also provides consulting services and training in specialized areas of the college.

### The Goals

1. To build a deep theoretical scientific knowledge through which students learn the orifical knowledge in computer hardware and software provide scientific concepts of basic roots.
2. It was adopted in the development of the curriculum to build a scientific and practical skills in analyzing and construct systems software and the adoption of constructed integrated software in laboratory work and adoption of laboratory and field work formats
3. To development all capacity through analysis

and the logical conclusion by install these softwares parts to form an integrated computer system updatable and sustainability.

4. Adopt more than a system of a well-known operating systems and make the subject used their parts operation of these systems.

5. The students choose at their third stage one of the proposed terms of reference of the section (as the path specialist). As for the topics related to each specialization are selected by the Scientific Committee the sections inter related topics are complete of each other.

The Faculty members of Computer Science Department for the Academic Year 2015-2016

Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Ban Nadeem ThannoonYounis	Professor	Computer	Image processing artificial intelligence	Ph.D.
2	Haitham Abdul-Lateef Omar al-ani	Asst. Professor	Computer	Artificial intelligence	Ph.D.
3	Mohammed Saheib Mahdi	Asst. prof	Physics	Multimedia	Ph.D.
4	Khameal Abbas Khudhair	Asst. Professor	Computer	multimedia	M.Sc.
5	Taha Saadoon Bashaga Saad	Lecturer	Maths	Algorithms	Ph.D.
6	Sawsan Kamal Thamer Mohammed Al-Ani	Lecturer	Computer	Artificial intelligence and object-oriented programming	Ph.D.
7	Safaa Hussein Shwail	Lecturer	Computer	Artificial intelligence	Ph.D.
8	Jamal Mohammed KadhimiAli	Lecturer	Computer	Software systems and computer security	Ph.D.
9	Azhar Mawlod Khathum Meyessar	Lecturer	Computer	Genetic algorithm	M.Sc.
10	Suhad Lateef Mahmood	Lecturer	Computer	Image processing	M.Sc.
11	Abeer Khalid Ahmed	Lecturer	Computer	Artificial intelligence	M.Sc.
12	Ihab Ahmed Mohammed	Lecturer	Computer	Computer networks	M.Sc.
13	Dalal Naeem Hmood	Lecturer	Computer	Computer security	M.Sc.
14	Ghassan Abdul Hakeem Mahmood	Lecturer	Computer	Multimedia	M.Sc.



15	Suhad Abdulm Rahmaan Yousif	Ass. Lecturer	Computer	System Software	M.Sc.
16	Tiba Zaki Abdul Hameed	Ass. Lecturer	Computer	Natural Language Processing	M.Sc.
17	Najwan Abed Hasan	Ass. Lecturer	Computer	Artificial Intelligence	M.Sc.
18	Haider Majeed Jaber	Ass. Lecturer	Computer	Computer networks& Computer security	M.Sc.
19	Rasool Hisham Abd Al-Rasool	Ass. Lecturer	Computer	Computer networks& System programming	M.Sc.
20	Ruaa Abdullah Jaber	Ass. Lecturer	Computer	Image processing & Cloud computing	M.Sc.
21	Azahar Flaih Hassan Zaho	Ass. Lecturer	Computer	Data mining	M.Sc.
22	Wafaa Sahir Hasan Sudad	Ass. Lecturer	Computer	Network	M.Sc.
23	Nadia Fadhil Ibrahim	Ass. Lecturer	Computer	Web security	M.Sc.
24	Hanaa Mohammed Mushjil Zinad	Ass. Lecturer	Computer	Artificial intelligence	M.Sc.
25	Assel Basim Sabri Yakoob	Ass. Lecturer	Computer	Data base `	M.Sc.
26	Khairiyah Saied Abd-Algab-bar Jasim	Ass. Lecturer	Computer	Image processing	M.Sc.
27	Zahraa Abdul hussien Jaaz Abed	Ass. Lecturer	Computer	Wireless network	M.Sc.
28	Shelan Sabah Ahmed	Ass. Lecturer	Computer	Data mining	M.Sc.
29	Hasnaa Imad Abdul Salam	Ass. Lecturer	Computer	Image processing	M.Sc.
30	Ihsan Kahtan Ahmed	Ass. Lecturer	Computer	Network	M.Sc.

## Course Syllabus for Underrate

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
COMP051	Programming Fundamentals II	1,3,2	3	UREQ020	Programming Fundamentals I	2,3,1	3
MATH042	CalculusII	1,-,3	3	MATH041	CalculusI	3,0,1	3
COMP120	Digital Logic	1,3,2	3	PHYS063	Electronics Physics	2,3,1	3
COMP124	Computer Organization	-٣,٢,١	3	UREQ021	Introduction To Computer Science	2,3,-	3




COMP125b	Discrete structure II	1,-,2	2	COMP125a	Discrete structure I	2,-,1	2
UREQ011	EnglishII	2,-,-	2	BIOT082	Biotechnology I	3,-,-	3
COMP180a	Computer Skills I	2,-,-	1	UREQ010	English	2,-,-	2
	Total	0	17		Total	0	19

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
MATH043	Probability and Statistics	3,-,-	3	COMP261	Computation Theory I	3,-,-	3
COMP272	Data Structure	2,3,-	3	COMP221	Computer Architecture	3,-,-	3
COMP053	Computer Graphics	2,-,-	3	COMP228	Numerical Computation	2,2,-	3
COMP210	System Programming	3,3,-	4	COMP280b	Computer skills II	-2	1
COMP262	Computation Theory II	3,-,1	3	COMP052	Programming II-OOP	2,3,1	3
COMP280	Computer skills III	2,-,1	1	COMP215	C language	2,3,-	3
UREQ002	Arabic Language II	1,-,-	1	UREQ001	Arabic Language I	1,-,-	1
	Total	0	18		Total	-2	17

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
COMP370	Web design&Programming	2,2,-	3	COMP311b	Algorithm design&Analysis	2,2,-	3
COMP313b	Language Translators II	2,2,1	3	COMP313a	Language Translators I	2,2,1	3
COMP350	Software Engineering I	2,2,-	3	COMP380c	Computer skills IV	2,-,-	1
COMP330b	Database II	2,3,-	3	COMP360c	Digital Image Processing	2,2,-	3
COMP335a	Computer Security I	2,2,-	3	COMP340	Artificial Intelligence	2,2,-	3
UREQ021	Democracy	1,-,-	1	COMP382	Database I	2,3,-	3
				UREQ020	Human rights	1,-,-	1
	Total	0	16		Total	0	17

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
COMP414b	Operating System II	2,2,-	۳	COMP414a	Operating System I	2,2,-	۳
COMP490b	Project II	-6	۲	COMP436	Computer Networks	3,3,-	۳
COMP422	Distributed System	2,2,-	۳	COMP435	Computer security II	2,2,-	۳
COMP462	Audio&Video Computing	2,2,-	۳	COMP441	Machine Learning	2,2,-	۳
COMP475	Information theory&data compression	2,2,-	۳	COMP470	Web design&Programming	2,2,-	۳
COMP452	Software project management	2,2,-	3	UREQ0	Communication Skills	1,-,-	1
•UREQ	General management	1,-,-	1	COMP490a	Project I	-6	2
	Total	-6	18		Total	-6	18

The Top Three Students in the Section for the Academic  
Year 2014-2015

Sq.	The Name	Picture	Average
1	Ibtihaal Abbas Daiem		82,784
2	Dhamiaa Abd Al-Kareem Farman		79,356
3	Abbas Younis Saad		76,298

## The Achievements of the Department of Computer Science

The main mission of the department is to prepare students owing a B.A.'s degree in computer science and characterized by good ability in dealing with these and languages which enables them get the maximum use of tools and languages. In addition to work on the preparation of staff carrying postgraduate degrees (M.Sc. And Ph.D.) In the jurisdiction of the computer.

To achieve these tasks has the department, including the following:

1- Laboratories and classrooms: the department has the news quantum leap in the development of its laboratories by connecting all computers to a local network (Internet), and was able to secure as sophisticated server highly efficient management of this network. And update all the computers in the department, both at the level of section labs, (where they were provided with computers for every student in all stages of study) and secure all programs needed by the student on those computers in addition to securing an official copy of the operating system (WINDOWS), and virus Protection system with insurance computer for each lecture in the departments as well as notebook computers. The development of multimedia lab through providing equipped which enable implementation of experiments and research that could not be conducted in the previous phase, and the development of the classroom through the processing of each class with modern electronic blackboard and large screen display enables the teaching of the lesson better management and utilization of the means of advanced illustration style to communicate ide as to the student in a clearer and faster way.

2- Curriculum: In this area, the commission in section worked for more than two years studying of previous approaches and methods corresponding sections in international and Arabic university, in addition to the standard curriculum set by the (IEEE / ACM) with a holistic view and

using the staff of the section, each according to its competence. The commission has mentioned a developed new curriculum for the entire department. During obtaining regulatory approvals to those curricula stage, there was a guidance directed by the Ministry of Higher Education to State unified curriculum for computer departments through the Committee of Deans Computer and already the section has worked effectively in the development of the unified curriculum and that was to a large extent Identical with the new curriculum, which includes the provision of specialized in scientific fields and needed by the labor market, including multimedia ,Computer Networks, security of computers in addition to computer science in general. The section was also able to obtain approvals to reopen graduate (to get a M.A.'s degree) in the beginning next school year (2015-2016) after stopping for many years and we hope that this step be a factor in increasing the quality of scientific research produced by the department to serve the community.



Electronic Controlled Session



Computer Laboratory



Computer Department Staff 2014 – 2015

### Mathematics and Computer Applications Department

The department of Mathematics and Computer applications was established in 1990 and that was only two years after the establishment of the college of Science at the University of Al-Nahrain.

At the moment, the department is granting the B.A.'s degree for students of undergraduate studies, the M.A.'s degree for graduate students, and it was granting PhD. degree for graduate students until 2004. Since then, the department is still concerned with the graduation of a dedicated staff in Applied Mathematical Sciences, who were and still being attracted by many departments and state institutions to occupy various areas of work to even include medicine, engineering, applied science, economics, etc. Those graduates have proved high efficiency, regarding the responsibilities and tasks assigned to them in solving real problems, which encouraged the department to constantly develop and diversify its curricula and to keep pace with scientific development taking place in this ar

The Faculty members of Mathematics and Computer Applications Department for the Academic Year 2015-2016

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Alauddin Nuri Ahmed	Professor	Mathematics	Mathematical models	.Ph.D
2	Fadhel Subhi Fadhel	Asst. Prof.	Mathematics	Fuzzy Dynamics	.Ph.D
3	Ahlam Jamel Khalil	Asst. Prof.	Mathematics	Functional Analysis	.Ph.D
4	Osama Hameed Mohammed	Asst. prof	Mathematics	Approximation theory	.D.Ph
5	Ali Hasan Naser	Asst. prof	Mathematics	Differential Equations	.D.Ph
6	Saad Muhsin Salamn	Asst. prof	Mathematics	Operations Research	.M.Sc
7	Raneen Zaid Hamoud	Lecturer	Mathematics	Mathematical statistics	.M.Sc
8	Fayeez Faeiq Shaukat	Asst. prof	Mathematics	Operations Research	.M.Sc
9	Ibtisam Kamil Hannon	Lecturer	Mathematics	Dynamical Systems	.M.Sc
10	Ahmed Ayoub Yousif	Lecturer	Mathematics	Differential Equations	.M.Sc
11	Munaf Adnan Salih	Lecturer	Applied Mathematics	Dynamical Systems	.M.Sc
12	Azhar Waleed Hummad	Lecturer	Computer Science	Algorithms	.M.Sc
13	Amna Rasim Muhammed	Lecturer	Mathematics	Functional Analysis	.M.Sc



14	Ammar Jaafar Muhaisin	Lecturer	Mathematics	Fuzzy Differential Equations	.M.Sc
15	Zainab Reyadh Shakir	Asst. Lecturer	Mathematics	Control Systems	.M.Sc
16	Fatima Sahib Kadhim	Asst. Lecturer	Mathematics	Dynamical Systems Control	.M.Sc
17	Ali Abdul-Sahib Muhammed	Asst. Lecturer	Mathematics	Topology	.M.Sc
18	Akram Abbas Jasim	Asst. Lecturer	Mathematics	Mathematical Statistics Simulation	.M.Sc
19	Fidaa Nuael Abdul-Ahad	Asst. Lecturer	Mathematics	Mathematical Statistics	.M.Sc
20	Fadi Adil Ibraheem	Asst. Lecturer	Mathematics	Mathematical Statistics	.M.Sc
21	Salam Adil Ahmed	Asst. Lecturer	Mathematics	Mathematical Statistics	.M.Sc
22	Shayma Abdul-Sattar Younis	Asst. Lecturer	Mathematics	Applied Mathematics	.M.Sc
23	Omar Ismaeel Khaleel	Asst. Lecturer	Mathematics	Mathematical Statistics	.M.Sc
24	Eman Abdul-Wahab	Asst. Lecturer	Mathematics	Applied Mathematics	.M.Sc



Council of the Mathematics and Computer Applications Department

## Course Syllabus for Undergraduate

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
MATH 112	Finite Mathematics I	3, 0, 1	3	MATH 113	Analytic Geometry	3, 0, 1	3

MATH 114	Foundations of Mathematics I	4, 0, 0	4	MATH 115	Foundations of Mathematics II	4, 0, 0	4
MATH 141	Calculus I	3, 0, 1	3	MATH 142	Calculus II	3, 0, 1	3
PHYS 161	Mechanics I	2, 3, 0	3	PHYS 162	Electricity and Magnetism	2, 3, 0	3
UREQ 110	English I	2, 0, 0	2	UREQ111	English II	2, 0, 0	2
UREQ 150	Introduction to Computers	2, 3, 0	3	UREQ 151	Programming Fundamentals	2, 3, 0	3
	Total	0	18		Total	0	18




Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
MATH 210	Advanced Calculus I	4, 0, 0	4	MATH 211	Advanced Calculus II	4, 0, 0	4
MATH 212	Linear Algebra I	4, 0, 0	4	MATH 213	Linear Algebra II	4, 0, 0	4
MATH 243	Probability and Statistics	2, 3, 1	3	MATH 216	Solution of Ordinary Differential Equations	4, 0, 0	4
UREQ 201	Arabic Language I	1, 0, 0	1	MATH 214	Optimization I	2, 3, 0	3
CHEM 271	General Chemistry	2, 3, 0	3	UREQ 202	Arabic Language II	1, 0, 0	1
COMP 251	Computer Applications for Mathematics I	2, 3, 0	3	COMP 253	Computer Graphics	2, 3, 0	3
UREQ002	Arabic Language II	1,-,-	1	UREQ001	Arabic Language I		
	Total	0	19		Total	0	19

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
MATH 310	Real Analysis I	4,0,0	4	MATH 311	Real Analysis II	4,0,0	4
MATH 312	Abstract Algebra I	3,0,1	3	MATH 313	Abstract Algebra II	3,0,1	3
MATH 314	Numerical Analysis I	3,3,0	4	MATH 315	Numerical Analysis II	3,3,0	4
MATH 316	Applied Mathematics	4,0,0	4	MATH 317	Fuzzy Set	4,0,0	4
MATH 319	Optimization II	2,3,0	3	MATH 318	Theory of O.D.E	4,0,0	4

URIQ 420	Human Rights	1,0,0	1	UREQ 421	Liberty and Democracy	1,0,0	1
	Total	0	16		Total	0	17

Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
MATH 410	Partial Differential Equations	3,0,1	3	MATH 412	Complex Analysis II	4,0,0	4
MATH 411	Complex Analysis I	4,0,0	4	MATH 414	Mathematical Statistics II	4,0,0	4
MATH 413	Mathematical Statistics I	4,0,0	4	MATH 416	Topology II	4,0,0	4
MATH 415	Topology I	4,0,0	4	MATH 461	Topics in Pure Mathematics	4,0,0	3
	Project I	6,0,6	2		Project II	6,0,6	2
	Total	0	17		Total	0	17

### The Top Three Students in the Section for the Academic Year 2015-2016

No.	The Name	Picture	Average
1	Noor Samir Rahmaa		84,040
2	Adyan Mohammed Malik		76,719
3	HananMounirLabeeb		69.470

## Number of Students Graduated from the Department for the Academic Year 2015-2016

Male	Female
3	9

### Computer Lab

It the mathematics department there is a systematic and integrated computer lab which includes 30 advanced computers to serve the areas of mathematics for undergraduate students, which are needed for programming languages or computer applications. This laboratory was setup since the first year of the founding of the department in 1990. Taking into account the replacement of the lab's computers every few years to keep pace with the technology advancement and the scientific development in the field of mathematics and its various applications.

### Summer Training

Summer training has its priority and of great importance to the department, through the training of students in different state institutions and increase the practical experience for students through direct contact with various state institutions service and look at the practical side of the department specialties, which in turn paves the future of students to work within the non-educational institutions.



### Higher Studies

The M.A.'s study was found since 1990-1991 and so far, the department grants M.A.'s de-

grees in Applied Mathematics. The Ph.D. studies was established in the academic year 1994-1995 and till 2002-2003.

The Ph.D. study was suspended, because of the lack of lecturer's staff holding Ph.D.'s and the title of professor, the first M.A.'s degree was awarded in 1993 and the first Ph.D. degree in 1998. Because of the lack of teaching staff, M.A. study has been suspended for one year in the academic year 2013-2014.



### Activities within the department and research and scientific plan

In each academic year, the staff of the department provide a number of seminars and courses for contribution community service and marketing of scientific product to the various ministries and government sectors. It is proposed that the teaching staff of the department plays distinct roles in participating in conference and seminars at the domestic and external levels, in addition to the publication of a number of researches in the fields of specialization in global and prestigious journals.

### General Guidelines for Admission to the Initial Plan and Graduate Studies

The general trends of the section is to build a high scientific level in the field of mathemat-

ics and computer applications and graduation distinct staff of initial studies students, through a great volume in outs and an adequate sub-disciplines of mathematics which have close relationship with other applied sciences. It is proposed that the department's role in a distinct area of the Graduate / M.A.s through graduation distinct staff and increasing the number of post-graduate seats (M.A.) to supply the other various Iraqi universities.

In addition to the various institutions and government organizations which included a section plan the diversity of study for students, and the development of different paths and upgrading to the informations of professors in the section and that to build up Ph.D. studies, also the diversity in the terms of reference section, to include the three branches of mathematics in Pure Mathematics, Applied Mathematics and Operation Research.

### The Qualifications of Graduates and their Specialties and Fields Available for their Work

Graduate qualifications involves granting the degree of a B.A. in mathematics and computer applications and additionally qualifications equivalent diploma in physics and computer, as it contains a lot of lessons given within four years of studying that interfere with physics and computer sciences, qualifications will make students eligible for:

1. Working in all departments and state institutions within the sectors that need computer skills.
2. Mathematical modeling for life problems within topics in the engineering and applied science.
3. Statistical treatments in the Ministry of Planning and the Ministry of Health.
4. Teaching in high schools, colleges and universities.

### The Department Contribution in Community Service

A team group can be formed to address the

following problems:

1. A working group to address the problems of mathematical modeling that facing the ministries and government departments by extracting mathematical models that rely on a solid mathematical foundations.
2. A working group to address the statistical problems and models of statistical analysis ) Population growth and public Census of Population Problems, Statistical analysis of the problems of drugs, conducting theoretical simulation by using computers to problems of informatics and communications).
3. The establishment of courses and hosting workshops in section which includes a number of professors with expertise and efficiency in Applied Mathematics for the development of workers in the ministries and government institutions, skills enhancement in the field of mathematical modeling and system's analysis through the use of computers in addressing problems.
4. Establishing courses on ready-made applications for mathematical programming. Build Computer Programs and Systems to solve a lot of industrial and engineering problems that faced by the Ministry of Industry and Minerals, which can formulate a mathematical model of the problem, including the (oil extraction and refining problems, the problems of irrigation and treatment of pollution in groundwater, electroplating of metals, cutting metal with laser).



Department of Mathematics Staff 2014 – 2015

### Biotechnology Department

Biotechnology department was established in



the college of Science/ University of Al-Nahrain in 1991 and on a scientific visions of the future and the need to a staff working in the field of applied sciences. The biotechnology considered

as rapidly evolving discipline and with a variety of scientific matters, which include; animal and plant microbiology, genetic engineering, science and other relevant science.

#### The Teaching Staff of Biotechnology Department for the Academic Year 2015-2016

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Hameed Majeed Jasim	Professor	Biotechnology	Molecular Biology	.Ph.D
2	Khaloud Whaeib Abboud	Professor	Biology	Mycotoxins& Secondary Metabolites	.Ph.D
3	Saleh Ahmed Wheib	Professor	Biochemistry	Antibiotics	.Ph.D
4	Ayad Mohammad Ali Fadel	Professor	Biology	Molecular Genetics	.Ph.D
5	Kadhim Mohammed Ibrahiem	Professor	Plant Biotechnology	Plant Tissue Culture	.Ph.D
6	Nabeel Khalaf Ibrahiem	Professor	Plant Biotechnology	Plant Physiology	.Ph.D
7	Majed Hussain	Professor	Biotechnology	Molecular Genetics	.Ph.D
8	Masysa Chasip Elias	Asst. Professor	Biotechnology	Medical Microbiology	.Ph.D
9	Shahla Mahdi Saleh	Asst. Professor	Biotechnology	Immunity	.Ph.D
10	Abdul wahid Shamkhi	Asst. Professor	Food Science	Biochemistry	.Ph.D
11	Rehab Subhi	Asst. Professor	Biotechnology	Histology	.Ph.D
12	Asmaa Ali	Asst. Professor	Biotechnology	Enzymology	.Ph.D
13	Ali Shihab Ahmed	Asst. Professor	Biotechnology	Industrial fermentation	.Ph.D
14	Mohsen Hashem Resan	Asst. Professor	Biology	Mycology	.Ph.D
15	Ali abdul hafdh Ibrahim	Asst. Professor	Mathematics	Artificial intelligence	.Ph.D
16	Bilal kamil	Asst. Professor	Biotechnology	Microbiology	.Ph.D
17	Asmaa Oubaid Ismael	Asst. Professor	Biotechnology	Biotechnology	.Ph.D
18	Ali Zaid Fadhel	Lecturer	Biotechnology	cytogenetics	.Ph.D
19	Shaymaa Hussain	Lecturer	Biotechnology	Environmental Biotechnology	.Ph.D
20	Mayada Sallal	Lecturer	Biotechnology	Environmental Biotechnology	.Ph.D
21	DhafarNajem	Lecturer	Biotechnology	Medical Microbiology	.Ph.D
22	Asmaa Qataa	Lecturer	Biotechnology	Plant Biotechnology	.Ph.D

23	Nedhal Suhail	Lecturer	Biotechnology	Enzymology	.Ph.D
24	Khalid Hashim	Lecturer	Biotechnology	Plant Biotechnology	.Ph.D
25	Noora Adel Hadi	Lecturer	Biotechnology	Microbiology	.M.Sc
26	Yaseen Ismael Omran	Lecturer	Biotechnology	Microbiology	.Ph.D
27	Bushra Hindy Salh	Lecturer	Biotechnology	Medical Microbiology	.Ph.D
28	Maha Hameed Abdulha	Lecturer	Biotechnology	Enzymology	.Ph.D
29	Hanaa Chasib Salim	Assistant Lecturer	Biology	Plant Biotechnology	.M.Sc
30	Tania Tahseen	Assistant Lecturer	Biotechnology	Microbiology	.M.Sc
31	Orooba Nadhim	Assistant Lecturer	Biotechnology	cytogenetics	.M.Sc
32	Menhal Farooq	Assistant Lecturer	Veterinary Medicine	Immunity	.M.Sc
33	Sahar Medhat	Assistant Lecturer	Biotechnology	Microbiology	.M.Sc
34	Raghda Saad	Assistant Lecturer	Biotechnology	Microbiology	.M.Sc
35	Israa Azhar	Assistant Lecturer	Biotechnology	Plant Biotechnology	.M.Sc
36	Saddam Yahya	Assistant Lecturer	Biotechnology	Microbiology	.M.Sc
37	Ayat Munem	Assistant Lecturer	Biotechnology	Cytogenetics	.M.Sc
38	Moyasser Basil	Assistant Lecturer	Biotechnology	Cytogenetics	.M.Sc
39	Amal Saleem	Assistant Lecturer	Biotechnology	Plant Biotechnology	.M.Sc
40	Roaa Nazar	Assistant Lecturer	Biotechnology	Medical Microbiology	.M.Sc
41	Lamyaa Finjan	Assistant Lecturer	Biotechnology	Genetic Engineering	.M.Sc
42	Rana Adnan	Assistant Lecturer	Biotechnology	Medical Microbiology	.M.Sc
43	Farah Turki	Assistant Lecturer	Biotechnology	Medical Microbiology	.M.Sc
44	Reem Naaem	Assistant Lecturer	Biotechnology	Medical Microbiology	.M.Sc
45	Tamara Husham	Assistant Lecturer	Biotechnology	Medical Microbiology	.M.Sc
46	Heba Khaleel	Assistant Lecturer	Biotechnology	Cytogenetics	.M.Sc
47	Ibraheem Abdullah	Assistant Lecturer	Biotechnology	Genetic Engineering	.M.Sc
48	Ruqaya Muhammed	Assistant Lecturer	Biotechnology	cytogenetics	.M.Sc
49	Zahraa Kamel	Assistant Lecturer	Biotechnology	Histology	.M.Sc
50	Hasan Abdul Hadi	Assistant Lecturer	Biotechnology	Microbiology	.M.Sc
51	Maysaa Hamed	Assistant Lecturer	Nursary	Plant Tissue Culture	.M.Sc
52	Zayd Nusaif	Assistant Lecturer	Biotechnology	Molecular Genetics	.M.Sc

53	Zina Fouzy Husain	Assistant Lecturer	Biotechnology	Biotechnology	.M.Sc
54	Rana Kasim Naeem	Assistant Lecturer	Biotechnology	Microbiology	.M.Sc
55	Ahmad Kadhim Owaid	Assistant Lecturer	Physics	Image Processing	.M.Sc
56	Mohanad Hassan	Assistant Lecturer	Biotechnology	Biotechnology	.M.Sc
57	Dina Ahmad Hashem	Assistant Lecturer	Chemistry	Biochemistry	.M.Sc
58	Madiha Hameed Mahmood	Assistant Lecturer	Chemistry	Analytical Chemistry	.M.Sc
59	Zainab Sabeeh Omran	Assistant Lecturer	Biotechnology	Biotechnology	.M.Sc



**The Council of biotechnology Department**

### Course Syllabus for Undergraduate

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
BIOT 101	General Biology I	2, 3	3	BIOT 081	General Biology II	2, 3	3
BIOT 102	Biotechnology I	2, 3	3	BIOT 082	Biotechnology II	2, 3	3
CHEM 072	General Chemistry I	2, 3	3	CHEM 071	General Chemistry II	2, 3	
MATH 041	Mechanic	2, 3	3	UREQ 010	Calculus	3	3
UREQ 011	English Language I	2	2	UREQ 050	English Language II	2	2
UREQ 051	Computer	2, 3	3	UREQ 051	Programming Fundamental	2, 3	3
	Total	2	17		Total	5	14

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
BIO 202	Cell Biology I	2, 3	3	BIOT 201	Cell Biology II	2, 3	3
BIO 212	General Genetics I	2, 3	3	BIO 211	General Genetics II	2, 3	3
BIO T205	Microbiology I	3, 3	4	BIOT 204	Microbiology II	2, 3	3
BIO 231	Histology	2, 3	3	BIO 203	Plant Physiology	2, 3	3
CHEM 074	Biochemistry I	2, 3	3	CHEM 073	Biochemistry II	2, 3	3
UREQ 002	Arabic Language	1	1	UREQ 001	Arabic Language	1	1
	Total	1	17		Total	1	16

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
BIOT 355	Animal Physiology	2, 3	3	BIOT 306	Mycology	2, 3	3
BIOT 341	Industrial Microbiology	2, 3	3	BIOT 342	Food microbiology	2, 3	3
BIOT 313	Molecular Biology I	2, 3	4	BIOT 314	Molecular biology II	2, 3	3
BIOT 351	Immunology	2, 3	3	BIOT 352	Virology and Vaccine	2, 3	3
BIOT 083	Environmental Biotechnology	3	3	BIOT 333	Plant Tissue Culture	3	3
BIOT 305	Antibiotics	2, 3	3	BIOT 307	Microbial Toxins	2, 3	3
UREQ021	Human rights	1	1	UREQ022	Democracy	1	1
	Total	4	20		Total	4	19
Forth Year First Semester				Forth Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
BIOT453	Immunochemistry	2, 3	3	BIOT443	Fermentation Technology	2, 3	3
BIOT415	Molecular genetics	2, 3	3	BIOT408	Cytogenetics	2, 3	3

BIOT421	Genetics Engineering	3	3	BIOT422	Cloning in Eukaryotes	3	3
BIOT434	Phytochemistry	6	2	BIOT454	Animal Tissue Culture	2, 3	3
BIOT460	Research project	6	2	BIOT461	Research project II	6	2
	Elective	3	3	BIOT446	Microbial Groups	2, 3	3
					Elective	3	3
	Total	18	16		Total	12	20

### Higher Studies

The higher studies were established in the section in the academic year 1998-1999 admitting 11 students to study M.A.s, and in the academic year 2000-2001 only 1 student was admitted in the Ph.D. study.

The Number of Students who graduated in the Academic Year 2014-2015

.M.A		.Ph.D	
Female	Male	Female	Male
8	3	12	-
11		12	

### Course Syllabus for M.Sc.


MSc Year First Semester				MSc Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
BIOT 514	Advanced Molecular Biology	3	3	BIOT523	Advanced Genetic Engineering	3	3
BIOT 544	Microbial Fermentation	3	3	BIOT583	Advanced Biochemistry	3	3
BIOT 555	Advanced Immunology	2	2		Elective	3	3
BIOT 536	Secondary Metabolites	2	2		Elective	3	3
BIOT 535	Plant Biotechnology	2	2		Seminar	1	1
BIOT 562	Research Methods	1	1	UREQ502	English Language II	1	1
UREQ501	English Language I	1	1				
	Total	14	14		Total	14	14



## Course Syllabus for Ph.D.

PhD Year First Semester				PhD Year Second Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
BIOT 614	Molecular Biology of the Gene	3	3	BIOT624	Molecular Techniques	3	3
BIOT 644	Advanced Industrial Microbiology	3	3	BIOT670	Bioseparation Engineering	3	3
BIOT 680	Enzyme Technology	3	3		Elective	3	3
BIOT 637	Industrial Plant Biotechnology	3	3		Elective	3	3
UREQ 601	English Language I	1	1		Seminar	1	1
				UREQ602	English Language II	1	1
	Total	13	13		Total	14	14

## The Top Three Students in the Section for the Academic Year 2014-2015

No	The Name	Picture	Average
1	Afnan Ayad Abdul Ameer		86.437
2	Saja Ali Shareef		82.304
3	Mahmood Ahmed Mohee		80.999

## Number of Students Graduated from the Department for the Academic Year 2014-2015

Male	Female
8	23



**Department of Biotechnology Teaching Staff 2014-2015**

CHEM516	Photochemistry	2	2	CHEM 547	corruption	2	2
CHEM 517	Coordination complexes	2	2	CHEM 548	Oxidation technics	2	2
CHEM 519	ionic liquid	2	2	CHEM 549	Nano technics	2	2
CHEM 524	separation methods	2	2	CHEM 556	Bio calculations	2	2
CHEM 527	statistic	2	2	CHEM 557	enzymatic calculations	2	2
CHEM 529	selective electrodes	2	2	CHEM 532	mechanism of organic reactions	2	2
				CHEM 537	reactive intermedia	2	2
				CHEM 558	clinical chemistry	2	2
				CHEM 539	organ-synthesis	2	2
				CHEM 543	quantum chemistry	2	2
				CHEM 533	spec to-identification	2	2
	Total	18	14		Total	38	36

# COLLEGE OF POLITICAL SCIENCES



## About College of Political Sciences

This college was established in 1994. It aims at preparing specialists in political sciences fields, it includes the following departments: International Politics Department, Strategic Studies Department, Political Systems and Public Policies Department and The Department of International Economic Relations. The college grants Bachelor, Master, and Doctoral degrees.



### About the College:

The college was established in 1994. It involves four scientific departments. The study in the first stage is general and specialization in the academic departments begins in the second stage. The four Scientific departments, according to the date of establishment, are: -

#### 1-International politics Department

It was founded in (1997/1998) Interested in studying international politics and its dimensions and their interactions and the variables that affecting it. The department aims to graduate specialists at a high level in the areas of interest.

#### 2-Strategy Department

It was founded in (30/06/1998) Interested in studying strategic affairs in all its Levels and dimensions and related to .The Section aims to graduate specialists at a high level in the areas of interest.

#### 3- Political Systems and Public Policy Department

It was established in (30/6/1998) in the name of public policy department, later, was amended the department name to the general political systems and public policy department in (2003). Interested in studying issues of political systems, public policy and related matters .The section aims to graduate specialists at a high level in

the field of interest.

#### 4- Department of International Economic Relations

It was founded in (19/9/1998). It tackles all aspects of international economic relations and provide the society with graduates of specialists in this rare field of knowledge.

#### Admission and enrollment in undergraduate and postgraduate studies:

The admission in the college for the undergraduate Studies is through the Central acceptance, according to the college plan.

As for acceptance in college for higher/ postgraduate Studies, it is done according to the plan set by the scientific departments, Dean and the presidency of the university according to the instructions and regulations of the Ministry of Higher Education and Scientific Research.

#### Awarded Certificates

The College awards the degree of B.A. / certificate in general specialization - Political Sciences and Jurisdiction (according to the scientific section).

The College also offers M.A.'s degree /Major - Political Sciences and Jurisdiction specified (by the scientific section).

The PH.D degree / general Specialization - Political Sciences, exact jurisdiction (according to the scientific section) is also awarded by the college.

### Deans of the College of Engineering



Prof. Dr. Mazen Ismael  
Isaac Al- Ramadani

1994 – 2002



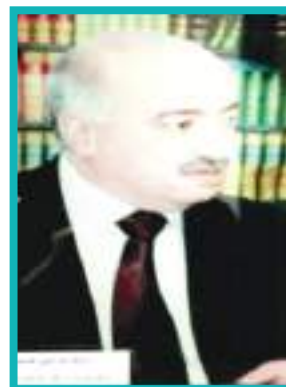
Prof. Dr. Fekraat Namik Abid  
al Fattah al-Ani

2002 – 2003



Prof. Dr. Wesal Najib Arif

2003 - 2008



Prof. Dr. Menem Sahi Hus-  
sein al-Amar

2008 - 2011





Prof. Dr. Menem Sahi Hussein al-Amar

2008 - 2011

### Council of the college of Political Sciences for the acadmic year 2015-2016

.Sq	The name	position	Scientific Section	Academic Title	General Specialization	Specific Specialization	Degree	of Date joining
1	Amer Hassan Fayyad	Dean of the College of Political Science	Political systems and public policy	Prof.	Political Science	Political Thought	Ph.D	20/10/2011
2	Layla Ashour Hajim	Associate Dean for Administrative Affair	International Economic Relations	Asst.prof	Economy	International Economy	Ph.D	21/01/2012
3	Zaid Adnan Mohsin	Associate Dean for Academic Affairs Administrative Affair	Political systems and public policy	Asst.prof	Political Science	Political systems and public policy	Ph.D	07/05/2014
4	Ahmed Shehab Ahmed	Head of Department of International Economic Relations	International Economic Relations	Prof	Statistics	Applied Statistics	Ph.D	17/2/2013
5	Laith Abdul Hassan Jawad	Head of Department of political systems and public policy	Political systems and public policy	Asst.prof	Political Science	Political Systems	Ph.D	17/2/2013
6	Lubna Khamis Mahdi	Head of Strategy Department	Strategy	Asst.prof	Political Science	Strategy	Ph.D	2014 /6/5
7	Mohammed Kareem Kazem	Head of international politics Department/ Secretary College council	International Politics	Asst.prof	Political Science	International Relations	Ph.D	17/2/2013

## Council of the college of Political Science



### Vision:

Strengthening and deepening the teaching of scientific and political knowledge which assets the rules and mechanisms of public affairs management (governance) in Iraq and other world countries at the theoretical level and at the level of practice and down to prepare specialists in Political Sciences through solid scientific methods and a high level of scientific maturity to serve our country.

### Mission:

Knowledge of students with assets policy, principles and foundations and bases on both fields, theory and practice and graduating specialists who have political knowledge and the ability to manage state affairs at the local, national and international levels.

### Goals:

The college of Political Sciences has its serious scientific projects and effective in contributing to the construction of contem

porary Iraq through externalized to a group of specialized staff and supporting the labor market. The objectives of the college are summarized as follows: -

- 1- Participating in building a new Iraqi man.
- 2- Rehabilitation of students qualified academically and cognitively, valuable and scientifically to ensure building a civilized frameworks, take of committed scientific thinking that related to country and nation issues a way to understand the past and understand the present and look to the future.
- 3- Upgrading of teaching science policy in Iraq to the level of contemporary global development
- 4- Sophisticated and integrated program easily accessible on a regular knowledge and specialized skills in the fields of Political Sciences at the level of primary and higher studies..
- 5- Ensure an active and continuous interaction with work field serving the community and the fulfillment of his civilization.

The Names of the Top three Students at the College for the Academic Year  
2014-2015

No	The Name	The Section	average
1	Zainab Hamza Abd Shadhan	Political systems and public policy	90.646
2	Umnya Hamza Yaseen	Strategy	88.458
3	Hiba Ghlib Kamel	International politics	88.421



Graduates of the College of Political Sciencess for the Academic Year 2014-2015

### Research unit:

The Unit was opened 22/7/2012. The main task of this unit is to undertake studies and research in the fields of international relations, public policy and strategy.

### College Library:

The library of the college of Political Sciences was opened since the establishment of the college in 1994, involving thousands of textbooks and literature and periodicals in Arabic and foreign languages, as well as hundreds of thesis and dissertations.

The college has initiated the adoption of virtual library a way to develop the means to enrich the Library Circulation and modern scientific

publications. The college has initiated the adoption of virtual library a way to develop the means to enrich the Library Circulation and modern scientific publications.



### College journal

The College is issuing a scientific journal en-



titled (Political Issues). It is a quarterly journal which is concerned with the research and Political Studies that deals with Iraq and the world policy issues, the focus of interest in the present and future. It depends on the Arabic language and accurate scientific standards publishing. Furthermore, it also holds an international standard number in global indexes and classifications: the International number of the magazine is: ISSN2070-9250.



### Continuing Education and Community Service:

In terms of activating the communication between universities and society movement, the college offers scientific and rehabilitative services through the establishment of training programs be prepared by the Division of Continuing Education at the college and on an annual basis include a variety of topics and that be need by the state ministries, as well as through seminars and scientific conferences to address many of the problems faced by the Iraqi situation in political, economic and security aspects, as well as providing consultancy to various government offices, and research centers, universities and whenever needed. We would like to refer to the participations continuously in the activities and events held by the state institutions and non-governmental institutions, which aims to serve the community and promote national awareness of cooperation and coordination with the advisers in the Board of Ministers and the Foreign Service Institute, Parliamentary com-

mittees related to the competence of Political Sciences, The Integrity Commission and the National Center for Human Rights and the bodies of the holy shrines in Najaf, Holy Karbala, Holy Kazimiyah, Hammurabi center for Strategic Studies and the US Agency for International Development.

### Sports Activity:

The Sports activity division cares about academic athletic sports staff in activities for the students and for the college. It also cares for athletes students and sports teams for the students of the college as it works to train and develop their skills and their eagerness to participate effectively targeted university add to the activities carried out by the division during festivals and events held by the college.



Football Team in College



Computer Lab

### Scientific Departments

#### The first stage /General

During the first stage, the study at the college is general. Specialization is decided by the second stage.

## Academic Program of the First Stage / General ,for the academic year 2015/2016

First Year / First Semester				First Year / Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th.App,Tut				Th.App,Tut	
PSFS11	(Arabic Language (1) (requirement	1	1	PSFS21	(Arabic Language (1) (requirement	1	1
PSFS12	(Computer (1) ( requirement	1	1	PSFS22	(Computer (1) (requirement	1	1
PSFS13	Principles of Political Sciences (1) (E) Including Grammar	3	3	PSFS23	Principles of Political Sciences (1) (E) including Grammar	3	3
PSFS14	(Principles of Law (1	2	2	PSFS24	(Principles of Law (1	2	2
PSFS15	(Introduction to Political Sciences (1	3	3	PSFS25	(Introduction to Political Sciences (1	3	3
PSFS16	(Introduction to Strategy (1	2	2	PSFS26	(Introduction to Strategy (1	2	2
PSFS17	Principles of Political Systems and (Public Policies (1	2	2	PSFS27	Principles of Political Systems and (Public Policies (1	2	2
PSFS18	(History of International Relations (1	2	2	PSFS28	(History of International Relations (1	2	2
PSFS19	Principles of Economic and Interna- (tional Economic Relations (1	2	2	PSFS29	Principles of Economic and Interna- (tional Economic Relations (1	2	2
Total		18	18	total		18	18

**Department of International Politics**

The department of International Politics was founded in (1997/1998). It is interested in studying international politics and dimensions and their

interactions and variables affecting the topics. The department aims to graduate specialists at a high level in the areas of interest.

## Council of the International Politics Department for the academic year 2015-2016

.Sq	The name	Academic title	General Special- ization	Specific Specialization	Degree
1	Mohammed Kareem Khazem « Head of Department	Ass.prof	Political Science	International Relations	Ph.D
٢	Ola AbdulGhafoor “““Section Rapporteur	Ass.prof	English Language	Modren Literature	.M.A
3	Nadia Abdel Kader Al-Mukhtaar	Ass.prof	Political Science	International Relations	Ph.D
4	Qasim Muhammad Abid	Professor	Political Science	International Politics	Ph.D
5	Khader Abbas Atwan	Ass.prof	Political Science	International Politics	Ph.D
6	Mohammed Yass Khudair	Ass.prof	Political Science	International Politics	Ph.D
7	Osama Mortatha Baqer	Ass.prof	Political Science	International Politics	Ph.D



8	Anas Karim Mohammed	Instructor	Political Sciencess	International Relations	Ph.D
9	Mustafa Farouk Majeed	Instructor	Political Sciencess	Political Systems and public Policies	Ph.D
10	Al>aa Taleb Khalaf	Instructor	Political Science	International Politics	Ph.D
11	Abbas Saadon Refaat	Instructor	Political Science	International Politics	Ph.D
12	Hussein Mustafa Ahmed	Ass.prof	Political Science	International Relations	.M.A
13	Majid Hameed Khudair	Ass.prof	Political Science	International Politics	.M.A
14	Ahmed Mahmoud Abdul Majid	instructor	Political Science	International Relations	.M.A
15	Hummam Khudair Mutlaq	instructor	Political Science	International Politics	.M.A
16	Hadeel Saad Ahmed	Asst.instructor	Law	Private Law	.M.A



Council of the International Politics Department

Academic Program of the Department of International Politics for the academic year  
2015/2016

Second Year / First Semester				Second Year/ Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSIS11	(Principles of International Relations (1	3	3	PSIS21	(Principles of International Relations (1	3	3
PSIS12	(Political Sociology (corporate) (1	3	3	PSIS22	(Political Sociology (corporate) (1	3	3
PSIS13	(Human Rights (corporate) (1	2	2	PSIS23	(Human Rights (corporate) (1	2	2
PSIS14	(Public International Law (corporate) (1	2	2	PSIS24	(Public International Law (corporate) (1	2	2
PSIS15	International System & International Organizations (1	3	3	PSIS25	International System & International Organizations (1	3	3
PSIS16	Political System and Public Policies in Iraq and Arab Countries (1	2	2	PSIS26	Political System and Public Policies in Iraq and Arab Countries (1	2	2
PSIS17	(Principles of International Relations (E)(1	3	3	PSIS27	(Principles of International Relations (E)(1	3	3
PSIS18	(Foreign Policy (corporate) (1	3	3	PSIS28	(Foreign Policy (corporate) (1	3	3
Total		21	21	Total		21	21

Third Year/ First Semester				Third Year/ Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSIT11	Private International Law and (Humanitarian Law (1	3	3	PSIT21	Private International Law and (Humanitarian Law (2	3	3
PSIT12	Political Parties and Public Opinion (1	3	3	PSIT22	Political Parties and Public Opinion (2	3	3
PSIT13	International Organization and (International Problems (E) (1	3	3	PSIT23	International Organization and (International Problems (E) (2	3	3
PSIT14	Ancient and Medieval Political Thought (corporate) (1	2	2	PSIT24	Modern-Contemporary Political Thought (corporate) (2	2	2
PSIT15	International Strategies (Regional - Global)(1	3	3	PSIT25	International Strategies (Regional - Global) (2	3	3
PSIT16	Diplomacy and the Art of Negotiations (1	3	3	PSIT26	Diplomacy and the Art of Negotiations (2	3	3
PSIT17	(International Political Media (1	2	2	PSIT27	(International Political Media (2	2	2
PSIT18	International Economic Relations (1	2	2	PSIT28	International Economic Relations (2	2	2
Total		21	21	Total		21	21

## The Three Top Students in the Department for the Academic Year 2014-2015

No	The Name	The Section	average
1	Hiba Ghlib Kamel	International Politics	88.421
2	Marwa Malik Kaied	International Politics	84.818
3	Huthaifa Abdulmutalib Abdulridha	International Politics	82.316

The number of students graduating from the department for the academic year 2014- /2015

Male	Female
15	13

## Higher Studies

The College was founded in 1994 and has started with one department, which is the Department of International Politics with the undergradu-

ate study. Later by the beginning of the academic year 1995/1996 the Ph.D. study was introduced, and at the beginning of the 1997/1998 academic year the M.A.'s study was opened.

The numbers of graduate students who are graduating in the academic year 2014/2015 according to the type of certificate.

.M.A		Ph.D	
Female	Male	Female	Male
1	5	-	٤
6		4	

Academic Program of the Department of International Politics / M.A. and –PH.D. studies

## M.ADgree

First Semester				Second Semester			
.Sq	Subject	Units	Hours	.Sq	Subject	Units	Hours
.1	(Foreign Policy (General Subject	2	2	.1	(Foreign Policy (General Subject	2	2
.2	(Foreign Policy (E) (General Subject	2	2	.2	(Foreign Policy (E) (General Subject	2	3
.3	(Foreign Policy (General Subject	2	2	.3	(Foreign Policy (General Subject	2	2
.4	(Foreign Policy (Major Subject	2	2	.4	(Foreign Policy (Major Subject	2	3
.5	(Foreign Policy (Major Subject	2	2	.5	(Foreign Policy (Major Subject	2	3
.6	(Foreign Policy (Major Subject	2	2	.6	(Foreign Policy (Major Subject	2	3
Total		12	12	Total		12	16

## Doctoral Degree

First Semester				Second Semester			
Sq	Subject	Units	Hours	Sq	Subject	Units	Hours
.1	(Foreign Policy (General Subject	2	2	.1	(Foreign Policy (General Subject	2	2
.2	(Foreign Policy (E) (General Subject	2	3	.2	(Foreign Policy (E) (General Subject	2	3
.3	(Foreign Policy (General Subject	2	2	.3	(Foreign Policy (General Subject	2	2
.4	(Foreign Policy (Major Subject	2	3	.4	(Foreign Policy (Major Subject	2	3
.5	(Foreign Policy (Major Subject	2	3	.5	(Foreign Policy (Major Subject	2	3
.6	(Foreign Policy (Major Subject	2	3	.6	(Foreign Policy (Major Subject	2	3
Total		12	16	Total		12	16

## Strategy Department

It was founded in 1998 and cares to study the strategic affairs with all its levels and dimensions and related. It aims to graduate specialists at a high level in the areas of interest.

Council of the of Strategy Department for the academic year 2015 – 2016

.Sq	The name	Academic title	General Special-ization	Specific Specialization	Higher certificate
1	Lubna Khamis Mahdi “ Head of Department “	Ass.prof	Political Science	Strategy	Ph.D
٢	Ali Fares Hameed “ Section rapporteur “	Instructor	Political Science	Strategy	Ph.D
3	Menem Sahi Hussein Al-Amar	Professor	Political Science	International Relations and strategy	Ph.D
٤	Sarmed Zaki Hamed	Professor	Political Science	International Relations	Ph.D
٥	Ali Hussein Hamid	Ass.prof	Political Science	Strategy	Ph.D
٦	Qahtan Khazum Mohammed	Ass.prof	Political Science	International Politics	Ph.D
7	Malik Dahaam Muteeb	Ass.prof	Political Science	International Economic Relations	Ph.D
8	Qassim Mohammed Obaid	Ass.prof	Literatures	Geopolitical	Ph.D
9	Hussein Allawi Khalifa	Instructor	Political Scienc- cess	Strategy	Ph.D
10	Sarab Hamid Saleh	Instructor	Political Science	International Relations	Ph.D
10	Ehsan Adnan Abdullah	Instructor	Political Science	Strategy	M.A.

11	Suhad Ismail Khalil	Instructor	Political Science	Strategy	.Ph.D
12	Mohammed Abdullah Radi	Ass.Instructor	Political Science	Strategy	.M.A
13	Amena Ali Saeed	Asst.instructor	Political Science	Strategy	.M.A
14	Zaid Mohammed Ali	Asst.instructor	Political Science	Strategy	.M.A
15	Salah Mahdi Hadi	Asst.instructor	Political Science	Strategy	.M.A
16	Noor Abdul Ilah Ajursc	Asst.instructor	Political Science	Strategy	.M.A
17	Shaima Tarkan Saleh	Asst.instructor	Political Science	Strategy	.M.A



Council of the Strategy Department

## Academic Program of the Department of Strategy for the Academic Year 2015-2016

Second Year/ First Semester				Second Year /Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSS11	Principles of Strategy (E) terms & definitions (1	3	3	PSS21	Principles of Strategy (E) terms (& definitions (2	3	3
PSS12	(Human Rights (corporate) (1	2	2	PSS22	(Human Rights (corporate) (2	2	2
PSS13	Principles of International Relations ((1	3	3	PSS23	Principles of International Relations (2	3	3
PSS14	(Political Sociology (corporate) (1	3	3	PSS24	(Political Sociology (corporate)(2	3	3
PSS15	Public International Law (corporate) (1	2	2	PSS25	Public International Law (corporate) (2	2	2



PSS16	(Strategy Thought (1	3	3	PSS26	(Strategy Thought (2	3	3
PSS17	(Foreign Policy (corporate) (1	3	3	PSS27	(Foreign Policy (corporate) (2	3	3
PSS18	International System & Interna- (tional Organizations (1	2	2	PSS28	International System & Interna- (tional Organizations (2	2	2
total		21	21	total		21	21

Third Year /First Semester				Third Year /Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th.App,Tut				Th.App,Tut	
PSST11	International Conflict & Cooperation (E) (1	3	3	PSST21	International Conflict & Cooperation (E) (2	3	3
PSST12	Diplomacy & the Art of Negotiation ((1	3	3	PSST22	Diplomacy & the Art of Negotia- tion (2	3	3
PSST13	(Making of Strategic Decision(1	3	3	PSST23	(Making of Strategic Decision (2	3	3
PSST14	Ancient - Medieval Political Thought (corporate) (1	3	3	PSST24	Modern-Contemporary) Political) (Thought (corporate) (2	3	3
PSST15	(Strategic Balance (1 (environment + deterrence + change)	3	3	PSST25	(Strategic Balance (2 (environment + deterrence + change)	3	3
PSST16	(Strategy of National Security(1	3	3	PSST26	(Strategy of National Security (2	3	3
PSST17	Iraq and Strategies of Regional and (Global Powers (1	3	3	PSST27	Iraq and Strategies of Regional and (Global Powers (2	3	3
Total		21	21	Total		21	21

Fourth Year/ First Semester				Fourth Year/ Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSSF11	Iraq and Strategies of Regional (and Global Powers (E) (1	3	3	PSSF21	Iraq and Strategies of Regional (and Global Powers (E) (2	3	3
PSSF12	(Geopolitics (1	3	3	PSSF22	(Geopolitics (2	3	3
PSSF13	(Futuristic Studies (1	3	3	PSSF23	(Futuristic Studies (2	3	3
PSSF14	(Strategic Planning (1	3	3	PSSF24	(Strategic Planning (2	3	3
PSSF15	Theories of International Con- flict and Cooperation (1	3	3	PSSF25	Theories of International Con- flict and Cooperation (2	3	3
PSSF16	Arab Islamic Political Thought ((corporate) (1	2	2	PSSF26	Arab Islamic Political Thought ((corporate) (2	2	2
PSSF17	Methodology & Graduation (Research(corporate) (1	2	2	PSSF27	Methodology & Graduation (Research(corporate) (2	2	2
PSSF18	(Economic Strategies (1	2	2	PSSF28	(Economic Strategies (2	2	2
Total		21	21	Total		21	21

The top three students In the section for the academic year 2014/2015

No	The Name	The Section	Average
1	Umnya Hamza Yaseen	Strategy	88.458
2	Mena Luay Abdulrazaq	Strategy	86.233
3	Asraa Saleem Kazim	Strategy	82.97

The number of students graduating from the department for the Academic Year 2014-2015

Male	Female
11	10

### Higher Studies

The M.A.'s study has been opened in the department during the academic year 1997/1998 and PhD. studies in the academic year 1999/2000

The number of graduate students who are graduating in the academic year 2014/2015, according to the type of certificate

.M.A		Ph.D	
Female	Male	Female	Male
4	11	-	-
15		-	

Academic Program of the Department of Strategy / M.A. and –PH.D. studies

### M.A. Degree

First Semester				Second Semester			
.Sq	Subject	Units	Hours	.Sq	Subject	Units	Hours
.1	(Strategy (General Subject	2	2	.1	(Strategy (General Subject	2	2
.2	(Strategy (E) (General Subject	2	3	.2	(Strategy (E) (General Subject	2	3
.3	(Strategy (General Subject	2	2	.3	(Strategy (General Subject	2	2
.4	(Strategy (Major Subject	2	3	.4	(Strategy (Major Subject	2	3
.5	(Strategy (Major Subject	2	3	.5	(Strategy (Major Subject	2	3
.6	(Strategy (Major Subject	2	3	.6	(Strategy (Major Subject	2	3
Total		12	16	Total		12	16

### Doctoral Degree

First Semester				Second Semester			
.Sq	Subject	Units	Hours	.Sq	Subject	Units	Hours
.1	(Strategy (General Subject	2	2	.1	(Strategy (General Subject	2	2
.2	(Strategy (E) (General Subject	2	3	.2	(Strategy (E) (General Subject	2	3
.3	(Strategy (General Subject	2	2	.3	(Strategy (General Subject	2	2
.4	(Strategy (Major Subject	2	3	.4	(Strategy (Major Subject	2	3
.5	(Strategy (Major Subject	2	3	.5	(Strategy (Major Subject	2	3
.6	(Strategy (Major Subject	2	3	.6	(Strategy (Major Subject	2	3
Total		12	16	Total		12	16

### 3. The Political Systems and Public Policies Department

This department was founded on 06/30/1998 under the name of Public Policy, later was amended department name to the political systems and

public policy department in 2003. It is interested in public policy and what is related to it. The department aims at graduating specialists at a high level in the field of interest.

#### Council of the of Political Systems and Public Policies Department for the Academic Year 2015 – 2016

.Sq	The name	Academic title	General Specialization	Specific Specific Specialization	Degree
1	Laith Abdul Hassan Jawad “ Head of Department “	Professor	Political Science	Political Systems	Ph.D
2	Firas Abdul-Karim Muhammad Ali « Section Rapporteur «	Instructor	Political Science	Political Systems	Ph.D
	Amer Hassan Fayyad	Professor	Political Science	Political Thought	Ph.D
3	Maha Abdel-Latif Hasan	Ass.prof	Political Science	Political Systems	Ph.D
4	Hisham Hikmat Abdul- Sattar	Ass.prof	Political Science	Political Systems	Ph.D
5	Ahmed Abdullah al- Nahi	Ass.prof	Political Science	Political Systems	Ph.D
6	Emad Salah Abdul- Razzaq	Ass.prof	Political Science	Political systems and public policies	Ph.D
7	Yasin Saad Mohammed	Ass.prof	Political Science	Political Systems	Ph.D
8	Ali Salman Sayel	Ass.prof	Political Science	Political systems and public policies	Ph.D
9	Zaid Adnan Mohsin	Ass.prof	Political Science	Political systems and public policies	Ph.D
12	Esra Aladdin Nuri	Ass.prof	Political Science	Political systems and public policies	Ph.D
13	Khazim Ali Mahdi	Ass.prof	Political Science	Political Thought	Ph.D
15	Ali Mohammed Alwan	Ass.prof	Political Science	Political Thought	Ph.D

16	Yasser Ali Ibrahim	Ass.prof	Political Science	Political systems and public policies	Ph.D
17	Ahmed Ghalib Mohi	Ass.prof	Political Sciencess	Political systems	Ph.D
18	Qasim Shoaib Abbas	Instructor	History	History and civilization	Ph.D
19	Nahedh Hassan Jaber	Instructor	Political Science	Political Though	Ph.D
20	Istabrq Fadel Shuaeer	Instructor	Political Sciencess	Political Systems and Public Policies	Ph.D
21	Abdel- Azim Jabir Hafeth	Instructor	Political Science	Political Systems and Public Policies	Ph.D
22	Hebaa Zuhair Zidane	Instructor	Science	Computer Sccience	.M.A



### Council of the Political Systems and Public Policies Department

The Academic Program of Political Systems and Public Policies Department Year Academic2014/2015

Second Year/ First Semester				Second Year/ Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSSYS11	(Political Sociology (corporate) (1	3	3	PSSYS21	Political Sociology (corporate) (2	3	3
PSSYS12	(Human Rights (corporate) (1	2	2	PSSYS22	(Human Rights (corporate) (2	2	2
PSSYS13	(Public International Law (corporate) (1	2	2	PSSYS23	Public International Law ((corporate) (2	2	2
PSSYS14	Principles of Political Systems and Public Policies (1) (E	3	3	PSSYS24	Principles of Political Systems and Public Policies ((2) (E	3	3
PSSYS15	Political Systems and Public Policies (in Iraq and Arab Countries (1	3	3	PSSYS25	Political Systems and Public Policies in Iraq and Arab (Countries (2	3	3
PSSYS16	(Constitutional Law (1	2	2	PSSYS26	(Constitutional Law (2	2	2
PSSYS17	(Foreign Policy (corporate) (1	3	3	PSSYS27	(Foreign Policy (corporate) (2	3	3
PSSYS18	(Public and Local Administrations (1	3	3	PSSYS28	Public and Local Administrations (2	3	3
Total		21	21	Total		21	21

Third Year/ First Semester				Third Year /Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th.App,Tut				Th.App,Tut	
PSSYT11	Political Parties and Public Opinion (1	3	3	PSSYT21	Political Parties and Public Opinion (2	3	3
PSSYT12	Political Systems and Public Policies in the Southern World (Asia-Africa-Latin America) (1	3	3	PSSYT22	Political Systems and Public Policies in the Southern World ((Asia- Africa-Latin America) (2	3	3
PSSYT13	Development Policies and Sustain (Human Development (1	3	3	PSSYT23	Development Policies and Sustain Human Development (2	3	3
PSSYT14	Public Policies (Making-Implementing-Analyzing- Evaluating) ((1	3	3	PSSYT24	Public Policies (Making-Implementing-Analyzing- Evaluating) ((2	3	3
PSSYT15	Political Institutions and Theories (of Public Policy (E) (1	3	3	PSSYT25	Political Institutions and Theories (of Public Policy (E) (2	3	3
PSSYT16	The Political Systems of Turkey (and Iran (1	2	2	PSSYT26	The Political Systems of Turkey (and Iran (2	2	2
PSSYT17	Parliamentary Policies (Procedures and Practices) (1	2	2	PSSYT27	Parliamentary Policies (Procedures and Practices) (2	2	2
PSSYT18	Ancient Medieval Political (Thought (corporate) (1	2	2	PSSYT28	Modern -Contemporary) Political Thought (corporate) (2	2	2
Total		21	21	Total		21	21

Fourth Year/ First Semester				Fourth Year/ Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th.App,Tut				Th.App,Tut	
PSSYF11	Political Development and (Political Culture E (1	3	3	PSSYF21	Political Development and (Political Culture E (2	3	3
PSSYF12	Political Systems and Public Policies in the Northern World (Europe- Northern America) (1	3	3	PSSYF22	Political Systems and Public Policies in the Northern World (Europe- Northern America) (2	3	3
PSSYF13	Public Relations and Communicating Skills (1	3	3	PSSYF23	Public Relations and Communicating Skills (2	3	3
PSSYF14	Arab-Islamic Political (Thought (corporate) (1	2	2	PSSYF24	Arab-Islamic Political (Thought (corporate) (2	2	2
PSSYF15	Methodology and Graduation (Research (corporate) (1	3	2	PSSYF25	Methodology and Graduation (Research (corporate) (2	3	2
PSSYF16	(Political Psychology Science (1	3	3	PSSYF26	(Political Psychology Science (2	3	3
PSSYF17	Crisis Management in Political Systems (1	2	3	PSSYF27	Crisis Management in Political Systems (2	2	3
PSSYF18	(Political Analysis (1	2	2	PSSYF28	(Political Analysis (2	2	2
Total		21	21	Total		21	21

The top three students in the section for the academic year 2014/2015

Sq.	The Name	The Section	Average
1	Zainab Hamza Abd Shadhan	political systems and public policy	90.646
2	Aseel Thaeir Thiab	political systems and public policy	86.937
3	Afraa Khalid Abd	political systems and public policy	86.191



The number of students graduating from the department for the academic year 2014-2015

Male	Female
11	15

### Higher Studies

The M.A.'s study has been opened in the department by the academic year 1997/1998 and PhD. studies in the academic year 1999/2000.

-The number of students who are graduating in the academic year 2014/2015 (from 01/09/2013 until 31/08/2014) According to the type of certificate are

M.A		Ph.D	
Female	Male	Female	Male
4	3	-	1
7		1	

Academic Program of the Department of political systems and public policies for higher studies / M.A. –PH.D

### M.A. Degree

First Semester				Second Semester			
.Sq	Subject	Units	Hours	.Sq	Subject	Units	Hours
.1	(Political Systems & Public Policies (General Subject	2	2	.1	(Political Systems & Public Policies (General Subject	2	2
.2	(Political Systems & Public Policies (E)(General Subject	2	3	.2	(Political Systems & Public Policies (E)(General Subject	2	3
.3	(Political Systems & Public Policies (General Subject	2	2	.3	(Political Systems & Public Policies (General Subject	2	2
.4	(Political Systems & Public Policies (Major Subject	2	3	.4	(Political Systems & Public Policies (Major Subject	2	3
.5	(Political Systems & Public Policies (Major Subject	2	3	.5	(Political Systems & Public Policies (Major Subject	2	3
.6	(Political Systems & Public Policies (Major Subject	2	3	.6	(Political Systems & Public Policies (Major Subject	2	3
Total		12	16	Total		12	16

### Doctoral Degree

First Semester				Second Semester			
.Sq	Subject	Units	Hours	.Sq	Subject	Units	Hours
.1	(Political Systems & Public Policies (General Subject	2	2	.1	(Political Systems & Public Policies (General Subject	2	2
.2	(Political Systems & Public Policies (E) (General Subject	2	3	.2	Political Systems & Public Policies (E) (General (Subject	2	3
.3	(Political Systems & Public Policies (General Subject	2	2	.3	(Political Systems & Public Policies (General Subject	2	2
.4	(Political Systems & Public Policies (Major Subject	2	3	.4	(Political Systems & Public Policies (Major Subject	2	3

.5	(Political Systems & Public Policies (Major Subject	2	3	.5	(Political Systems & Public Policies (Major Subject	2	3
.6	(Political Systems & Public Policies (Major Subject	2	3	.6	(Political Systems & Public Policies (Major Subject	2	3
Total		12	16	Total		12	16

#### 4-Department of International Economic Relations

It was founded on (19/09/1998), the department is interested in all aspects of international

economic relations and provide the society with graduates from the owners of competence in this field of knowledge.

The Council of the of International Economic Relations Department for the Academic Year 2014 – 2015

No	The name	Academic title	General jurisdiction	Specialization	Higher certificate
1	Ahmed Shehab Ahmed “Head of the Department “	Professor	Statistics	Applied Statistics	Ph.D
2	Iklass Qassim Nifl «Section Rapporteur «	Lecturer	Political science	International Economic Relations	Ph.D
3	Abid Ali Al-Mamouri	Professor	Economy	Economical Thought	Ph.D
4	Abdul Samed Saddoun	Professor	Political science	International Economic Relations	Ph.D
5	Heitham Kareem Syee- wan	Asst.prof.	Political science	International Economic Relations	Ph.D
6	Nadia Dhyaa Shkaraa	Asst.prof.	Political science	International Relations	Ph.D
7	Wassen Ehssan Saheb	Asst.prof.	Political science	International Economic Relations	Ph.D
8	Layla Assure Hajeem	Asst.prof.	Economy	International Economy	Ph.D
10	Edhah Numan Khazaal	Asst.prof.	English Language	Methods of Teaching English Language	Ph.D
11	Mohammed Abbas Ahmed	Lecturer	Political science	International Economic Relations	Ph.D
12	Essam Asaad Mohsen	Lecturer	Political science	International Relations	Ph.D
13	Sulaf Mushab Mahdi	Lecturer	Arabic Language	Modern literature	Ph.D
14	Nessreen Ryad Shanshool	Lecturer	Political science	International Economic Relations	M.A
15	Attared Awad Abdul Al-Hameed	Lecturer	Political science	International Relations	Ph.D
16	Ansam Awnnee Rasheed	Lecturer	Law	Civil Law	M.A
17	Randa Talal Hasan	Lecturer	Political science	International Economic Relations	M.A
18	Vian Hadi Abid	Asst. Lecturer	Political science	International Economic Relations	M.A



Council of International Economic Relations Department

## Academic Program of International Economic Relations Department

Second Year/ First Semester				Second Year /Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSRS11	(Human Rights (corporate) (1	2	2	PSRS21	(Human Rights (corporate) (2	2	2
PSRS12	(Political Sociology (corporate) (1	2	2	PSRS22	(Political Sociology (corporate) (2	2	2
PSRS13	Public International Law (corporate) (1	2	2	PSRS23	Public International Law (corporate) (2	2	2
PSRS14	(Foreign policy (corporate) (1	2	2	PSRS24	(Foreign policy (corporate) (2	2	2
PSRS15	(Micro Economics (1	3	3	PSRS25	(Micro Economics (2	3	3
PSRS16	(Economic Thought (1	3	3	PSRS26	(Economic Thought (2	3	3
PSRS17	Principles of Economics and (Economic Relations (E)(1	3	3	PSRS27	Principles of Economics and (Economic Relations (E)(2	3	3
PSRS18	International Economic Relations (1	2	2	PSRS28	International Economic Relations (2	2	2
PSRS19	(Principles of Statistics (1	2	2	PSRS29	(Principles of Statistics (2	2	2
Total		21	21	Total		21	21

Third Year/ First Semester				Third Year/ Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSRT11	Ancient -Medieval) Political) (Thought (corporate) (1	2	2	PSRT21	Modern - Contemporary) Po-) (litical Thought (corporate) (2	2	2
PSRT12	International Economic and (Foreign Trade (1	3	3	PSRT22	International Economic and (Foreign Trade (2	3	3
PSRT13	(Macro Economics (1	3	3	PSRT23	(Macro Economics (2	3	3
PSRT14	(Mathematical Economic E(1	3	3	PSRT24	(Statistical Economic E (2	3	3

PSRT15	International and Regional Economic Organizations (E) ((1	3	3	PSRT25	International and Regional Economic Organizations (E) ((2	3	3
PSRT16	Management of Economic Resources and Knowledge (Economy (1	2	2	PSRT26	Management of Economic Resources and Knowledge (Economy (2	2	2
PSRT17	Public Finance and Financial (Policy (1	3	3	PSRT27	Public Finance and Financial (Policy (2	3	3
PSRT18	Diplomacy and the Art of (Negotiation (1	2	2	PSRT28	Diplomacy and the Art of (Negotiation (2	2	2
Total		21	21	Total		21	21

Fourth Year/ First Semester				Fourth Year /Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PSRF 11	Arab Islamic Political (Thought (corporate) (1	2	2	PSRF 21	Arab Islamic Political (Thought (corporate) (2	2	2
PSRF 12	Methodology and Graduation Research(corporate) (1	2	2	PSRF 22	Methodology and Graduation Research(corporate) (2	2	2
PSRF 13	Human and Economic (Development (1	2	2	PSRF 23	Human and Economic (Development (2	2	2
PSRF 14	Planning and Economic (Systems(1	3	3	PSRF 24	Planning and Economic (Systems(2	3	3
PSRF 15	Electronical Trade and (Market Integration (1	3	3	PSRF 25	Electronical Trade and (Market Integration (2	3	3
PSRF 16	International Investment (and Oil Economics (1	3	3	PSRF 26	International Investment (and Oil Economics (2	3	3
PSRF 17	Monitory Theory and International Monitory (Policy(1	3	3	PSRF 27	Monitory Theory and International Monitory (Policy (2	3	3
PSRF 18	Econometric and Construc- (tion Economic Models E (1	3	3	PSRF 28	Econometric and Construc- (tion Economic Models E(2	3	3
Total		21	21	Total		21	21

The Academic Program of International Economic Relations Department 2014/2015

### M.A. Degree

First Semester				Second Semester			
Sq.	Subject	Units	Hours	Sq.	Subject	Units	Hours
.1	Economic International Relations ((General Subject	2	2	.1	Economic International Relations ((General Subject	2	2
.2	Economic International Relations (E) ((General Subject	2	3	.2	Economic International Relations ((E) (General Subject	2	3
.3	(Strategy (General Subject	2	2	.3	(Strategy (General Subject	2	2

.4	Economic International Relations ((Major Subject	2	3	.4	Economic International Relations ((Major Subject	2	3
.5	Economic International Relations ((Major Subject	2	3	.5	Economic International Relations ((Major Subject	2	3
.6	Economic International Relations ((Major Subject	2	3	.6	Economic International Relations ((Major Subject	2	3
Total		12	16	Total		12	16

### Doctoral Degree

First Semester				Second Semester			
Sq.	Subject	Units	Hours	Sq.	Subject	Units	Hours
.1	Economic International Relations ((General Subject	2	2	.1	Economic International Relations ((General Subject	2	2
.2	Economic International Relations ((E) (General Subject	2	3	.2	Economic International Relations (E) ((General Subject	2	3
.3	(Strategy (General Subject	2	2	.3	(Strategy (General Subject	2	2
.4	Economic International Relations ((Major Subject	2	3	.4	Economic International Relations ((Major Subject	2	3
.5	Economic International Relations ((Major Subject	2	3	.5	Economic International Relations ((Major Subject	2	3
.6	Economic International Relations ((Major Subject	2	3	.6	Economic International Relations ((Major Subject	2	3
Total		12	16	Total		12	16

The top three students in the section

Sq.	The Name	The Section	Average
1	Suroor Mohammed Hasan	International Economic Relations	87.039
2	Ebtehal Hussein Kazim	International Economic Relations	83.06
3	Shaymaa Rasool Taha	International Economic Relations	82.285

The number of the students graduating from the department for the academic year 2014/2015

Male	Female
12	15



## Higher Studies

The M.A.'s study has been opened in department by the academic year 1998/1999 and PhD. studies in the academic year 1999/2000. The

number of students who are graduating in the academic year 2014/2015 ( from 01/09/2014 until 31/08/2015 ) According to the type of certificate

.M.A		Ph.D	
Female	Male	Female	Male
2	3	-	4
5		4	



OCTOBER 2016

# COLLEGE OF INFORMATION ENGINEERING



## About College of Informa- tion Engineering

This college was established in 2002 to be one of the leading institutes in the field of information technology. The mission of this college is to develop graduate skills in the information technology for businesses. It includes the following departments: Information and Communication Engineering, Network Engineering, and Systems Engineering. The college grants Bachelor and Master degrees.





### About the College:

The college was established in 2002, under the name of 'College of Information Technology', to become the core of the information technology field in Iraq. To stay updated with scientific and cognitive development in this area, specialized staff which is capable to keep up with the rapid changes in the field was prepared.

In 2005 and as a result of the rapid development and convergence of information and communication, the College council had found that it was necessary to modify the college's name to 'College of Information Engineering'. The expansion of its specialties included information and communication technologies, it also had modified academic programs for the college under its new perspective.

The College is seeking to raise the level of teaching and research and to link it to the needs of the local and regional environment, as well as the dissemination of knowledge and the promotion of research collaboration with local, regional and international institutions. To achieve this, the sections of the College have a responsibility to provide students with general and specialized knowledge and necessary practical skills to enable them to use modern technology by offering a variety of academic programs on the first undergraduate and graduate degree levels, these programs combines excellence and modernity and responds to the needs of society and the labor market.

The College consists of three departments: Department of Information and Communication Engineering, Department of Networks Engineering and Department of Systems Engineering.

It has been taken into account the programs offered by these sections equilibrated with regional and international academic programs of similar design colleges that contain the latest technologies offered in these terms of reference.

The College is keen to provide training opportunities for students in the private sector and the public sector for special institutions to facilitate the integration of students in the job market after graduation, and the integration of academic skills and knowledge requirements of practical life. The college is seeking to launch a series of continuous education programs in the latest information and communication technology for students and beneficiaries from inside and outside the university to spread education and culture in this area. To achieve the vision of the college and its ambitious goals to acquire a privileged position among universities in the region, the college needs to provide an environment and outstanding academic programs in addition to the scientific and practical capabilities of student development. The college reviewed the study plans for undergraduate studies programs and graduate studies for all departments in 2010 and 2015 to keep pace with the evolution in this jurisdiction and meet the requirements of the labor market.

The college also adopted the application of educational quality assurance in all its actions, educational, research, and other activities to ensure the provision of high-quality academic programs and access to excellence in this area. The College has also started the preparatory phase for Academic Accreditation of the Council of Academic Accreditation Board of Engineering and Technology (ABET).

College of Information Engineering Buildings





College of Information Engineering Gardens

## Deans of the College of Engineering



Prof. Dr. Mazen Abdul Hamid Kadhim

2002 – 2003



Prof. Dr. Fawzi Mohamed Mounir Al-Neama

2003 - 2004, 01/04/2013 - 13/06/2013



Prof. Dr. Sufyan Tayeh Faraj

2004 – 2006



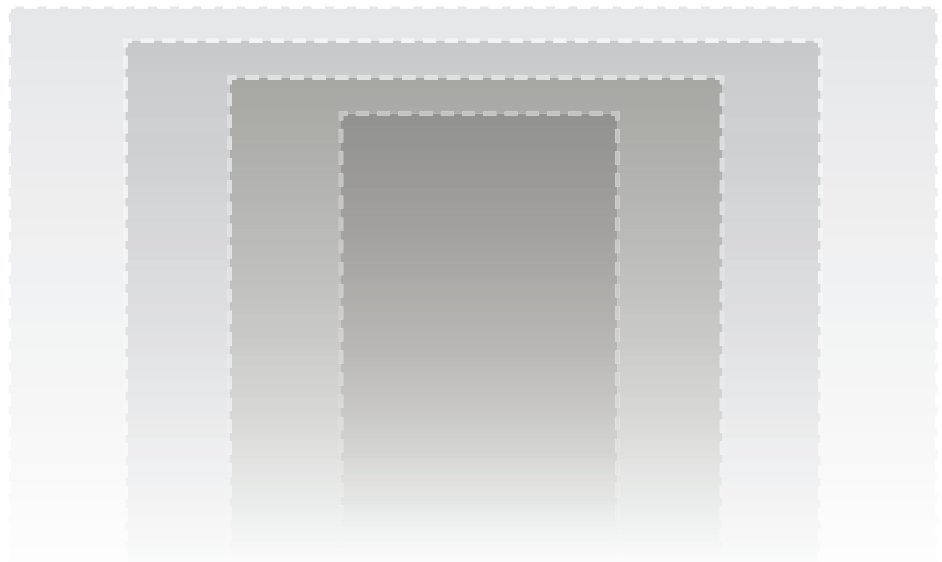
Prof. Dr. Nasr Nafeaa Khamis

2007 – 2013



Prof. Dr. Mohammed Zeki Al-Faiz

2013 - UNTIL NOW





## Council of the college of Information Engineering for the academic year 2015-2016

Sq.	Name	Position	Scientific Section	Academic Title	General Specialization	Specific Specialization	Degree	Date of joining
1	Mohammed Zeki Al-Faiz	Dean of the college		Professor	Electronic Engineering	Control and Computers	Ph.D.	13/06/2013
2	Mahmoud Khalil Ibrahim	Deputy Dean for Academic and Student Affairs	Department of Systems Engineering	Asst. prof.	Computer Science	Info. & Networks Security	Ph.D.	23/09/2014
3	Ali Sadiq Abdul Hadi	Deputy Dean for Administrative and Financial Affairs	Information and Communication Engineering	Asst. prof.	Electronic Engineering	Communication	Ph.D.	23/09/2014
4	Bayaan Mahdi Sabaar	Head of Department of Information and Communication Engineering	Information and Communication Engineering	Asst. prof.	Electricity Engineering	Signal processing	.Ph.D	23/09/2014
5	Abdul Karim Abdul Rahman	Head of Networks Engineering Department	Networks Engineering	Asst. prof.	Communication Engineering	Digital Engineering	Ph.D.	09/22/2014
6	Osama Ali Awad	Head of Systems Engineering Department	Department of Systems Engineering	Lecturer	Control systems	Automatic Control	Ph.D.	09/24/2014



College Council

**Vision:**

College of Information Engineering seeks to achieve excellence in the field of information and communication engineering and networks at the local, regional and global levels under the intellectual and healthy environment helping out with community service and obtaining scientific development, and assisting with the preparation of engineering staff in the field of competence. This actually fits with the scientific and economic developments in the local, regional and global labor market.

**Mission:**

Participation to provide high quality academic programs in line with the effective scientific and technological development at the local, regional and global level, in the development of these technologies and continuous improvement in the fabric of educational and research system altogether through continued cooperation with those working in the field of information and communication and networks engineering and according to local, regional and global labor market needs.

**Goals:**




The College is aiming to prepare engineering staff is a distinctive and high degree of science, knowledge and experience to be future leaders in their business centers. This is achieved through the following: -

- ① The effective management and optimal use of facilities and resources of the college developed in accordance with the prescribed standards.
- ② Developing and introducing comprehensive academic programs having visions of the future and compatible with the continuous change in the needs and requirements of the labor market, in the light of local, regional and global academic standards.
- ③ Deepening the academic culture in the areas of communication technologies and information among students.
- ④ Integrating the academic side of the study

in the fields of communications and information technologies with applied side.

- ⑤ Developing learning, teaching, training methods for students and equipping them with knowledge and skills that are compatible with the community and the labor market requirements.
- ⑥ Attracting faculty members with multidisciplinary distinct and different skills in the field of information and communication technologies.
- ⑦ Adopting total quality and continuous improvement in the educational process and research culture.
- ⑧ Enriching the theoretical and practical knowledge in accordance with the ethical and social standards of the community and spread the culture and ethics of scientific research.
- ⑨ Strengthening cooperation between the college and other colleges and scientific research centers locally, regionally and globally.
- ⑩ Focusing on discreet and distinguished research with its practical usefulness and usefulness to the society.
- ⑪ Developing the functional capacity for the college staff, providing training opportunities and access to higher teaching staff. Higher administrative certificates and getting the highest degree of the teaching and administrative staff and reward outstanding work and encourage creative thinking.
- ⑫ Supplying the students with the latest learning and knowledge and modern technology sources to develop their abilities in innovation, leadership and self-learning, teamwork and competition.
- ⑬ Providing students with services and encourage them to develop social, professional and academic skills.
- ⑭ Supporting continuing Education and provide counseling to serve the development and community.

Top Three Students at the College 2015-2016

Sq.	Student Name	Department	average	Sequence at the college	Picture
1	Saad Badya Younis	Networks Engineering	84.276	First	
2	Samar Farhan Gatea	Info. & Comm. Engineering	79.084	Second	
3	Sara Rabea Mohammed	Internet Engineering	75.389	Third	

### Advisory bureaus and research units of the college

#### Consulting Engineering bureau

This bureau was established in 2009; out of the urgent need for a consultant within the bureau of modern disciplines simulate global development and information under the name of (Information Engineering Consultancy Bureau). Recently the name was changed in mid-2013 to Consulting Engineering bureau – college of Information Engineering, to cover all aspects of traditional consulting offices in addition to the college specialization. The Bureau provides consultancy services in various aspects such as Design - Studies - check designs - Overseeing the implementation, setting standards and other various services. In addition to what can be provided by the office of consulting services and design in aspects of civil and architectural engineering and construction works and various related systems. The bureau is proud of

its ability to cover different aspects of Infor-

mation Engineering, Communications & Networks, wired and wireless applications, Web applications, E-government applications, E-commerce and mobile phone networks, information and networks security, monitoring of TV networks, vehicles tracking systems using GPS technology, providing security solutions for enterprises and individuals and databases, banks and financial transactions, and geographic information systems (GIS) with its applications Environmental, health, industrial, agricultural and other fields.

#### Bureau staff

The bureau staff involves advanced consultant staff involving PhD. and M. Sc.'s degree holders in different disciplines covered by the bureau and expertise of up to tens of years. In addition there are assistant staff members of engineers and others for technical assistance and administrative follow-up. It is associated with the office staff of consultants from Al-Nahrain Uni-

versity and other universities when needed for the purpose of attribution in some disciplines. Also, the bureau has signed memoranda of understanding and partnership agreements with some local and international companies and research centers. The bureau is also putting the final touches to conclude a partnership contracts and mutual cooperation with a group of consulting firms and some of the specialty centers and similar local and international research bodies for the purpose of Specialist and joint action and exchange of experience integration.

### Bureau Activities

The most important work completed or in progress, which was attended by the engineering consulting bureau:

1. Consulting engineering works for Dezlat Hyundai stations fast monument in Baghdad and a number of provinces, and the Ministry of Electricity.
2. Consulting engineering works in Hadetha Dezlat station and the Ministry of Electricity.
3. Advisory services to create a network of banking system in all branches of ACB in Iraq and the Ministry of Finance.
4. Construction of health geographical map system for the city of Baghdad for Ministry of Health.
5. Being the Advisory (check designs and schedules quantities and oversee the implementation) to set up a cultural city for the kids – for Ministry of Culture.
6. Group of Studies and panel discussions, Contributed by the office for the benefit of different views, mostly government and some of them resulted in the projects under study or shown as offers :-
  - A study on the design and implementation of networked systems for communication and exchange of data using (LTE) technology.
  - Vehicles Tracking using the integrated network and using (GPS) system.
  - Study on e-trading electronically via the World Wide Web and store information using databases.

- Monitor and collect data on the environment and linked to a central interactive network for different applications.

- CCTV surveillance and linked computer networks for security applications.

- A Study on e-government in Iraq - Reality and Ambition and implementation steps.

- A study on the implementation of modern communications networks in Iraq.

- Security solutions for data transfer and security networks.

### Academic Departments

#### Department of Information and Communication Engineering

The department was established in 2002 under the name of 'Department of Information Engineering'. It enrolled its first batch of students according to the university system plan of quarters; the study was a three-year period, which lasted until the academic year (2004-2005). Where it had adopted a semester system and the study period had become a term of four years. Then it accepted its first batch of students, according to the central admissions plan to the Ministry of Higher Education and Scientific Research.

The department has launched graduate study programs (M.Sc. / PhD) degree in information and communication engineering since its inception in 2002. A new name has been implemented for the department (Department of Information and Communication Engineering) after obtaining the expansion of the college and the opening of new sections in the academic year (2008-2009). The section aims to graduate engineering staff able to develop information and communication systems and applications, management and used effectively and efficiently to provide integrated quality in information and communications technology services and graduate them with a B.A. of Science degree in Information and Communication Engineering.



## Department of Information and Communication Engineering Council 2015–2016

Sq.	The name	Academic title	General Specialization	Specific Specialization	Degree
1	Bayan Mahdi Sabar	Asst. Prof.	Electrical Engineering	Signal processing	Ph.D.
2	Naser Nafea Khamis	Professor	Communication Engineering	Image processing	Ph.D.
3	Hikmat Najem Abdullah	Professor	Electrical Engineering	Communication Engineering	Ph.D.
4	Talib Mohammad Jawad Abbas	Asst. Prof.	Computer Science	Signal processing	Ph.D.
5	Amar Dawood Jassem	Lecturer	Computer Engineering	Microprocessor Applications	Ph.D.
6	Hana Rashid Ismail	Lecturer	Computer Science	Software systems	M.Sc.
7	Fatima Abdulnabi Salman	Asst. Lecturer	Computer Engineering	Networks Engineering	M.Sc.



Information and Communication Engineering Department Council

## Curriculum

First Year First Semester				First Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR111	English Language I	2	2	UR121	English Language II	2	2
CR111	Computer Programming	5	3	CR121	(++Object oriented Programming I (C	5	3
CR112	Mathematics I	4	3	CR122	Mathematics II	5	4
CR113	Logic Circuits	5	3	CR123	Electrical Circuits	7	4



CR114	IT Fundamentals & Workshop	5	3	CR124	Engineering Drawing & CAD	3	2
CR115	Physical Electronics	6	3	ICE121	Internet Programming I	5	3
<b>Total</b>		<b>27</b>	<b>18</b>	<b>Total</b>		<b>27</b>	<b>18</b>

Second Year First Semester				Second Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR211	Arabic Language	2	2	CR221	Digital Electronics	5	3
CR211	Object Oriented Programming II (Java)	5	3	ICE221	Coding & Data Compression	3	3
CR212	Electronics	6	4	ICE222	Microprocessors Architecture & Interfacing	6	4
CR213	Engineering Analysis	6	4	ICE223	Internet Programming II	4	3
ICE211	Statistical Inform. Theory	3	2	ICE224	Transmission Line Theory	3	2
ICE212	Data & Database Systems Structure	6	3	ICE225	Computer Networks	6	3
<b>Total</b>		<b>28</b>	<b>18</b>	<b>Total</b>		<b>27</b>	<b>18</b>

Third Year First Semester				Third Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CR311	Communication Systems	7	4	UR321	Human Rights	1	1
CR312	Project Management	3	2	CR321	Operating Systems	6	4
ICE311	Computer Architecture	3	3	ICE322	Cryptography	6	3
ICE312	Modern Algebra & Discrete Mathematics	4	2	ICE323	Digital Communications	6	4
ICE313	(Engineering Analysis(signal+numerical	7	4	ICE324	Image Processing	6	3
ICE314	Distributed Database	4	3	ICE325	Information Systems	3	3
<b>Total</b>		<b>28</b>	<b>18</b>	<b>Total</b>		<b>28</b>	<b>18</b>

Fourth Year First Semester				Fourth Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR411	Democracy	1	1	ICE411	Project	4	2

CR411	Digital Signal Processing	7	4	ICE421	Multimedia Computing	5	3
ICE411	Project	4	2	ICE422	Internet Engineering	5	3
ICE412	Wireless Communications	5	3	ICE423	Data Mining	3	2
ICE413	Artificial Intelligence	5	4	ICE424	Control Engineering	5	4
ICE414	Information Security	5	4	ICE425	Network Management & Security	5	4
<b>Total</b>		<b>27</b>	<b>18</b>	<b>Total</b>		<b>27</b>	<b>18</b>

Top three students in the department for the academic year 2015 /2016

Sq.	Student Name	Department	Average
1	Adraa Khaled Dawod	Information and Communication	78.298
2	Israa Khazy Dakhel	Information and Communication	72.906
3	Mohammed Muafaak Nowri	Information and Communication	72.875

Number of students graduating from the department for the academic year 2015/2016

Male	Female
12	16

## Laboratories

The department contains three labs:

### 1. Laboratory of electrical and electronic circuits.

It was founded in 2010, and there have been several expansions to the laboratory for up to ten groups of students with three students in each group.

It has been used as part of a training for the following subjects:

- Electronic physics and electrical circuits: for the first year students in all departments.
- Electronic circuit for the second year students in all departments.
- Some experiments in telecommunications subject for the third year students in information and communication and network departments.



### 2. Multimedia Laboratory

The establishment of the laboratory was concurrent with the overall transmission of the current building in 2009, where it has been used as computers lab to serve a number of subjects in the B.Sc. program. The laboratory has been developed recently through the completion of net-

working to fulfill the requirements of the subjects served. The total capacity of the standard lab is 24 students with one computer for each student. It is possible to accommodate 30 students such that some computers are shared

The lab serves the following purposes, these are:

- Training the students to apply the software programs they learned in the following subjects practically: Networks and Internet technology, database, control and digital signal processing. The training includes the following software packages like OPNET PNET, NETSIM, BOSON, PROLOG, and MATLAB.
- Implementing the graduation projects of the fourth year students in the multimedia applications.
- There are other uses - such as the survey work and workshops.



Multimedia Laboratory

### 3. Research Laboratory - Graduate Studies

The Laboratory was founded in 2010, and had 8 computers. In 2012, a set of modern equipment for the development of laboratory work was added. The laboratory provides place for students to carry out research tasks and develop their projects using the available laboratory equipment.

Work is not limited to students in the laboratory research, but also includes the researches related to the instructor at the college to carry out research tasks and develop their projects using the available laboratory equipment

### Summer Training

The gain of practical experience and mastery of specialized skill is very important for applied disciplines such as engineering in all its branches and ramifications. The graduate is usually taking theoretical knowledge in the classroom at the university,

This theoretical knowledge teaches students, academic theories and practices its place the classroom, it is not linked by the application in the practical life of the students young age and lack of experience, they do not realize the desired depth, the relationship between theory Entries in the pages of the book and the application of it in work spaces.

However, after a period of time from the right professional practice if they succeeded and found such work place provides such a practice. Hence, comes the importance of summer training to establish this relationship, Where Section students demanding summer training after they complete the third phase for a period of two months. The numbers of students who have been trained in the summer of 2013/2014 were s (30) students.

### Postgraduate Studies

The department has opened programs of study in graduate studies (M.Sc. / PhD) degree in Information and Communication Engineering since its inception in 2002, where it was the beginning of these programs as follows:

1. It has accepted 3 students in 2003 in the doctorate program in the specialty of information engineering.
2. It has accepted 23 students in 2005-2006, as the first batch of the M.Sc. program in Information Engineering as a complement to study in previously approved quarter's system.

The aim of the department is to ensure access to high scientific and research capacity level to engage prospects of the following areas for the development of the country: computer engineering, networks, information processing, modern communications, digital signal processing, multimedia technology, and information security.

No. of graduate students who are graduating in the academic year 2015/2016

.M. Sc	
Female	Male
3	6
9	

Subjects in the preparatory classes

First Semester				Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
PICE101	Multimedia Communications	3	3	PICE103	Wireless Communica- tions	3	3
PICE102	Advanced Information Systems	3	3	PICE104	Advanced Operating Systems	3	3
PICE105	Data Compression & Coding	3	2	PICE108	Software Engineering	3	2
PICE106	Information Security	3	2	PICE109	Advanced Internet Technology	3	2
PICE107	Wave Propagation & Antenna	3	2	PICE1010	Mobile Computing	3	2
PUR101	English I	2	1	PUR102	English II	2	1
Total		17	13	Total		17	13



Graduating students of Information and Communication Engineering Department

### Department of Networks Engineering

The department of network engineering was established in 2009

where it admitted its first batch of students by the Central Admission Plan of the Ministry of Higher Education and Scientific Research for the academic year 2009/2010. The first batches of students were admitted by the Central Admission Plan of the Ministry of Higher Education and Scientific Research for the academic year 2009/2010. . The specialization in this section was considered as one of the new trends in the world, where the information revolution and data transmission and the urgent need to provide networks communications able to keep up with cutting-edge applications day after day. The network engineering department is the first section open in this specialization at the level of the country.

The academic programs of the department were formed to be in accordance with international contexts used in prestigious universities in the world to cover all the theoretical and practical aspects of the field of specialization. The graduate of this section will be awarded B.A. of Science degree in network engineering. The

B.A.'s study program in the section includes all courses of study approved within Al-Nahrain University requirements for B.A. study, as well as the requirements of the approved study at the college of Information Engineering, and of the curriculum for the department which covers the following aspects:

- Study of digital communications networks globally adopted.
- Study of the theoretical and practical side of the foundations of the work of data transmission in wired and wireless networks.
- How to handle, store and analyze data sent over networks.
- The use of software for the design and inspection networks.
- Study and use of appliances and equipment used to build networks of all kinds.
- Theoretical analysis of the efficiency of the performance of computer networks.
- Study and application of methods to maintain the security of networks and data sent through them and encrypted.
- Efficient methods to manage computer networks.

Council of the Department of Networks Engineering for the academic year 2015 – 2016

.Sq	The name	Academic title	General Specialization	Specific Specialization	Degree
1	Abdul Karim Abdul Rahman Khadhim	Asst.Prof	Communication Engineering	Digital communication systems	.Ph.D
2	Emad Hasan Abbood	Asst.Prof	Electronics and Communications Engineering	Networks Engineering and Electronic system design	PhD
3	Rwayeda Hazim Hassan	Instructor	Math Science	Applied Mathematics	PhD
4	Ammar AbdelMelik AbdelKareem	Instructor	Computer Engineering	Embedded Systems	PhD
5	Khalid Waleed Hameed	Ass. Instructor	Electronics and Communications Engineering	Electronic Engineering	.M.Sc
6	Mustafa Abdulkadhim Neamah	Ass. Instructor	Information Technology Engineering	Information Technology	.M.Sc



7	Hind Khalid Hameed	Ass. Instructor	Computer Science	Computer Science	.M.Sc
8	Tabarak Dhiaa Abdul-hussein	Ass. Instructor	Computer Engineering	Ass.Instructor	.M.Sc
9	Salim Abdulattef Mohammed-Ali	Ass. Instructor	Computer Engineering	Computer system Architecture	.M.Sc



## Curriculum

First Year First Semester				First Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR111	English Language I	2	2	UR121	English Language II	2	2
CR111	Computer Programming	5	3	CR121	(++Object Oriented Programming I (C	5	3
CR112	Mathematics I	4	3	CR122	Mathematics II	5	4
CR115	Physical Electronics	6	4	NE121	Networks Fundamentals	4	3
CR113	Logic Circuits	5	3	CR123	Electrical Circuits	7	4
CR114	IT Fundamentals & Workshop	5	3	CR124	Engineering Drawing & CAD	4	2
Total		27	18	Total		27	18

Second Year First Semester				Second Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR211	Arabic Language	2	2	NE223	Information Theory & Coding	4	3
CR211	Object oriented Programming II (Java	5	3	NE222	Fiber Optics & Transmission Lines	3	2
NE213	Engineering & Numerical Analysis	6	4	CR221	Digital Electronics	5	3
CR212	Electronics	6	4	NE221	Signals & Systems	4	3
NE211	Computer Networks I	5	3	NE224	Computer Networks II	6	4
NE212	Web Programming	4	2	NE225	Networks Programming I	5	3
Total		28	18	Total		27	18

Third Year First Semester				Third Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CR311	Communication Systems	7	4	UR321	Human Rights	1	1
CR312	Project Management	3	2	CR321	Operating Systems	6	4
NE311	Storage Area Networks	3	3	NE321	Networks Simulation	6	3
NE314	Comp. Arch. & Microprocessors	6	4	NE322	Data Communications	7	4
NE312	Networks Programming II	4	3	NE323	Software Engineering	3	3
NE313	(Database (PHP, MY_SQL	4	2	NE324	Network Protocols & Services	5	3
Total		27	18	Total		28	18

Fourth Year First Semester				Fourth Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR411	Democracy	1	1	NE422	Networks Management	3	2
CR411	Digital Signal Processing	7	4	NE423	Network Design	3	2
NE411	Project	4	2	NE421	Project	4	2
NE412	Modern Networks Technologies	4	3	NE424	Wireless Networks	6	4
NE413	Selected Subject 1	5	4	NE425	Selected Subject 3	5	4

NE414	Selected Subject 2	5	4	NE426	Selected Subject 4	5	4
<b>Total</b>		<b>28</b>	<b>18</b>	<b>Total</b>		<b>28</b>	<b>18</b>

Top three students in the Department for the academic year 2015 /2016

Sq.	Student Name	Department	Average
1	Ali Abbas Hussien	Network Engineering	90.222
2	Hajir Ahmed Abdulhadi	Network Engineering	80.767
3	Shahad Hikmat Majid	Network Engineering	77.125

Number of students graduating from the department for the academic year 2015/2016

Male	Female
11	15



Graduating students of Information and Communication Engineering Department

## Laboratories and workshops

### 1. Networking Research Laboratory

The Laboratory has been opened by The Minister of Higher Education and Scientific Research on 02/19/2014, aiming to enable the graduate and under graduate students to im-

plement their research and ideas in the field of computer networks.

To lay a solid research base in the Department of Network Engineering and to represent the latest equipment and technology in the field of computer network and to lay

a solid research base in the Department of Network Engineering represented with the latest equipment and technology in the field of computer networks. The laboratory includes (21) computers with high specifications associated with each other to a wireless network, and are controlled by one of the computers used as a server through a central program that controls the rest of Computing (Net support school)

It has a smart blackboard and an advanced sophisticated data show. The Laboratory is supplied with air conditioning in the summer and winter and contain devices (UPS) for high efficiency ) to keep the computers from the variations of the power supply and to provide the necessary electricity for computers operated for a period of not less than one hour in the event of a power outage. The Laboratory is aimed at a wide range of student service to fulfill the practical side of subjects, especially materials and programming material of computer networks and their applications and graduation projects and students in graduate studies (M.Sc.) to complete research projects and applied scientific ideas in the field of network engineering and supporting and implementing the research plan for the teaching staff of the department.

## **2. Communications Laboratory:**

It was founded in 2006 and was updated in 2010. It has been used as part practical and applied the following materials:

- Communications Systems.
- Digital communications.
- Wireless networks.

The laboratory doesn't contain the following devices:

- Drawing the pointing device.
- Instant devices optical digital and analogue.
- Measuring devices and antennas examination.
- Application of Communications Systems Test devices, Analogue and digital.
- Examination and analysis of transmission lines devices.

In 2014 the laboratory in 2014 equipped with a smart display screen.

## **3- CISCO Laboratory**

The college established a laboratory specialized for networks (Cisco lab) which contains all connectivity devices and is equipped with the latest networking devices and a broad range of Routers and Switches advanced wireless networks and WLAN's devices, while providing a computer for each trainee.

The program, which is prepared by the college, aims to the deployment of network technology and telecommunications, according to the scientific foundations criteria approved by international companies in this field, such as Cisco Company. The program works on the rehabilitation of the trainee scientifically and practically to the design and construction of small and medium sized computers and the maintenance of computer networks where the practical part represents 60% helping the trainee to assimilate the basic concepts of networks very nicely.

The College also aims to link some relevant scientific articles available in this lab and take advantage of the technology available in the laboratory at the graduation projects and practical applications for graduate students' courses. This allows the laboratory rapid application of the concepts that the trainee learns, and prepares students for IT jobs by teaching them practical skills. The program qualifies students to get basic degrees in the computer field. These certificates are recognized measure for assessing the skills and efficiency in the process. Among the certificates Cisco will certify in networking to the adherents accredited is (Cisco Certified Network Associate (CCNA®) and Cisco Certified Networking Professionals accredited (Cisco Certified Network Professional (CCNP®), which provides an extra feature which will be included in the curriculum vitae of graduates.

## **4- Programming and network simulation lab**

The Lab was inaugurated by the Minister

of Higher Education and Scientific Research On02/19/2014. The lab feature 21 computer each with high specifications associated with interfaces to a wireless network and are controlled by a computer and used as a server centrally through the software that controls the rest of Computing (net support school) and it has a smart blackboard opposed optical sophisticated laboratory conditioner in summer and winter and has the devices (UPS) that are highly efficient to keep the computer from fluctuations in the power supply. In addition to supplying computers with the needed electricity to operate for a minimum period of time in case of a power outage.

The laboratory serves a large segment of students to complete the practical side of the course material especially software material, computer applications networks, graduation projects and student research in graduate studies (M.Sc.) for the completion of research projects applied scientific and ideas in the field of networking, plus support and implement the research plan for the teaching staff of the Department of Engineering. Immolation and Network Programming Laboratory



Subjects that are taught in the preparatory classes are:

First Semester			Second Semester		
Subject	Hrs per week	Units	Subject	Hrs Per Week	Units
	Th,App,Tut			Th,App,Tut	
Queuing Theory & Systems	3	3	Networks Security	3	3
Multimedia Communication	3	2	Wireless & Mobile Networks	3	3

## Summer Training

The importance of the summer training lies the development of students by connecting theory to the practical aspects, through choosing the training sites in companies specializing in the field of Telecommunications like, (Zain, Asiacell, Korek, and Kalamat). Through these companies, the students were able to see an advanced sophisticated equipment and they were trained by dedicated staff of engineers from companies according to program prepared previously in coordination with the summer training committee to suit with a specialization of our students in the college. The department has received certificates of appreciation awarded to the students of the section from Zain –Iraq Company.

In the future there are attempts to deal with new companies such as (Earthlink, Huawei) to enlarge the student's experience in his field.

The number of students participating in the summer training program for the academic year 2013/2014 amounted to 81 students.

## Postgraduate Studies

Postgraduate studies were founded in 2009/2010 and the awarded degree is the M.Sc. degree in Networks Engineering and International Network Technology.

Subjects that are taught in the preparatory classes are:



Soft Computing	3	2	Distributed Systems	3	2
Networks Management	3	3	IP Switching & Routing	3	2
Data Compression & Coding Theory	3	2	Software Engineering	3	2
English I	2	1	English II	2	1
<b>Total</b>	<b>17</b>	<b>13</b>	<b>Total</b>	<b>17</b>	<b>13</b>

Number of graduate students in the academic year 2015/2016

.M. Sc	
Male	Female
5	4
9	

### Department of Systems Engineering

The Department of Systems Engineering was primarily established as one of the departments within the college of Information Engineering, under the international networking major in 2009. According to the engineering market requirements, this department is renamed to be System Engineering in (2014/2015). The Department provides a program for the study of the systems engineering and its modern applications. The Students who fulfill the terms of the

program will award bachelor degree in Systems Engineering.

The curriculum has been prepared according to international standards, with

state-of-the-art laboratories including the latest apparatus, computers and software. Out of keenness to develop and maintain modern scientific department, the adoption of quality standards and accreditation has been maintained.

Department of Systems Engineering Council 2015 – 2016

No	The name	Academic title	General jurisdiction	Specialization	Higher certificate
1	Osama Ali Awad	Lecturer	Control systems	Control & Automation	Doctorate
2	Mohammed Faleh Abdul Karim	Lecturer	Computer Engineering	Computer Engineering	Doctorate
3	Rajaa Al-Din Abid Khalid	Lecturer	Communication Engineering	Spectrum Diffuse	Doctorate
4	Subhi Ali Aswaad	Lecturer	Control systems	Computer Engineering	Doctorate
5	Sami Khadim Hassan	Lecturer	Computer Engineering	Computer Engineering	Doctorate
6	Naeem Thgeel Yousir	Lecturer	Computer Science	Cloud Computing	Doctorate

7	Rana Dhiaa	Lecturer	Computer Engineering	Computer Engineering	Master
8	Hamsa Abdul Karim Abdullah	Lecturer	Engineering Information	Engineering Information	Master
9	Sanaa Saeed Kadhim	Asst. Lecturer	Electronic Engineering	Electronic Engineering	Master
10	Abdulhakeem Aamer Abdulameer	Asst. Lecturer	Software Engineering	Information Hiding	Master



Department of Systems Engineering Council

## Curriculum

First Year First Semester				First Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR111	English Language I	2	2	UR121	English Language II	2	2
CR111	Computer Programming	5	3	CR121	(++Object oriented Programming I (C	5	3
CR112	Mathematics I	4	3	CR122	Mathematics II	5	4
CR113	Logic Circuits	5	3	CR123	Electrical Circuits	7	4
CR114	IT Fundamentals& Workshop	5	3	CR124	Eng. Drawing & CAD	3	2
CR115	Physical Electronics	6	4	SE121	Introduction to Systems Engineering	5	3

<b>Total</b>	<b>27</b>	<b>18</b>	<b>Total</b>	<b>27</b>	<b>18</b>
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Second Year First Semester				Second Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR211	Arabic Language	2	2	CR221	Digital Electronics	5	2
CR211	Object oriented Program- ming II (Java)	5	3	SE221	Numerical Analysis	4	3
CR212	Electronics	6	4	SE222	Fundamentals of Control Engineering	5	3
CR213	Engineering Analysis	6	4	SE223	Engineering Statistics	3	3
SE211	Instrumentation & Mea- surements	5	3	SE224	Computer Architecture	6	3
SE212	Information Systems	3	3	SE225	Computer Networks	4	3
<b>Total</b>		<b>27</b>	<b>19</b>	<b>Total</b>		<b>27</b>	<b>18</b>

Third Year First Semester				Third Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
CR311	Communication Systems	7	4	UR321	Human Rights	1	1
CR312	Project Management	3	2	CR321	Operating Systems	6	4
SE311	Microprocessors & Interfacing	6	4	SE321	Microcontrollers	6	4
SE312	Systems Engineering Analysis & Design	3	3	SE322	Security Engineering	5	3
SE313	Control Engineering	6	4	SE323	Intelligent Systems	4	3
SE314	Operations Research	3	2	SE324	Digital Control	6	3
<b>Total</b>		<b>28</b>	<b>19</b>	<b>Total</b>		<b>28</b>	<b>18</b>

Fourth Year First Semester				Fourth Year Second Semester			
Code	Subject	Hrs per week	Units	Code	Subject	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR411	Democracy	1	1	SE411	Project (continued from 1 <sup>st</sup> (Semester	4	2
CR411	Digital Signal Processing	7	4	SE421	Robotics	6	4
SE411	Project	4	2	SE422	System Modeling & Simulation	5	3
SE412	Real time & Embedded Systems	5	3	SE423	Systems Reliability	3	3
SE413	Elective I	5	4	SE424	Elective III	4	3
SE414	Elective II	5	4	SE425	Elective IV	5	4

Total	27	18	Total	27	19
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Top three students in the Department for the academic year 2015 /2016

Sq.	Student Name	Department	average
1	Noor Loay Tehia	Systems Engineering	80.806
2	Alaa Ali Abdulameer	Systems Engineering	75.417
3	Israa Abdulkareem Muhsen	Systems Engineering	74.194

Number of students graduating from the department for the academic year 2015/2016

Male	Female
7	17



Graduating Students of International Network Engineering Department

### College Labs

#### ① Microprocessor Lab 8086

The lab was founded in (2008), to accommodate nine groups of three students. The laboratory was used as part of the training material for the students of the microprocessor and the sec-

ond stage of the second semester in all departments of the college, it includes devices used in the laboratory such as: integrated device contains all the applications you need experiences an 8086 Microprocessor Training Kit, as well as Interfacing Kits.

#### ② Digital Electronics Lab

The lab was founded in (2008) to accommodate ten groups of four students. The laboratory was used as part of the training material and logical design for the first grade students / First Semester and for Digital electronics subject for students of the second stage of the second semester in all departments of the college. The devices used in the lab include an integrated device contains all the applications you need a test (Analogue / Digital Training System).

### 3 Computing Laboratory (102) B

4 Laboratory was established in 2009 to accommodate 27 students, each student having his own computer, where the lab is used to serve a number of practical subjects within the initial studies program.

### 5 (Cisco) Lab.

The laboratory is equipped with the latest networking devices and a broad range of advanced Routers and Switches, and wireless networks WLAN's, and provides a computer for each trainee. It aims to deploy networks and communications technology in accordance with the standards approved the scientific foundations by international companies in this field, and works to rehabilitate trainee scientifically and practically the design and construction of the small and medium-sized computer networks and its maintenance.

6. Web Lab it can make use of the lab in the implementation of experiments within some subjects as well as to take advantage of it effectively in the fourth stage projects or M.A. studies.

The laboratory contains on (2 Racks), each containing the following services:

- Core switch
- Two Cisco Routers 1941
- Cisco Router 2921
- Cisco Firewall ASA
- Two Cisco Servers
- Wireless LAN controller
- Two Access Points

## College professional Centers

The college seeks to establish a professional centers for specialized continues training for its students and others from inside and outside the university. In 2015 the college succeeds to establish two centers:

- Cisco Academy for training and Networks Solution: this center working in accordance to Cisco programs and deliver training course in different levels and provide trainees with professional certificates that will help them in the job market. The center is equipped with a modern laboratory of Cisco software and hardware products.
- Microsoft Center for training and Software Solutions: this center is established with cooperation with Legend Land Group (LLS) (licensed from MS) to train students and other interested professional's on Microsoft programs to provide them with a professional MS certificates in different software programs. The center is equipped with a specialized laboratory for this purpose.



## Scientific, cultural, sports and technical aspects and community services

### 1. Section of Scientific Affairs and Cultural Relations

The Section of scientific Affairs and Cultural Relations is one of the new sections. The aim is establish a developed cooperation between the scientific departments in the college and Dean through the section, which includes two units:

- Scientific Affairs Unit

The job of this unit is to follow up seminars, workshops and conferences held inside and outside the college as well as inside and outside the



country. Also it includes recording scientific activities of the college and follow up all researches and scientific activities of the staff in the college.

- Cultural Relations Unit

This unit is responsible of working on the follow-up and management of staff development in postgraduate studies outside the country in fellowships, scholarships, and training programs in coordination with the university and ministry departments through the following activities: .

1. The registration of public and private activities related to scientific affairs and follow-up on a regular basis.
2. Coordination between the scientific departments and the office of the Ass. Dean for Scientific affairs to facilitate administrative procedures and the implementation of the tasks assigned.

## 2. Sports activity Unit

The Sports activity works on how to care about youth on a balanced and integrated education, social, physical and mental aspects, through programs and multi-sport fields under the supervision of a specialized leadership working to achieve the goals of sports activity, which would contribute to the achievement of the overall objectives of physical education in different educational levels and stems from the general principles of educational policy in Iraq, which include: -

1. Raise awareness of sports-oriented calling for sports exercise to gain fitness, and healthy bodies.
2. Planting and establishing the concepts of physical education and physical activity.
3. Development of social trends and ethical

conduct by using some of the positions in the collective and individual Games and lend self-confidence and the development of sportsmanship.

4. Contribute to get rid of stress.
5. Appreciate the importance of investment leisure time for some useful sports activity.
6. Raising the level of physical competence for students by providing them with appropriate doses of exercise.
7. Provide students with the skills and motor abilities.
8. Care for talented students in different sports games.



## Summer Training

The college Coordinates with government offices and institutions and private sector companies in relevant jurisdiction to train students in the third stage for a month during the summer holidays. Before the start of training, preparation is done for the training program in its theoretical and practical sides in coordination with those agencies. The trainees are being evaluated by the training staff in the organization and supervisor training in the department.

The following table illustrates the number of trainees and hosting organizations for the academic year 2014/2015:

The following table illustrates the number of trainees and hosting organizations for the academic year 2015/2016:

Sq.	Hosts	Number of trainees
1	Asia Cell Telecommunications Company	19
2	Zain Telecommunications Company	21

3	Korek Telecom	14
4	Earthlink Telecom	17
5	Microsoft – LLS Group	5
6	SCOPE SKY Communications	9
<b>Total</b>		<b>85</b>



A group of trainees in MS center

### Scientific and cultural activities in 2015-2016

The college conducts the following scientific and cultural activities in the academic year 2015-2016:

Seq.	Type of Activity	Date	Description
1	Reception	5/11/2015	New students reception program
2	Seminar	17/11/2015	IYLEP program for students
3	Seminar	22/12/2015	Self-adapting parallel frame work for long-term object tracking
4	Lecture	13/12/2015	Digital drugs and its effects on youth
5	Sports	16/12/2015	University Football match

6		17/12/2015	Gardens planting by students
7 Workshop		24/12/2015	LATEX a tool for research preparation
8	Seminars	28/12/2015	M. Sc. Projects assessment
9	Gallery	15/1/2016	Students fine art gallery
10	Workshop	9/2/2016	Interactive E-Learning program (MOODLE)
11	Symposium	16/2/2016	Data center and electronic management
12	Symposium	7/3/2016	Social networks in academic society
13	Symposium	14/4/2016	Research trend investment in government organization and society
14	Conference	April 2016	Postgraduate researches
15	Trip	3/3/2016	Visit to Iraqi museum

### Continuous Training in 2015-2016

Continues training section perform the following courses for the college employee and students.

Seq.	Course title	Date	No. of Attendant	Objectives of Course
1	Cisco-CCNA		4	Fundamentals of networks establishment and management
2	MS Office		6	Employee development program
3	Cisco-CCNA		21	Fundamentals of networks establishment and management

### New projects in 2015-2016

The college lunches the following new projects for the benefit of the university and its colleges:

Seq.	Project Title	Description
1	Al-Nahrain Data Center	Construction of central data center for the university to run different information applications for the university and its colleges
2	Al-Nahrain Internet & Data network	Construction of internet and data networks to connect all colleges with one network
3	Information systems	Design and implementation of information systems for resources managements

4	Plagiarism test	Implementation of plagiarisms program for theses and researches examination using (TURNITIN)
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The website of the College of Information Engineering

<http://www.coie-nahrain.edu.iq>



OCTOBER 2016

# COLLEGE OF BUSINESS ECONOMICS



## About College of Business Economics

This college was established in 2009. Its Academic programs are based on interdisciplinary educational system to ensure specialized outputs in business & economics, it includes the following departments: Economics of Investment and Resources Management Department, Economics of Banking Management Department and The Department of Accounting and Financial Control. It grants Bachelor degree in Business Economics.





### About the College:

The College of Business Economics was founded in 2009. It represents a primary center in establishing the scientific evidencing the formation of a homogenous combination of the interrelationship between economic and administrative sciences, statistics and accounting. This ensures that the composition of output masters the basics of science that simulating what is in the advanced educational systems on the basis of the four disciplines in each section of the scientific departments. On the basis of this general target, it is important to master that by the graduated students in this college. This is to be achieved by all the branches needed to create an integrated scientific horizon when exercising administrative and economic works. It is whether for his own account or as a user in a private in-

vestment firm or bank or was a public institution, as well as take the necessary legislation to give effect to the relevant professional dimension of what qualifies a graduate to be administratively and economically available on the appropriate accounting background and Sports mentality able to handle this science applications.

On this basis of common conviction among Al- Nahrain University and the Ministry of Higher Education and scientific research, in the light of the desire of the ministry in the founding of the College being different from the traditional path in the colleges 'systems of the colleges of Management and Economics, heading mainly to meet the needs of the private sector under an open economic environment, it has been building curriculum for college departments



## Deans of the College of Business Economics



Assistant professor Dr. Emmad Abd al-latif Salem

2009 - 2011



Professor Dr. Hajir Adnan Zaki

2011 - UNTIL NOW

## Council of the college of Business Economics for the academic year 2015-2016

.Sq	The name	position	Scientific Section	Academic Title	General Specialization	Specific Specialization	Degree	Date of joining
1	Hajir Adnan Zaki	Dean of the college of Business Economics	Department of Economics of bank management	profess	Economy	International economy	Ph.D.	1/12/2011
2	Nagham hussein Neamaa	Associate dean for Academic affairs	the economics of the investment management	Asst. prof	Business administration	financial management	Ph.D.	20/12/2011
3	Esam Hussein khadar	Associate Dean for Administrative Affairs	Department of Economics of bank management	Asst. prof	Statistics	Applied Statistics	Ph.D.	15/03/2015
4	Salam Abd AL JALeel ALshamy	Head of Department	The economics of the investment management department	Asst. prof	Economy	Econometrics	Ph.D.	15/3/2015
5	Faiza ibraheem mahmoud	Head of Department	Accounting and financial control department	Asst. prof	Account	Cost accounting and Administrative	MA.	1/07/2015
6	Sahar fathalla mohmad ali	Head of Department	Department of Economics of bank management	Lecturer	Economy	International economy	.Ph.D	1/07/2015



The names of the top three students at the college for the academic year

2014 /2015

### Vision:

That the college be a monument scientifically distinguished in the field of economic, administrative and accounting Science Simulates what exist in developed educational systems , based on the composition of a combination of harmonious interdependence between these sciences to ensure the formation of specialized output , demand -based commercial and expected in the labor market .

### The mission:

Meet the needs of the community and educational development, b offering high-quality academic programs and rely on efficiency standards and provide opportunities for the sustainability of income, and work to enclose a graduate of this college with competences needed to create an integrated scientific horizon when exercising economic - administrative work

Whether for his own account or as a user in the public or private institution, whether it was for the investment

or bank, armed with the basics and forest disciplines associated with this work, such as an administration, economics and accounting with an appropriate amount of knowledge used quantitative methods applied to deal with this science.

### The goals:

1. Simulation of advanced educational systems in the expansion of sports and Applied Economic and Administrative Sciences basis.
2. Keeping up with sub-disciplines relevant economic, administrative and accounting sciences which have been developed as a result of the growing path in specialization and division of labor.

And avoiding the situation of graduate unemployment and alienation experienced Suffered by graduate traditional approach by being away from the developments and the requirements of modern economies

Forest and various related sciences.



The name of the top student at the college for the academic year

2015 /2016

Sq.	The Name	The section	Average
1	Eman Ali Muhssen	Economics of trade and international finance	91.14



Eman Ali Muhssen



Graduates of the College of Business Economics for the academic year 2015/2016



## 1-Department of Investment and Resource Management Economics

The department was established with the foundation of the college in the academic year 2009/2010. The department curriculum has been designed so that its output is available on the capabilities and skills by the use of mathe-

matical methods in economic and financial analysis and the use of scientific standards in making real and financial investment and familiarity with the basics of bank financing for investment at the local and international levels, the decision process.

Council of the economics department of investment management for the academic year 2015 - 2016

No	The name	Academic title	General Specialization	Specific Specialization	Degree
1	Salam Abd AL jaleel AL shamy	Asst. Prof	Economics	econometrics	PhD.
2	Talib Abid al- Saleh	Asst. Prof	Economics	History of Economic Thought	PhD.
3	Imad Abid al- Latif Salem	Asst. Prof	Economics	Economic development	PhD.
4	tayeeb Othman Abdul Razak	Asst. Prof	Economics	International economy	PhD.
5	Staar Jabar khleel	prof	Economics	International economy	PhD.
6	Esam hussen kader	Asst. Prof	statistics	Applied statistics	PhD.
7	Ahmed shaker Mahmood	lecturer	Economics	econometrics	PhD.
8	Saad Farag Hammadi	lecturer	Administration	Tourism Administration	M.A.
9	Tareq ali jassem	lecturer	Business management	Information system	PhD.
10	Asmaa Adib Abid al-Wahid	Ass. lecturer	Urban and Regional Planning	Urban Planning	M.A.
11	Alaa hussian alwan	Ass. lecturer	accounting	taxes	A.M
13	Loay naseer jaber	Ass. lecturer	management	Operation management	M.A
14	Ahmeed Ibraheem taha	Ass. lecturer	management	Human resources management	A.M

## Syllabus

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR101	Math 1	3	3	UR102	Math 2	3	3
CR101	Economics. 1	3	3	CR111	Economics. 2	3	3

CR102	Management 1	3	3	CR112	Management 2	3	3
CR103	Accounting 1	3	3	CR113	Accounting 2	3	3
CR104	Statistics 1	3	3	CR114	Statistics 2	3	3
CR105	Introduction to Law	2	2	CR115	Marketing	2	2
CR106	English for Economics	2	2	CR116	English for Economics	2	2
CR107	Skills	1	1	CR117	Skills	1	1
<b>Total</b>		<b>20</b>	<b>20</b>	<b>Total</b>		<b>20</b>	<b>20</b>

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR 201	Micro Economics	2	3	UR 211	Macro Economics	3	3
CR 201	Economics of investment 1	4	3	CR 211	Economics of investment 2	3	3
CR 202	Economics of money and banking	3	3	CR 212	Market activities	2	2
CR 203	Mathematics for economists	3	2	CR 213	Financial Mathematics	3	3
CR 204	Intermediate accounting	3	3	IE 203	Intermediate accounting	3	3
CR 205	Financial Management	3	3	IE 204	Financial analysis and planning	3	3
IE 201	Time series analysis	2	2	IE 205	Information Technology	3	2
IE 202	Skills	1	1	IE 206	Skills	2	1
<b>Total</b>		<b>22</b>	<b>20</b>	<b>Total</b>		<b>22</b>	<b>20</b>

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR 301	Micro Economics applied	4	3	UR 311	Macro Economics applied	4	3
CR 301	Econometrics for investment	4	3	CR 311	Econometrics for investment	4	3
CR 302	Cost accounting	3	3	IE305	Cost accounting	3	3
CR 303	Economics of trade and international finance	3	3	IE306	Economics of taxation	3	3

IE 301	Strategic planning for business	6	3	IE307	Management of International business	3	3
IE 302	Feasibility and project evaluation	3	2	IE308	Executive law	2	2
IE 303	Commercial law	2	2	IE309	Electronic commerce	3	2
IE 304	Skills	2	1	IE310	Skills	2	1
Total		24	20	Total		20	20

Fourth Year First Semester				Fourth Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR 401	Economics of sustainable development	3	3	UR 411	Economics of Resources management	3	3
CR 401	Economics of Foreign investment	3	3	CR 411	Accounting for corporate	3	3
CR 402	Managerial Accounting 1	3	3	CR 412	Managerial Accounting 2	3	3
CR 403	( Theory of decisions ( E	4	3	IE404	( Operation Research ( E	4	3
CR 404	Crisis management	-	3	IE405	Market Research	4	3
IE 401	Commercial correspon- ( dence ( E	3	2	IE406	Management of Compre- hensive quality	2	2
IE 402	Scientific research meth- odology	3	2	IE407	Negotiation skills	3	2
IE 403	.Skills/ Arabic L	2	1	IE408	.Skills/ Arabic L	2	1
Total		21	20	Total		24	20

The top three Students In the section for the academic year 2015-2016

No	The Name	The Average
The First	Huyam Ali talab	87.15
The Second	Yasmeen essa abd alsattar	83.05
The Third	Rugya saad mohammed	81.94

The number of students graduating from the department for the academic year 2015-2016

Male	Female
3	14

### Department of the Economics of Bank management

The department of the Economics of Bank management was established with the foundation of the college in the academic year 2009/2010. It aims to provide students with information about how to absorb the basics of money and banking and finance at the local and international levels, and absorb the basics of sports aspects of financial management, quantitative analysis of financial and banking operations,

knowledge of the basics of investment banking and financing elements of lending decisions and risk analysis and principles of investment and feasibility evaluation. This is in addition to

the ability to analyze the economic activity at the macro level and the studies of economic overlap local - International, and the ability to assess the Macroeconomic and identify the methods used by the international institutions to assess the performance of the overall economy.

Council of the economics department bank management for the academic year 2015-2016

.Sq	The name	Academic title	General Specialization	Specific Specialization	Degree
1	Sahar fathalla mohmod ali	lecturer	Economics	Econometrics	.Ph.D
2	Hajir adnan Zaki	Prof.	Economic sciences	History of Economic Thought	.Ph.D
3	Ali Abd ALhafid ibrahim	Prof.	Statistics	Artificial intelligence	.PH.D
4	Nagham hussien neama	Asst. Prof	Business management	Financial management	PH.D
5	Natheer abas ibraheem	Asst. Prof	Statistics	Applied statistics	.Ph.D
6	Omer ali kamel	Asst. prof	Accounting	Audit	PH.D
7	Mohammed abd salh	Asst. prof	Economics	Economic development	PH.D
8	Sahar kamel khleel	lecturer	Political science	Political systems	M.A
9	Hamsa kosy abd AL lateef	lecturer	International economic relation	International economic relation	M.A
10	Feraal moshref aedan	lecturer	Economics	Finance and banking	M.A
11	Alea adeel mzeed	Asst. lecturer	law	law	M.A
12	Nashat majeed nashat	Asst. lecturer	Management	Information systems	M.A
13	Baraka Bahgat Ahmed	Asst. lecturer	Business Administration	Operation Management	M.A.
14	Bedayaa Bahjat Nouman	Asst. lecturer	law	Law	.M.A
15	Mohammed Salman Aboud	Asst. lecturer	Accounting	Taxes	.M.A
16	Basim mahammad salah	Asst. lecturer	Arabic Language	Arabic Language	M.A.

## Syllabus

First Year First Semester				First Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR101	Math 1	3	3	UR102	Math 2	3	3
CR101	Economics. 1	3	3	CR111	Economics. 2	3	3
CR102	Management 1	3	3	CR112	Management 2	3	3
CR103	Accounting 1	3	3	CR113	Accounting 2	3	3
CR104	Statistics 1	3	3	CR114	Statistics 2	3	3
CR105	Introduction to Law	2	2	CR115	Marketing	2	2
CR106	English for Economics	2	2	CR116	English for Economics	2	2
CR107	Skills	1	1	CR117	Skills	1	1
Total		20	20	Total		20	20

Second Year First Semester				Second Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR101	Micro Economics	3	3	UR102	Macro Economics	3	3
CR101	Economics of money and banking	3	3	CR111	Economics of investment	3	3
CR102	International monetary Economics	3	3	CR112	Financial Mathematics	3	3
CR103	Business Economics	2	2	CR113	Analysis of banks reports	3	2
CR104	Intermediate accounting	3	3	CR114	Intermediate accounting	3	3
CR105	Financial Management	3	3	CR115	Banking Management	3	3
CR106	Time series analysis	2	2	CR116	Information Technology	3	2
CR107	Skills	2	1	CR117	Skills	2	1
Total		21	20	Total		23	20

Third Year First Semester				Third Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR 301	Micro Economics applied	4	3	UR 311	Macro Economics applied	4	3



CR 301	Econometrics for banking and finance	4	3	CR 311	Econometrics for banking and finance	4	3
CR 302	Accounting for banking	3	3	BE 303	Accounting for banking	3	3
BE 301	Management of international banking	3	3	BE 307	Management of banking risks	3	3
BE 302	Central banks and monetary policies	3	3	BE 308	Evaluation of bank performance	3	3
BE 303	Banks investment and portfolio management	3	2	BE 309	Feasibility studies	2	2
BE 304	Commercial law	2	2	BE 310	Law of banks and control systems	3	2
BE 305	Skills	2	1	BE 311	Skills	2	1
<b>Total</b>		<b>24</b>	<b>20</b>	<b>Total</b>		<b>20</b>	<b>20</b>

Fourth Year First Semester				Fourth Year Second Semester			
Code	Sub	Hrs per week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR 401	Financial Markets	3	3	UR 411	Auditing and bank surveillance	3	3
CR 401	Managerial Accounting 1	3	3	CR 411	Managerial Accounting 2	3	3
CR 402	Banking costs accounting	3	3	CR 412	Good quality of banking services	3	3
CR 403	Decision theory	3	3	CR 413	Operation research	3	3
BE 401	Information systems for banking	3	3	BE 405	Financial Derivatives	3	3
BE 402	Management of Banking crisis	3	2	BE 406	Commercial correspondence	2	2
BE 403	Scientific research methodology	2	2	BE 407	Electronic Banking	3	2
BE 404	.Skills/Arabic L	2	1	BE 408	Skills/Arabic L	2	1
<b>Total</b>		<b>22</b>	<b>20</b>	<b>Total</b>		<b>22</b>	<b>20</b>

The top three Students In the section for the academic year 2015-2016

Sq.	The Name	The Average
1	Heba sattar dojy	85,4
2	Walaa khazel aliway	84,11
3	Duaa shaker mahmood	80,47

The number of students graduating from the department for the academic year 2015-2016

Male	Female
5	14

### 3. Accounting and financial control department

This department was established in the academic year 2012/2013. It is based on convictions of the College expansion which occurred in the accounting Science and direction to overlap with the responsible management and government on the basis of sustainable development dimensions temporal and spatial and environmental and based on the understanding of economics and the implications of economic corruption , the College has tended to entrust the Scientific Committee to provide an integrated study to construct a specializes Division in accounting and financial controls stems from the area of intervention four basic sciences , which also comes in line with what I have seen the college through communication with the public and private sec-

tor institutions to the need for these institutions for a qualified staff with a holistic perspective for interchanged and specialized accounting for the practice of accounting and financial control of what became posed this area of vital context of career in corruption cases And governance and Pre-emptive censorship

And good governance which is one of the most prominent concerns of the public and senior management.

The college also encouraged to move in this direction, increasing its invitations to the inspection and internal control departments to graduate staff professionally Specialize for the profession of accounting control based on the academic building and training, and not to the career progression as it exists now.



Council's accounting and financial control department for the academic year 2014 - 2015

Sq.	The name	Academic title	General Special-ization	Specific Specialization	Degree
1	Faiza Ibrahim Mahmood	Asst. Prof	accounting	Cost accounting	M.A.
2	Canaan Abid al- Latif Abid al- Razak	Ass. Prof	Statistics	Mathematical statistics	Ph.D.
3	Thaer Sabry Mahmood	prof	accounting	Cost and administrative	PH.D
4	Jalila Edaan Jaleel	Asst. Prof	Account	Cost and Managerial accounting	Ph.D.
5	Mahmood Jasm Abas	Asst. Prof	Economics	Economic development	PH.D
6	Sadam Kati Hashem	lecturer	accounting	Governmental accounting	PH.D
7	Muna Kamel Hamd	lecturer	accounting	Financial accounting	PH.D

8	Kahtan Lafta Ateaa	lecturer	economy	econometrics	M.A
9	Bedoor Sadk Jasem	Ass. lecturer	Libraries and information	Libraries and information	M.A
10	Reem Mohseen Kdeer	Ass. lecturer	accounting	accounting	M.A
11	Mohmad Slman Jasm	Ass. lecturer	economy	economy	M.A
12	Asma Adeeb Abd alwaheed	Ass. lecturer	Urban and regional planning	Urban and regional planning	M.A

### Syllabus

First Year Second Semester				First Year First Semester			
Code	Sub	Hrs Per Week	Units	Code	Sub	Hrs Per Week	Units
		Th,App,Tut				Th,App,Tut	
UR102	Human rights	1	1	UR101	democracy	1	1
CR111	Maths 2	3	3	CR101	Maths 1	3	3
CR112	Princ. Econ. 2	3	3	CR102	Princ. Econ. 1	3	3
CR113	Princ. Adm. 2	3	3	CR103	Princ. Adm. 1	3	3
CR114	Princ. Accon. 2	3	3	CR104	Princ. Accon. 1	3	3
CR115	Princ. Stat.2	3	3	CR105	Princ. Stat. 1	3	3
CR116	Princ. account	2	2	CR106	Princ. law	2	2
CR117	ESP 2	2	2	CR107	ESP1	2	2
	<b>Total</b>	20	20		<b>Total</b>	20	20

Second year First Semester					Second year Second Semester				
Code	Subject	Hours		units	Code	Subject	Hours		units
		Thcl	prcl				Thcl	prcl	
UR 201	Univ. requirement( computer 1	1	1	1	UR 211	Univ. requirement( computer 2	1	1	1
CR 201	Intermediate computer 1	3	1	3	CR 211	Intermediate computer 2	3	1	3
CR 202	Exclusive economy	3	--	3	CR 212	Financial math	3	--	3
AFC 201	.Gov. pull	3	--	3	AFC 206	.Adm. Econ	3	--	3
AFC202	.Log. Adm	3	--	3	AFC 207	Value study	2	1	2
AFC203	Com. law	2	--	2	AFC 208	.Nat. account	3	--	3
AFC 204	.English vocab	3	--	3	AFC 209	Firm. law	2	--	2
AFC 205	Business Economics	2	--	2	AFC 210	Gov. law	3	--	3

Total		20	2	20	Total	20	3	20
	22				23			

Third year First Semester					Third year Second Semester				
Code	Subject	Hours		units	Code	Subject	Hours		units
		Thtcl	prcl				Thtcl	prcl	
UR 301	English skills1	1	1	1	UR 311	English Skills2	1	1	1
AFC 301	.fin.count	3	--	3	AFC 308	.Spec. syst	3	--	3
AFC302	.Fin. List	2	1	2	AFC 309	.Fin. Qual	2	1	2
AFC303	Fin. Mon.1	3	--	3	AFC 310	Fin. Mon.2	3	--	3
AFC304	Adv. Count.1	3	--	3	AFC 311	Adv. Count.2	3		3
AFC 305	Cost. Count.1	3	-	3	AFC 312	Cost. Count.2	3	-	3
AFC306	.Unif. Count. Sys	2	1	2	AFC 313	.Count. Inf. Sys	2	1	2
AFC 307	.Quant. Econ	3	-	3	AFC 314	Fin. Law. econ	3	-	3
Total		20	3	20	Total		20	3	20
	23				23				

Fourth Year First Semester					Fourth Year Second Semester				
Code	Subject	Hours		units	Code	Subject	Hours		units
		Thtcl	prcl				Thtcl	prcl	
UR 401	Arabic1	1	1	1	UR 411	Arabic2	1	1	1
CR 401	Adm. Count.1	3	-	3	CR 411	Adm. Count.2	3	-	3
CR 402	Operation Research	2	1	2	AFC 405	.Perf. Eval	3	-	3
CR 403	.Scien. Res	2	-	2	AFC406	.Int. check	3	-	3
AFC 401	Adv. Cost. Count.1	3	-	3	AFC 407	Adv. Cost. Count	3	-	3
AFC 402	Count. theory1	3	-	3	AFC408	Count. theory2	3	-	3
AFC 403	.Gen. fin	3	-	3	AFC409	.Int. fin. Stand	3	-	3
AFC 404	Int. check	3		3	AFC410	.Grad. Proj	1	1	1
Total		20	2	20	Total		20	2	20
	22				22				

### Summer Training:

It is well known that universities generally lead a sacred role in preparing students as members who are scientifically and psychologically well. This is through conveying a university student from the halls of universities and production sites to the labor market are ready for the new life process later. And the training of students during the summer vacation is a form of training designed to familiarize students by operation environment and need grandparent of commitment, It is also on the other hand, provides an opportunity for the public and private sector to get to know the students and their potential. So the Summer Training Unit in the college of Business Economics Was keen on pushing the third year students in sections of sections: Economy for Investment and Resource Management and Economics for Bank management for the academic year 2014/2015 in this constructive experience in order to achieve a number of objectives, including:

1. Provide an opportunity for students to gain practical experience and training before graduation.
  2. Deepen students' understanding of the theory of science that they received in their field.
  3. Guide students to take responsibility.
- Development of Practical skills of students and prepare for field work.
4. Guide students to deal with members of the community outside the university, and the respect of his superiors at work.

The students of the college of Business Economics have been distributed at various departments and institutions of the public and private sector, particularly financial institutions, banks and government and civil bodies

The results of student assessment by supervisors had come in positive and encouraging training sites, as most supervisors during our field visits them at training sites had Praised their level of scientific and high commitment.

We found that the summer training experience of successful experience to build a generation that can build and develop the country and out of the state of apathy and loss experienced by some of our sons in universities, through a sense of responsibility to the development of their country and that they will interface of scientific country and its leaders in the future.

### Unit of Following-up of graduates

The College of Business Economics / University of Al-Nahrain is considered as the First college quality in Iraq as characterized in its various programs and specializations and placed on the list of priorities to raise the level of services provided to students from the moment of registration and up to the moment they graduate and have access to scientific testimony. The college has sought to improve the quality of life of university students by providing everything needed to prepare a student and rehabilitation to be able and qualified to engage in practical life and assuming various professional positions being able to play a prominent role in the construction of Iraqi society and serve as an ambassador for his university in the nation outside of the labor market. Due to the increasing number of graduates who leave the university holding their certificates on their way to the local community institutions and Arab and foreign institutions seeking for a future career;

The College administration has considered establishing a unit to follow up the graduate students aiming to marketing graduates and alleviate their suffering and the development of policies and mechanisms to help create jobs commensurate with their specialties and provide for them professional future commensurate with their degrees and their abilities, and because the college is aware of the importance of these graduates students. It was necessary to configure and setup to follow up and see their workplaces and work to help them through their definition of their work and all that is available to



provide more jobs and reduction of unemployment experienced by graduate students.

With the establishment of the college for the unity of the follow-up of graduates, the college of Business Economics / University of Al-Nahrain have followed the lead of many universities and international institutions in this area through its commitment to marketing graduate students out of concern for them after graduation.



College Graduates

### Unit of Continuing Education

Continuing Education Unit is seeking for co-operation between the college and its environment and achieves broad positive partnership between the college and the business sectors and individuals.

Continuing Education Unit cares to be excellence in all offerings of programs to meet the needs of participating in a changing world and globalized economy institutions to facilitate access for institutions and managers to specialized sources of information in the standard times and locations suitable for all learners.

### College of Business Economics Library:

The Library was established with the foundation of the College of Business Economics in the academic year 2009/2010. The library provides modern scientific sources for students to enable them to prepare reports required of them as the number of sources so far in 1200 scientific source in both languages Arabic and English. The library has a subscription to a number of scientific journals and the number of titles 13

scientific journal.

It contains a library subscription in a number of scientific journals and the number of titles 13 scientific journal. Library offers free books for the award of the curriculum for all stages and the number of free books, so far 3619 book. The library of the college of Business Economics for a Hall prepared for reading accommodate fifteen readers and provides services for college students and studies students from outside the college. All the books in the library are indexed and classified according to Decimal Classification league.



College library

### The unit of sports activity:

The unit of sports activity in the college of Business Economics has been established from the first day of the founding of the college so as to create a sports and cultural atmosphere and to be a magnet for students on the one hand, and providing opportunities to meet and dating and competition for students and the development of mathematical skills of students and transmit the spirit of activity have on the other hand , Thus contributing to raising the scientific and sports and cultural level of the students and unit activity includes Stadium for badminton and table tennis. The unit sports activity organized internal and external sporting events, where internal meetings is between sections and stages of the college

And the competitions for individual and collective games, while the external competitions they are organized by the university sports department at the head of the university.



### Division of Quality Assurance and the performance of the university:

The Division of Quality Assurance and the performance of the university was established in the college of business economics in the academic year 2011/2012 for the application of

quality standards in the college as it has become one of the necessities of scientific development in educational institutions and universities as to be provided scientific matching service with accepted international quality standards, and considered the most important means and methods to improve the quality of education and raise the level of his performance in the current era which is called as a quality life, no longer a luxury quality aspiration of the common educational institutions or alternative take it or leave it educational systems, but has become an urgent necessity dictated by the movement of contemporary life, a proof of the survival of the soul and the spirit of survival for the educational institutions.

### Published Books.

**A**ccounting  
Banking



**E**conometrics  
and its applications



**S**ports Applications  
in Financial Management



**E**valuating of  
banking performance



**COLLEGE OF  
BUSINESS  
ECONOMICS**

# COLLEGE OF APPLIED BIOTECHNOLOGY



## About College of Applied Biotechnology

This college was established in 2012. In order to distinguish biotechnology programs in higher education and scientific research, the college offers a range of teaching and research programs in various disciplines of medical, environmental, agricultural, and industrial biotechnology. It has two departments: Molecular and Medical Biotechnology, and Plant Biotechnology. It grants Bachelor degree in Biotechnology.





### About College:

The college of Applied Biotechnology was established in 2012 at Al-Nahrain University in Baghdad to achieve its goals and mission in building advanced bio-technology programs in the field of higher education and scientific research. The college offers a range of educational programs and research in various biogenic technical, medical, environmental, agricultural and industrial specialties. The current structure of the college includes two scientific departments, the first is the Molecular and Medical Biotechnology Department, and the other is the Agricultural Biotechnology Department.

The college awards BSc degree in Molecular and Medical Biotechnology for under graduate students from Molecular and Medical Biotechnology Department, and awards BSc degree in Agricultural biotechnology for under graduate students from Agricultural Biotechnology Department after completing courses of study for four years full-time study. All students are taught during the first year the same basic scientific principles to build a strong foundation of basic knowledge to prepare them for the advanced biological techniques Program. In the second year of the study the students are given the opportunity to be specialized either in molecular and medical Biotechnology or agricultural biotechnology.



Council of the College

The College Council Members for the Academic Year 2015-2016

Full Name	Position	Scientific .Dept	Aca- demic Rank	General Specialization	Specific Specialization	De- gree	Date of joining
Hayfa H. Hassani	Dean	Molecular & Medical .Biotechnol	Prof.	.Microbiol	Medical Genetics	PhD	1/9/2013
Nabeel K. Ibrahim	Deputy Dean for Administra- tive Affairs	Plant Biotech- .nol	Prof	Plant Bio- .technol	Plant tissue culture	PhD	26/1/2015



Mohsen H. Risan	Deputy Dean for Academic Affairs	Plant Biotechnol.	Asist. Prof.	Biology	Mycology	PhD	26/1/2015
Hissain M. Shukri	Head of Agricultural biotechnology	.Plant Biotechnol	Prof.	Plant Biotechnol.	Plant Biotechnol.	PhD	1/4/2015
Hameed M. Jasim	Head of Molecular and Medical Biotechnology	Molecular and Medical Biotechnol.	Prof.	.Biotechnol	Biotechnology	PhD	26/1/2015

### Vision:

The College of Applied Biotechnology Al-Nahrain University aims to be a leading academic institution in the field of biotechnology in Iraq, and seeks to achieve pioneering ambition in the field of bio-technology through the development of distinctive high standard programs in teaching and learning and applied research.

### The Mission:

The College of Applied Biotechnology works hard to develop and implement a biotechnology program to contribute effectively to the improvement of scientific knowledge and skills to the community. This is achieved by the college through innovative ideas that contribute to improving applied research, postgraduate courses and partnership with the private sector.

### The Goals:

The college aims to achieve educating, training and graduating qualified skilled cadres in many disciplines of biotechnology techniques.

- 1- Developing, implementing and evaluating of curricula biotechnology programs with strong commitment to national and international standards for quality assurance.
- 2- Conducting applied research in the field of fundamental biology to enhance interaction and cooperation between faculty members and researchers in the ministries of the various areas of the state.

3- Promoting a life supporting learning environment through the implementation of continuous learning programs.

4- The application of the principles and standards of the transfer of technology in general and ensure adequate staff training we have in the field of modern biotechnology.

#### Scientific Departments

1. Department of Molecular and Medical Biotechnology

The Department of Molecular and Medical Biotechnology was established in 2012. The department works to improve the knowledge, skills and scientific research to students and affiliates and graduate qualified cadres to work the labor market in the field of biotechnology and find a suitable environment for the development of scientific research to serve the community.

The study in this department takes four years; students must complete 143 units during the eight semesters to obtain a B.Sc. degree in biotechnology. The students take lectures and laboratory experience in molecular biological techniques, cloning of genes and genetic engineering used for the diagnosis of pathogenic microorganisms which is employed in the early diagnosis of diseases like cancer, genetically modified animals, DNA profiling and its use in identification of forensic medicine. In addition to the acquisition of research skills through conducting research projects in different areas.



Plant Tissue Culture Laboratory

The Department faculty members for the academic year 2015- 2016

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Hayfa H. Hassani	Prof.	Microbiology	Medical Genetics	PhD.
2	Hameed M.Jasim	Prof.	Biotechnology	Molecular Biology	PhD.
3	Subhy J.hamza	Prof.	Biotechnology	Molecular Biology	.PhD
4	Nidhal Abdul-Muhaimin	Prof.	Biotechnology	Immunology	PhD.
5	Salih A. Wahib	Prof.	Biotechnology	Drug Technology	PhD.
6	Waleed H. Yousif	Prof.	Biology	Animal Physiology	PhD.
7	Ayad M. Fadhel	Prof.	Biology	Molecular Genetics	PhD.
8	Shahlaa M.Salih	Asst. Prof.	Biotechnology	Immunology	PhD.
9	Salwa Jaber	Asst. Prof.	Biotechnology	Molecular Biology	PhD.
10	Bilal Kamel	Asst. Prof.	Biotechnology	Molecular Biology	.PhD
11	Rihab S.Ramadhan	Asst. Prof.	Biotechnology	Animal Physiology	PhD.
12	Hasan M. Nayef	Asst. Prof.	Biotechnology	Molecular Virology	PhD.
13	Asmaa A.Husain	Asst. Prof.	Biotechnology	Enzymology	PhD.
14	Ali Zaid Fadhel	Asst. Prof.	Biotechnology	Cytogenetics	PhD.

15	Mayada Sallal	lecturer	Biotechnology	Environmental Bio-technology	PhD.
16	Dhafar Najim	lecturer	Biotechnology	Medical Microbiololgy	PhD.
17	Maha Hameed	lecturer	Biotechnology	Enzymology	PhD.
18	Roqaya Mohammed	lecturer	Biotechnology	Cytogenetics	.PhD
19	Bushra Hindi	lecturer	Medical Micro-biology	Medical Microbiololgy	PhD.
20	Zahraa Kamel	lecturer	Biotechnology	Animal Tissue Culture	PhD.
21	Yasin I. Umran	lecturer	Biotechnology	Genetic Engineering	PhD.



Laboratory of Microbiology

### Curriculum

First Year / First Course					First Year / Second Course				
Code	Subject	Number of Hours		Units	Code	Subject	Number of Hours		Units
		Thtcl	Prctl				Thtcl	Prctl	
BTFS 1-1	General Biology 1	2	2	3	BTFS 2- 1	General Biology 2	2	2	3
BTFS 1-2	Cell Biology	2	2	3	BTFS 2-2	Genetics	2	0	2
BTFS 1-3	Analytical Chemistry	2	2	3	BTFS 2-3	Organic chemistry	2	2	3

BTFS 1-4	Bio Physics	2	2	3	BTFS 2-4	Introductory Bio-technology	3	0	3
BTFS 1-5	Computer	2	2	3	BTFS 2-5	BioStatistics	3	0	3
BTFS 1-6	English 1	2	0	2	BTFS 2-6	English 2	2	0	2
BTFS 1-7	Arabic 1	1	0	1	BTFS 2-7	Arabic 2	1	0	1
Total		13	10	18	Total		15	4	17
	23				19				

Second Year / First Course					Second Year / Second Course				
Code	Subject	Number of Hours		Units	Code	Subject	Number of Hours		Units
		T	P				T	P	
BTMSS 1-1	Histology	2	2	3	BTMSS 2-1	Animal Physiology	2	2	3
BTMSS 1-2	Biochemistry 1	2	2	3	BTMSS 2-2	Biochemistry 2	2	2	3
BTMSS 1-3	Molecular Biology 1	2	2	3	BTMSS 2-3	Molecular Biology 2	2	2	3
BTMSS 1-4	General Microbiology	2	2	3	BTMSS 2-4	Medical Microorganisms	2	2	3
BTMSS 1-5	Bio Safety and Risk Mangement	2	0	2	BTMSS 2-5	Microbial Physiology	2	2	3
BTMSS 1-6	Enviromental Bio-technology	2	2	3	BTMSS 2-6	Mycology	2	2	3
BTMSS 1-7	Human Rights	2	0	2	BTMSS 2-7	Democracy	2	0	2
Total		14	10	19	Total		14	12	20
	24				26				

T: Theoretical; P: Practical

Third Year / First Course					Third Year / Second Course				
Code	Subject	Number of Hours		Units	Code	Subject	Number of Hours		Units
		T	P				T	P	
BTMTS 1-1	Immunology	2	2	3	BTMTS 2-1	Human Cytogenetics	2	2	3
BTMTS 1-2	Embryology	2	2	3	BTMTS 2-2	Virology	2	2	3
BTMTS 1-3	Industrial Microbiology	2	2	3	BTMTS 2-3	Genetic Engineering	2	0	2
BTMTS 1-4	Genetic Engineering	2	0	2	BTMTS 2-4	Nanobiotechnology	2	0	2

BTMTS 1-5	Animal Tissue Culture	2	0	2	BTMTS 2-5	Antibiotics & Vaccines	2	2	3
BTMTS 1-6	Molecular Technologies	2	0	2	BTMTS 2-6	Microbial Genetics	2	2	3
BTMTS 1-7	Experiment Design & Academic Writing	2	0	2	BTMTS 2-7	Molecular Diagnostics	2	2	3
Total		14	6	17	Total		14	10	19
	20				24				

T: Theoretical; P: Practical

Fourth Year / First Course					Fourth Year / Second Course				
Code	Subject	No. of Hours		Units	Code	Subject	No. of Hours		Units
		T	P				T	P	
BTMFS1-1	Enzymology	2	2	3	BTMFS2-1	Molecular Genetics	2	2	3
BTMFS1-2	Toxicology	2	2	3	BTMFS2-2	Medical Biotechnology	2	0	2
BTMFS1-3	Forensic science & DNA Typing	2	2	3	BTMFS2-3	Proteomics and Genomics	2	0	2
BTMFS1-4	Bio informatics	2	2	3	BTMFS2-4	Pharmaceutical Biotechnology	2	2	3
BTMFS1-5	Graduation Research Project I	0	2	2	BTMFS2-5	Graduation Research Project II	0	2	2
BTMFS1-6	Elective I	2	0	2	BTMFS2-6	Elective I	2	0	2
BTMFS1-7	Elective II	2	0	2	BTMFS2-7	Elective II	2	0	2
Total		12	10	18	Total		12	6	16
	22				18				

T: Theoretical; P: Practical

#### Approved Electives for the fourth year in the Department of Molecular and Medical Biotechnology

Sq.	Subject	Code	Number Of Hours			Units
			Theoretical	Practical	Total	
1	Blood Diseases	BTMFE1	2	0	2	2
2	Human Genetic Diseases	BTMFE2	2	0	2	2
3	Antibody Engineering	BTMFE3	2	0	2	2
4	Fermentations Technology	BTMFE4	2	0	2	2
5	Biomarkers in Medical Diseases	BTMFE5	2	0	2	2



6	Bio Separation Technology	BTMFE6	2	0	2	2
7	Stem Cell and gene therapeutics	BTMFE7	2	0	2	2
8	Antibiotics Resistance and Infection Control	BTMFE8	2	0	2	2
9	Reproductive Biotechnology	BTMFE9	2	0	2	2

M.Sc. / First Course				M.Sc. / Second Course			
Subject	No. of Hours		Units	Subject	No. of Hours		Units
	T	P			T	P	
Molecular Biology and Gene Cloning	2	3	3	Molecular Techniques	1	3	2
Advanced Immunology	2	3	3	Vaccine Technology	2	-	2
Medical Biochemistry	2	-	2	Elective I	2	3	3
Advanced Medical Microbiology	2	-	2	Elective II	2	3	3
Research Methods	1	-	1	Seminar	1	-	1
English Language I	1	-	1	English Language II	1	-	1
Total	8	6	12	Total	9	9	12
	14				18		

Approved Electives for M.Sc. students in the Department of  
Molecular and Medical Biotechnology

Sq.	Subject	Number Of Hours			Units
		Theoretical	Practical	Total	
1	Advanced Enzymology	2	3	5	3
2	Advanced Cytogenetics	2	3	5	3
3	Advanced Physiology	2	3	5	3
4	Molecular Diagnostics	2	3	5	3

Ph.D. / First Course				Ph.D. / Second Course			
Subject	No. of Hours		Units	Subject	No. of Hours		Units
	T	P			T	P	
Molecular Biotechnology	2	-	2	Bioseparation Technology	2	-	2
Enzyme Technology	3	-	3	Microbial Technology	3	-	3
Molecular Epidemiology	3	-	3	Elective I	3	-	3

Molecular Immunology	3	-	3	Elective II	3	-	3
English Language I	1	-	1	English Language II	1	-	1
Total	12	-	12	Total	12		12
	12				12		

Approved Electives for Ph.D. students in the Department of  
Molecular and Medical Biotechnology

Sq.	Subject	Number Of Hours			Units
		Theoretical	Practical	Total	
1	Gene Technology	3	-	3	3
2	Stem Cell and Tissue Engineering	3	-	3	3
3	System Biology and Bioinformatics	3	-	3	3
4	Epigenetics and Gene	3	-	3	3
5	Protein Engineering	3	-	3	3
6	Nanobiotechnology	3	-	3	3
7	Medical Virology	3	-	3	3
8	Genetic Disease	3	-	3	3

## 2. Department of Agricultural Biotechnology:

As a result of the rapid evolution in biotechnology and related disciplines to biology sciences, agriculture and the environment, there was a need to keep pace with development through joining these three fields under the title of agricultural biotechnology to enable graduates to enter the work field with theoretical and practical scientific background to contribute in the development of the country.

The department has developed study plans that enable the graduate to cope with rapid advances in agriculture, industry and Ecology after pairing biological techniques with plant technology. The curricula have been developed on to expand scientific knowledge base through a wide range of subjects; they develop gradually based on this to master advanced knowledge and skills through theoretical and practical assignments and projects. Gradu-

ates will be skilled in the areas of bio-technology and scientific applications in the fields of Genetic Engineering, Ecology, Biosafety, and Agriculture to improve their opportunities to work in various fields.



Plant micropropagation

## Faculty Members of the Department of Agricultural Biotechnology for the academic year 2015-2016

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Kadhim M. Ibrahim	Prof.	Biotechnology	Plant Biotechnol.	PhD.
2	Khulood W. Abod	Prof.	Biotechnology	Toxicology	.PhD
3	Nabeel K.Ibrahim	Prof.	Biotechnology	Plant Tissues Culture	.PhD
4	Hussein Mahmood Shukri	Prof.	Soil Sciences and Water resources	Soil Chemistry	.PhD
5	Abdul-W. Shamkhi	Asst. Prof.	Biotechnology	Biochemistry	.PhD
6	Muhsin H. Risan	Asst. Prof.	Biotechnology	Mycology	.PhD
7	Ali S.Ahmed	Asst. Prof.	Biotechnology	Microbiology	.PhD
8	Asmaa G. Uraiby	Lecturer	Biotechnology	Plant technology	.PhD
9	Khalid H.Abdul-Muneim	lecturer	Biotechnology	Plant Nutrition	.PhD

## Curriculum

First Year / First Course					First Year / Second Course				
Code	Subject	Number of Hours		Units	Code	Subject	Number of Hours		Units
		T	P				T	P	
BTFS 1-1	General Biology 1	2	2	3	BTFS 2-1	General Biology 2	2	2	3
BTFS 1-2	Cell Biology	2	2	3	BTFS 2-2	Biological Variation	2	0	2
BTFS 1-3	Biochemistry	2	2	3	BTFS 2-3	Organic Chemistry	2	2	3
BTFS 1-4	Biophysics	2	2	3	BTFS 2-4	Introduction to Biotechniques	3	0	3
BTFS 1-5	Computer	2	2	3	BTFS 2-5	Bio Statistics	3	0	2
BTFS 1-6	English 1	2	0	2	BTFS 2-6	English 2	2	0	1
BTFS 1-7	Arabic 1	1	0	1	BTFS 2-7	Arabic 2	1	0	2
Total		13	10	18	Total		15	4	17
	23				19				

T: Theoretical; P: Practical

Second Year / First Course					Second Year / Second Course				
Code	Subject	Number of Hours		Units	Code	Subject	Number of Hours		Units
		T	P				T	P	
BTASS1-1	Cytogenetics	2	2	3	BTASS2-1	Food Safety	2	2	3
BTASS1-2	Bio Chemistry 1	2	2	3	BTASS2-2	Bio Chemistry2	2	2	3
BTASS1-3	Molecular Biology 1	2	2	3	BTASS2-3	Molecular Biolog y2	2	2	3
BTASS1-4	Plant Breeding	2	2	3	BTASS2-4	Plant Ecology	2	2	3
BTAFS1-5	Bio Safety & Risk evaluation	0	0	2	BTASS2-5	Algae	2	2	3
BTASE	Heredity	2	2	3	BTASE	Plant Tissues Cul- ture	2	2	3
BTASE	Human Rights	2	0	2	BTASE	Democracy	2	0	2
Total		12	10	19	Total 26		14	12	20
	22								

T: Theoretical; P: Practical

Third Year / First Course					Third Year / Second Course				
Code	Subject	Number of Hours		Units	Code	Subject	Number of Hours		Units
		T	P				T	P	
BTAS 1-1	Plant Physiology	2	2	3	BTATS 2-1	Plant Stress Physiology	2	2	3
BTATS 1-2	Fungi	2	2	3	BTATS 2-2	Plant Growth Organizers	2	0	2
BTFS 1-3	Renewed Energy Sources	2	2	3	BTFS 2-3	Plant Chemistry	2	2	3
BTATS 1-4	Generic Engineering	2	0	2	BTATS 2-4	Project Management	3	0	3
BTFS 1-5	Genetic Saving	2	2	3	BTATS 2-5	Seed techniques	3	0	3
BTATS 1-6	Nano Bio Tech- niques	2	0	2	BTATS 2-6	Secondary Metabolic Outputs	2	0	2
BTATS 1-7	Experiment Design & Data Analysis	2	0	2	BTATS 2-7	Technical Reports	1	0	1
Total		14	8	18	Total		15	4	17
	22				19				

T: Theoretical; P: Practical

Fourth Year / First Course					Fourth Year / Second Course				
Code	Subject	Number of Hours		Units	Code	Subject	Number of Hours		Units
		T	P				T	P	
BTAFS1-1	Microscopic Texology	2	2	3	BTAFS2-1	Plant Bio Reclamation	2	2	3
BTAFS1-2	Pharma Bio Tech- niques	2	2	3	BTAFS2-2	Bio Control	2	0	2
BTAFS1-3	External Plant growth	2	0	3	BTAFS2-3	Nutrition BioTech- niques	2	2	3
BTAFS1-4	Formmentation & Fungi	2	2	3	BTAFS2-4	Bio data Base	2	0	2
BTAFS1-5	Project	0	2	2	BTAFS2-5	Project	0	2	2
BTAFE	Elective I	2	0	2	BTAFE	Elective I	2	0	2
BTAFE	Elective II	2	0	2	BTAFE	Elective II	2	0	2
Total		12	8	18	Total		12	6	16
	20				18				

T: Theoretical; P: Practical

Approved Electives for the fourth year in the Department of Agricultural Biotechnology

Sq	Subject	Code	Hour/ Week		Units
			Thctl	Prctl	
1	Plant Molecular Taxonomy	BTAFE 1	2	0	2
2	Biofertilizer technology	BTAFE2	2	0	2
3	Biofuel Production	BTAFE3	2	0	2
4	Mycorrhiza and Lechines	BTAFE4	2	0	2
5	Applications of Genetic Engineering in Plants	BTAFE5	2	0	2
6	Cyanobacteria	BTAFE6	2	0	2
7	Microbial Groups	BTAFE7	2	0	2
8	Fungi Bio Techniques	BTAFE8	2	0	2

M.Sc. / First Course				M.Sc. / Second Course			
Subject	No. of Hours		Units	Subject	No. of Hours		Units
	T	P			T	P	
Advanced Molecular Biology	2	-	2	Medical Microbiology	2	-	۲



Industrial Biotechnology	2	-	2	Toxicology	2	-	٢
Secondary Metabolites	2	-	2	Bioseparation	2	-	٢
Advanced Plant Biotechnology	2	-	2	Seminar	1	-	١
Advanced Biochemistry	3	-	3	English II	١	-	١
Research Project	1	-	1	Elective	٣	-	٣
English I	1	-	1			-	
Total	13	-	13	Total	11	-	11
	13				11		

Approved Electives for M.Sc. students in the Department of Agricultural Biotechnology

Sq.	Subject	Number Of Hours			Units
		Theoretical	Practical	Total	
1	Therapeutic proteins	3	-	3	3
2	Drug Analysis	3	-	3	3
3	Bioinformatics	3	-	3	3
4	Environmental Biotechnology	3	-	3	3

Ph.D. / First Course				Ph.D. / Second Course			
Subject	No. of Hours		Units	Subject	No. of Hours		Units
	T	P			T	P	
Industrial plant biotechnology	3	-		Phytotherapy	3	-	٣
Advanced Genetic Engineering	3	-		Protein Chemistry	2	-	٢
Advanced Drug Biotechnology	3	-		Seminar	1	-	١
Bioinformatics	2	-		English II	2	-	٢
English I	2	-		Elective	٣	-	٣
Total	13	-		Total	11	-	11
	13				11		

Approved Electives for Ph.D. students in the Department of  
Agricultural Biotechnology

Sq.	Subject	Number Of Hours			Units
		Theoretical	Practical	Total	
1	Bioreactor Technology	3	-	3	3

2	Advanced Medical Microbiology	3	-	3	3
3	Pharmacology	3	-	3	3
4	Environmental Biotechnology	3	-	3	3

### Laboratories and workshops

The Labs of the College of applied biotechnology is characterized with advanced equipment in order to keep pace with the developments taking place in the world, and the advanced scientific theoretical and practical competence needed. The laboratories of the college are

the: Molecular biology laboratory, the microbiology laboratory, laboratory of animal tissues and Physiology, laboratory of cytogenetic and bioseparation, metabolic products and fermentation laboratory, laboratory of cultivating animal and plant tissues, Immunology Laboratory, genetics and fungi laboratory.



Laboratory of fungi



Laboratory of molecular biology



Genetics Laboratory



Bioseparation Laboratory

### Courses accomplished at the college for the academic year 2014/2015

#### A. A course on the principles and applications of PCR

- Major subjects of the course.
- Identifying the function and applications of the

set.

- isolating DNA.
- Preparation of DNA in the polymerase device.
- Detecting DNA via electrical deportation.
- Methods of result analysis using the Photo cad software.



Training course on DNA Extraction

### B. A course on Proteins

The course included the following:

- An introduction to protein electrophoresis
- Preparation of solutions for protein electrophoresis
- Gel electrophoresis and pigmentation
- Reading and imaging proteins.



Course in relay proteins cycle

### C. Course in the pathological laboratory analysis.

It included the following themes:

- Serological tests
- Tests in analytical chemistry
- Blood diseases tests
- General laboratory tests



Checking blood diseases Serological tests



workshop on Bacteriological

### D. Participating in "XRF and XRD workshop"

which has been held in the Physics Department, College of Science, University of Sulaymaniyah / Iraqi Kurdistan from 2 to 3 October 2013 and has been sponsored by both companies (Khurah ) and (PAN analytic company). Dr. Rehab Subhi Ramadan, the instructor at the College of Biotechnology Techniques has participated in this workshop.

The workshop included the Identification of techniques In the field of X-Ray deviation, radiation and the definition of devices produced by the company and the features provided by Khurah company in various fields of industry and scientific research. The Representative of this company also reviewed all means applied by the Company to provide its services to all universities and institutions.



Photo reflect the contribution of the workshop held in Sulaimaniya in 2013

E. Assistant Prof. Dr. Hassan Mohammed Naif had participated in a workshop entitled biosafety

and risk management Which was held in Jordan in January 2014, the session has addressed the level of biosafety and Bio -security at universities and health establishments and ways to be followed for risk management which are caused by the proliferation of microbes and what results from them.

### The workshops in the college

Biosafety and biosecurity in biotechnology techniques.

The workshop included the following themes.

- Biosafety.
- Biosecurity.
- Biogenic risk treatment.
- Community awareness of the biogenic risks.



Side of the workshop on safety and bio-security

### Published Books

**A.** Dr. Haifa Hadi Hassani . AZF Micro deletions in Human Semen Infected with Bacteria. Lambert Company Publication, Germany.

**B.** Dr. Sobhi Hamza Jawad. The Effect of AL-Turtai Extract on Compounds Inside and Outside Living Body . Lambert Company Publication . Germany

### Student activities:



Students Team of the Applied Biotechnology College

# COLLEGE OF APPLIED BIOTECHNOLOGY





OCTOBER 2016

# COLLEGE OF PHARMACY



MINISTRY OF HIGHER EDUCATION  
AND SCIENTIFIC RESEARCH  
AL-NAHRAIN UNIVERSITY  
COLLEGE OF PHARMACY  
ESTABLISHED-2014



وزارة التعليم العالي والبحث العلمي  
جامعة النهرين  
كلية الصيدلة  
تأسست سنة ٢٠١٤ م

## About College of Pharmacy

This college was established in 2014. Its goal is to prepare specialists in pharmaceutical sciences. The college grants Bachelor degree in Pharmacy.



### About the College

The college of Pharmacy at Al-Nahrain University has been founded in 2014; the college aims to educate an efficient generation of pharmacists with distinguished scientific qualifications to serve the institutions involved in the therapeutic fields. The study in the college of pharmacy is naturally a theoretical and practical study. Students

receive theoretical knowledge according to the latest scientific methods, at the same time , they are trained in laboratories and hospitals. Students also have to prepare a research for graduation under the supervision of a faculty member. The university received the first group of this college student in the academic year 2014 – 2015. They were (67) students.

Dean of the college



Prof Dr. Adeeb A. Al-Zubaidy



The College of Pharmacy

## Council of College of Pharmacy 2015 - 2016

Sq.	Full Name	Position	Academic Rank	General Specialization	Specific Specification	Degree
1	Adeeb Ahmed Al-Zubaidy	Dean	Prof	Pharmacology	Pharmacology	PhD.
2	Hayder Bahaa Sahib	Deputy Dean of Scientific Affairs	Lecturer	Pharmacology	Pharmacology	PhD.
3	Taha Shawi Morad	Deputy Dean of Admin. affairs	Assist. Prof	Biology	Immunophysiology	PhD.
4	Rafal Shakeeb Abdul Wahab	Head of laboratory sciences department	Lecturer	Biotechnology	Biotechnology	PhD.
5	Mohammed Jasi, Hamza	Head of pharmaceutical chemistry	Lecturer	Chemistry	Analytical Chemistry	PhD
6	Qais Majeed Isa	Council Secretary	Lecturer	Biology	Fungi & Enzymes	PhD.

## Affiliated Instructors at the College of Pharmacy 2015 – 2016

.Sq	Full Name	Affiliated from Mother College	Academic Rank	General Specialization	Specific Specification	Degree
1	Nawal Khairi Hussein		Prof	Biochemistry	Clicel Biochemistry	PhD
2	Lazim Hameed Kaied		Asst. Prof.	Microbiology	Parasitology	.PhD
3	Feryal hashim rada		Lecturer	Biochemistry	Clicel Biochemistry	PhD
4	Sadiq jaafar kadhim		Asst. Prof.	Physics	Nonlinear optics	PhD
5	Shaimaa Isam Abdul-wahab		Lecturer	Genetic Engineering & Bio technology	Genetic Engineering & Bio technology	.PhD
6	Ammal esmaeel ibrahim		Lecturer	Biochemistry	Clicel Biochemistry	.PhD
7	Abbas shebeeb hasan		Lecturer	Analytical chemistry	chemistry	.PhD
8	Shaima Hussein Hamoudi		Lecturer	Biotechnology	Biotechnology	.PhD
9	Mohammed Fareed Hameed		Asst. Lecturer	Pharmacology	Pharmacology	Msc
10	Saba Hamid Majid	Scientific and culture information department	Asst. Lecturer	Clinical pharmacy	Clinical pharmacy	.M.Sc
11	Raghad Kadhim Ubaid		Asst. Lecturer	Microbiology	Microbiology	M. Sc
12	Zeenah Saif Aldeen Mohammed		Asst. Lecturer	Biotechnology	Biotechnology	M.Sc





**Members of the council of the college of Pharmacy**

### **Vision:**

The program of the college of pharmacy should be one of the best programs on the local, regional and international levels, with improving quality systems, and achieve excellence to give the best educational outcomes that support health service and therapeutic institutions.

### **The Mission:**

- Excellence in providing programs for the development of Pharmacists who can exercise a successful career path in the field of pharmacy and serve pharmacy institutions efficiently and professionally to meet the diverse needs of the pharmaceutical in the public and private sectors
- Providing graduates with the necessary knowledge and balanced education to bear moral responsibility in the health-care professions
- The college should become an instructional center based on research and focus on the cooperation between the pharmaceutical sciences and pharmaceutical industry.
- Rehabilitation of educational systems to meet the local and international academic accreditation standards and use information technology to participate in activities that contribute to raising the efficiency of therapeutic system

At the local level, and actively participate in community service.

### **The Goals:**

The College of Pharmacy should have its scientific project in graduating specialized staffs, and to contribute to serve the institutions of the therapeutic health service system, to achieve this project, the objectives of the college are summarized below:

- 1** Providing outstanding education and professional development for students of pharmacy.
- 2** Enhancing the intellectual curiosity and commitment to lifelong learning.
- 3** Encouraging and supporting the development of appropriate models for various pharmaceutical industry practice environments.
- 4** Strengthening linkages between the college of pharmacy and the needs of the development of society.
- 5** Organizing and promoting applied research and basic research of a special nature as a vital element in the pharmaceutical sciences.
- 6** Giving undergraduate and graduate students of high quality training and educational skills.



## Curriculum

First Year First Semester					First Year Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Th	Lab				Th	Lab	
111	Human Biology	2	1		127	Human Anatomy	1	1	
112	Principles of Pharmacy Practice	2	----		128	Pharmaceutical Calculations	2	1	
113	Analytical Chemistry	3	1		129	Medical Physics	2	1	
114	Computer Sciences	2	1		1210	Organic Chemistry	3	1	
115	Mathematics and Biostatistics	3	----		1211	Histology	2	1	
116	Medical Terminology	1				Human Rights	1	----	
Total				32	Total				39

Second Year First Semester					Second Year Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Th	Lab				Th	Lab	
211	Organic Chemistry II	3	1		225	Communication skill	2	---	
212	Medical Microbiology	3	1		226	Organic Chemistry III	2	1	
213	Physical Pharmacy I	3	1		227	Medical Virology and Parasitology	2	1	
214	Physiology I	3	1		228	Physical Pharmacy II	3	1	
	Democracy	1	----		229	Physiology II	3	1	
	Arabic language	2	----		2210	Pharmacognocny I	3	1	
Total				39	Total				39

Third Year First Semester					Third Year Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Th	Lab				Th	Lab	
311	Inorganic Pharmaceutical Chemistry	2	1		326	Organic Pharmaceutical Chemistry I	3	1	
312	Pharmacognocny II	2	1		327	Pharmacology I	3	----	

313	Pharmaceutical Technology I	3	1		328	Pharmaceutical Technology II	3	1	
314	Biochemistry I	3	1		329	Biochemistry II	3	1	
315	Pathophysiology	3	1		3210	Pharmacognocoy III	2	1	
					3211	Pharmacy Ethics	1	----	
<b>Total</b>				<b>37</b>	<b>Total</b>				<b>37</b>

Fourth Year First Semester					Fourth Year Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Th	Lab				Th	Lab	
411	Pharmacology II	3	1		426	Pharmacology III	2	----	
412	Organic Pharmaceutical Chemistry II	3	1		427	Organic Pharmaceutical Chemistry III	3	1	
413	Clinical Pharmacy I	2	1		428	Clinical Pharmacy II	2	1	
414	Biopharmaceutics	2	1		429	General Toxicology	2	1	
415	Public Health	2	----		4210	Industrial Pharmacy I	3	1	
<b>Total</b>				<b>32</b>	<b>Total</b>				<b>32</b>

Fifth Year First Semester					Fifth Year Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Th	Lab				Th	Lab	
511	Organic Pharmaceutical Chemistry IV	2	----		527	Pharmacoeconomic	2	----	
512	Industrial Pharmacy II	3	1		528	Applied Therapeutics II	2	----	
513	Applied Therapeutics I	3	----		529	Therapeutic Drug Monitoring (TDM)	2	1	
514	Clinical Chemistry	3	1		5210	Advanced Pharmaceutical Analysis	3	1	
515	Clinical Laboratory Training	----	2		5211	Hospital Training	----	2	
516	Clinical Toxicology	2	1		5212	Dosage Form Design	2	----	
517	Project	1	----		5213	Pharmaceutical Biotechnology	1	----	
<b>Total</b>				<b>35</b>	<b>Total</b>				<b>35</b>



# THE HIGH INSTITUTE FOR INFERTILITY DIAGNOSIS AND ART'S



جامعة النهرين  
المعهد العالي لتشخيص العقم  
و  
التقنيات المساعدة على الإنجاب

## About The Institute

It was established in 1992 as a therapeutic center for infertility. Its duties were extended to include academic research at 2002. The institute includes two departments: The Department of Physiology of Clinical Reproduction and the Department of Applied Embryology and Assisted Reproductive Technologies. The Institute grants Higher Diploma, Master, and Doctoral degrees.





### About the institute

It was established in 1990 as a therapeutic center for infertility. In 2000, its duties were expanded to manage academic, research as well as therapeutic services. It was one of Baghdad university's institutions, but in 2005, it had been included within AL- Nahrain university .The institute is located in AL-Kadhemiya city, nearby Immain Kadhemain Medical City.

It is recorded by Postgraduate Medical Education Directory (PMED), which belongs to FAIMER foundation, that is one of (ECFMG)'s institutions. The institute has close scientific relationships with scientific

societies of fertility and reproduction at the local and global level. It is an active participant in scientific conferences and activities that deal with clinical reproductive physiology, fertility, and assisted reproductive technologies, and embryonic development.

The institute has two scientific departments, one of them is the department of clinical reproductive physiology that grants PhD degree in applied clinical reproduction and High Diploma in assisted reproductive technologies, the second department is the Applied Embryology which grants master degree in applied embryology.



### Deans of the High Institute for Infertility Diagnosis and Assisted Reproductive Technologies



Prof. Dr. Munther Tayyip  
Albarazanchy

2000 - 2003



AL-Janabi Prof. Dr. Adnan  
Salih

2003-2005



Prof. Dr. Mohaisen Hassan  
Aday

2005-2006



Prof. Dr. Anaam Rasheed  
Al-Salihi

2006-2013



Assist Prof. Dr. Mohammed Oda Salman

2013-2013



Assist Prof. Dr. Ula Mohammad Redha AL-Kawaz

2013 - Now

## The council of the institute for the academic year 2014-2015

No	The name	position	Scientific Section	Academic Title	General jurisdiction	Specialization	Higher Certificate	Date of joining
1	Ula Mohammad Redha AL-Kawaz	The dean	Clinical Reproductive Physiology	Assist. Prof.	General Medicine and Surgery	Genito urinary Surgery	Iraqi Board + European Board	29/08/2013
2	Muayyad Sraibet Abbood	Vice Dean for scientific Affairs and high studies	Clinical Reproductive Physiology	Lecturer.	General Medicine and Surgery	Pharmacology	Doctorate	17/9/ 2015
3	Mohammed Oda Salman	Head of Department of Applied Embryology	Applied Embryology	Prof.	General Medicine and Surgery	Histological Anatomy and Applied Clinical Embryology	Iraqi Board	4/3/ 2012
4	Manal Taha Meteab	Head of Department of Clinical Reproductive Physiology	Clinical Reproductive Physiology	Lecturer	General Medicine and Surgery	Assisted reproductive technologies/ Physiology	Doctorate	2008
5	Lubna Amer Abd-Alhussein	Head of IVF Unit	Clinical Reproductive Physiology	Lecturer	General Medicine and Surgery	Gynecology and obstetric	Iraqi Board	2015



**Vision:**

The institute works hard to offer high quality academic programs, which go in line with the medical and scientific development in the field of infertility and its treatment at the local, regional, and global level. It tries hard to achieve the high rates of success in using In Vitro Fertilization (IVF) Techniques and limit the infertility problems.

**Mission**

The institute's mission is within three axes. The first is to qualify and train the Scientific and Medical staff through postgraduate studies and academic researches. Second is to offer a distinguished clinical service to infertile women and men. It includes diagnostic and treatment services which are offered by using up-to date assisted reproductive technologies. The third is to improve the former two axes by the applied and scientific researches which deal with the difficulties that can interact with the process of infertility treatment.

**Goals:**

The institute's goals are:

- Awarding scientific certifications in IVF techniques, applied embryology and reproductive sciences according to the conditions accredited by The Ministry of High Education and Scientific Research.
- Conducting clinical, applied and basic scientific researches in the field of infertility, assisted reproductive technologies and embryology.
- Making the latest diagnostic and therapeutic devices that available to infertile women and men.
- Training the scientific personnel on assisted reproductive technologies and applied embryology.
- Providing governmental and non-governmental institutions with scientific consultations in the field of infertility, its treatment, and reproductive sciences.

The three top students of the Institute for the academic year 2014-2015

No	The Name	The Section	Average
1	Rabab Alwan Taher	Clinical reproductive physiology	88.95
2	Heba S'aadoon Mhwas	Clinical reproductive physiology	87.75
3	Azdehaar Nassif Ali	Applied embryology	86.96



Graduates of the Institute for the academic year 2014-2015



## Departments of the Institute

### 1. Department of Applied Embryology

#### Vision:

Department of Applied Embryology is one of the scientific departments of the High Institute for infertility diagnosis and assisted

reproductive technologies. It is considered as one of the basic scientific construction of the Institute. It was established in 2006 .This Department grants a master's degree in Applied Embryology to physicians, veterinarians and biologists exclusively.



#### Mission:

The department of applied embryology cares about teaching and rehabilitation of specialized employees in the field of modern embryology, especially the applied one. It conducts clinical researches in the field

of the development of embryos, fetal malformations, and tries to find an explanation for the effect of environment on the growth of embryos and so forth to serve community by limiting the problem of fetal malformations and genetic diseases.

### Council of the Department for the academic year 2015 – 2016

No	The name	Academic title	General jurisdiction	Specialization	higher certificate
1	Mohammed Oda Salman	Prof	General medicine and surgery	Histological anatomy and applied clinical embryology	Iraqi Board
2	Istebraq Abdul Rasool AL-Wasiti	Assist. Prof	Biochemistry	Clinical biochemistry	Doctorate
3	Rehab Shafiq Abdul Said	Lecturer	Veterinary Medicine	Microbiology	Master (studying ( Ph.D in Iraq
4	Nasreen Khazal Flayeh	Lecturer	Biology	Applied Embryology	Master (studying (Ph.D. abroad
5	Mufeeda Ali Jawad	Lecturer	General Medicine and Surgery	Applied Embryology	Master (studying ( Ph.D. in Iraq

6	Rana Abdul Rasool Redha	Assist. Lecturer	Veterinary Medicine	Applied Embryology	Master
7	Ban Thabit Sa'eed	Assist. Lecturer	Biology	Applied Embryology	Master
8	Usama Ismael Mejbil	Lecturer	Veterinary Medicine	Applied Embryology	Master (study- (ing PhD abroad
9	Wathiq Qutaiba Shakir	Assist. Lecturer	Biology	Applied Embryology	Master

## 2-Department of clinical reproductive physiology

### Vision:

The department of clinical reproductive physiology was constituted since the foundation of the institute to grant High Diploma in the assisted reproductive technologies to physicians specialized in obstetrics, gynecology or urinary and genital surgery at least. This certificate qualifies the doctor to serve infertile patients in a scientific manner and therapeutic methodology which helps him to get high rates of success. In the academic year 2014- 2015 ,it began to grant PhD degree in applied clinical reproduction to post graduate students with high diploma (equivalent to Master) in the assisted reproductive technologies or physicians with master degree in applied embryology.



### Mission:

The studies and researches, that are carried out in the Department of Clinical Reproductive Physiology, deal directly with the problems of infertility in women and men .It works hard to find therapeutic solutions to some of infertility problems by using devices of compulsory insemination of sperms and the use of fluorescent microscopy to signify the natural and non-natural legacies.

### The Council of the Section for the academic year 2015-2016

No	The name	Academic Title	General Jurisdiction	Specialization	higher Certificate
1	Manal Taha	Lecturer	General Medicine and Surgery	Assisted reproductive technologies/ Physiology	Doctorate
2	Ula Mohammed Redha	Assist. Prof	General Medicine and Surgery	Genito urology Surgery	Iraqi Board and European Board
3	Muayyad sraibet abbood	Lecturer	Pharmaceutical	Pharmacology	Doctorate
4	Hayder Ali Lefta Mossa	Lecturer	Biology	Assisted reproductive technologies/ Physiology	Doctorate
5	Wasan Adnan	Lecturer	General Medicine and Surgery	Gynecology and Obstetric	Iraqi Board and Arabic Board



6	Maha Khalid Abdul Karim	Lecturer	Veterinary Medicine	Reproductive and Genetic Physiology	Master(studying PhD abroad)
7	Amal Abdel Wahed Mohamed	Lecturer	Biology	Reproductive Physiology	Master(studying PhD abroad)
8	Esraa Mohsen Abdul Hadi	Lecturer	Veterinary Medicine	Reproductive Physiology	Master(studying PhD abroad)
9	Lubna Amer Abd-Alhussein	Lecturer	General Medicine and Surgery	Gynecology and obstetric	Iraqi Board

High Studies

It is the cornerstone to implement the vision of the Institute in providing academic programs that go in line with the up to date scientific development. It is also essential to accomplish the Institute's message in rehabilitation and training the specialized scientific and medical staff. It was founded with the foundation of the Institute in the year (1999-2000). The Institute grants high Diploma (equivalent to Master) in the assisted reproductive technologies, a Master degree in Applied Embryology, and PhD in applied clinical reproduction.

The studying plan of the institute's departments depends in the preparative academic year on a theoretical and practical program concerned exclusively with specialization of each department, in addition to the workshops and seminars that the students of the two departments must attend them. Clinical

training in the consulting clinic is also included within this plan. In the second academic year, research plans are introduced by the institute's professors and admitted by the scientific committee, and then every student can choose the subject and the supervisor he or she prefers.

The matriculation plan for the academic year 2014-2015 is 5 seats for high diploma in assisted reproductive technologies, 5 seats for master degree in applied embryology and 2 seats for doctorate degree in applied clinical reproduction.

### Curriculums

Curriculums of the higher studies of institute depend largely on world scientific references that deal with the specialization of the institute exclusively. Following are the curriculums:

Higher Diploma (equivalent to Master) Institute Labs

High Diploma in Assisted Reproductive Technology

First Semester					Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Theo	Pract				Theo	Pract	
NEMRPHY.HD13	Embryology	2	3	3	NEMRPHY.HD25	Reproductive Micro-manipulation	2	3	3
NEMRPHY.HD14	Reproductive Physiology	2	3	3	NEMRPHY.HD23	Assisted Reproductive Technologies	2	3	3
NEMRPHY.HD15	Clinical Bio-chemistry	2	3	3	NEMRPHY.HD24	Andrology	2	3	3
NEMRPHY.HD16	Infertility	1	-	1	NEMRPHY.HD22	Cytogenetic & Molecular Biology	1	-	1

NEMRPHY.HD12	Medical Statistics	1	-	1	NEMRPHY.HD21	English Language	1	-	1
NEMRPHY.HD11	English Language	1	-	1	NEMRPHY.HD26	Seminar	1	-	1
<b>Total</b>		<b>9</b>	<b>9</b>	<b>12</b>	<b>Total</b>		<b>9</b>	<b>9</b>	<b>12</b>

**Ph.D.****Ph.D in Clinical Applied Reproduction**

First Semester					Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Theo	Pract				Theo	Pract	
NEMRPHY.HD	Applied Reproductive Physiology	2	3	3	NEMRPHY.HD	Reproductive Biotechnology	2	3	2
NEMRPHY.HD	Assisted Reproduction	2	3	3	NEMRPHY.HD	Advance Andrology	2	3	2
NEMRPHY.HD	Applied Embryology	2	3	3	NEMRPHY.HD	Advance Infertility	2	3	3
NEMRPHY.HD	Reproductive Pathology	2	-	2	NEMRPHY.HD	Advance Embryology	2	3	3
NEMRPHY.HD	Reproductive Genetic	1	-	1	NEMRPHY.HD	Research Methods & Seminars	1	-	2
					NEMRPHY.HD	Medical Statistics	2	-	Pass
<b>Total</b>		<b>9</b>	<b>9</b>	<b>12</b>	<b>Total</b>		<b>11</b>	<b>12</b>	<b>12</b>

**Master:****M.Sc. in Applied Embryology**

First Semester					Second Semester				
Code	Sub	Hrs Per Week		Units	Code	Sub	Hrs Per Week		Units
		Theo	Pract				Theo	Pract	
NEMRPHY.HD13	General Embryology	3	3	4	NEMRPHY.HD11	Special Embryology	3	3	4
NEMRPHY.HD14	Reproduction	2	----	2		Experimental Embryology	1	3	2
NEMRPHY.HD15	Histology	3	3	4	NEMRPHY.HD25	Assisted Reproductive Technologies (ART)	2	3	3
NEMRPHY.HD16	Medical Statistics	1	-----	1	NEMRPHY.HD23	Clinical Biochemistry	1	3	2
NEMRPHY.HD12	English Language	1	----	1	NEMRPHY.HD24	Teratology & Birth defects	1	-----	1
					NEMRPHY.HD22	English Language	1	-----	1
						Seminar	1	-----	1
<b>Total</b>					<b>Total</b>				

The number of students who are graduating in the academic year 2015-2016

High Diploma		Master	
Male	Female	Male	Female
	8	5	4
8		9	

### Institute Labs

There are two laboratories for scientific departments in the Institute:

The laboratory of applied embryology and the laboratory of Clinical reproductive physiology which are equipped with various modern and sophisticated equipment that meet the requirements of scientific researches. There is also the device of intracytoplasmic sperm injection and the Fluorescent microscope.



### Clinical Training

Clinical training for the students of high diploma is included as unit of the curriculum.

High diploma students are trained in the consulting clinic of the institute.





### Division of Quality assurance

It is an important unit. Supported by the dean of the institute, it takes upon itself the responsibility of organizing deferent workshops and seminars to educate employees of different levels with the quality culture. It takes part in all activities regarded with quality assurance. The manager of this division hold periodical meetings for the division's members and distribute the tasks among them depending on an annual and biannual plan. This division supervises on the deferent symposiums and follows up the fulfillment of the curriculum. It also characterize as the responsibilities of every unit in the institute according to the structure of the institute.

### Goals of Quality Assurance Division

The goals as follows:

- 1- Clarifying the system of quality in light of quick scientific developments that the whole world exhibit them.
- 2- Taking the quality system into consideration and implementing it effectively.
- 3- Updrading the high education and materializing the educational quality in all institutions of the university as step to reach the world high level quality.
- 4- Realizing the importance of knowledge and education by Societies, so human investment becomes the better, and a great propaganda was organized by the ad-

vanced countries that calls for adopting the quality assurance of the outcomes of public and academic education to go in line with the advanced civilization.

### Animal House:

There is a house of laboratory animals in the Institute which provides the teaching staff and the students with laboratory animals they need to do their researches. It also provides the researchers of other institutions with these animals. The staffs that are in charge of this unit are qualified to take care of the animals (rats and mice).



### Library and Internet

The institute has a library that provides the academic staff and students

With up to date scientific references of infertility treatment, assisted reproduction techniques, embryology and other supporting sciences. There is also Medline that is



connected with Internet. The institute is keen to provide up-to date scientific periodicals to keep pace with the world scientific developments .the library was established with the

Foundation of institute in 1999 to achieve the goal of providing the references, and making them attainable by the following:

- 1- Borrowing all the academic staff, post-graduate students, and medical employees of the institute.
- 2- Using Internet as a resource of scientific references, in addition to the MEDLINE.
- 3- Making the academic staff know of every modern books and periodicals that the library get.



### Unit of Continuous Learning: Vision and Message

To make Al -Nahrain university continue its scientific message , this unit works hard to be one of the educational channels that support the university in achieving its mas-

sage and provide the society with the best service .This unit is responsible of organizing scientific courses and symposiums that deal with infertility and its treatment.

### Goals

This division tries to achieve the following goals:

- 1- Highlighting scientific researches, their messages and roles in order to find solutions for deferent health problems. Of deferent levels, developing their skills, and
- 2- Training the academic staff Upgrading their qualifications.
- 3- Going in line with the research developments at the theoretical and practical level.
- 4- Being in touch with the university's academic institutions and the health institutions of local society.

### Duties of continuous learning unit

- 1- Making an annual plan for the institute's activities (conferences, symposiums, courses, workshops, and heuristic programs.
- 2-Making this plan known to the university and identifying the beneficiaries so as to make this known to the related social societies .
- 3- Documenting the data of every course (its titles, number of the contributors and composing a summary about its subject.
- 4- Awarding appreciate certificates to the contributors of courses and conferences.
- 5- Making the academic staff participate in the specialized scientific courses that are organized by the university's colleges, social societies and research centers.





## Training Courses



Students Thesis



Graduation Ceremony

### Consulting Clinic

It is consisted of male and female infertility clinics, in which gynecologists, obstetricians and urologists check, and treat infertile patients. It includes a unit of files which is responsible of following up steps of treatment of each case. Hormonal examinations are done for primary and secondary cases of infertility in developed laboratories. Semi-

nal fluid is also examined in specialized laboratories. The consulting clinic includes laboratories for pathological, microbiological and ultra-sonographic examinations. There is also a pharmacy which provides patients with the medicines they need. The institute provides the justice and law institutions with accorded medical reports about cases of infertility when they ask.





### IVF Unit

This unit is specialized with assisted reproduction technologies that includes: Intrauterine Insemination (IUI), Intra cervical insemination (ICI), Intracytoplasmic sperm injection of spermatozoa (ICSI) and in Vitro fertilization (IVF). This unit contains two halls for operations, one another for IVF, two

wards, unit for recovery, a laboratory for artificial induction and other for IVF. This unit provides distinguished service to infertile patients, it trains institute's students of post-graduate studies and it helps them in accomplishing their researches. It is responsible of making many laboratory examinations and clinical operations.



3<sup>rd</sup> scientific Conference 2015



## Issues of the Institute



# BIOTECHNOLOGY RESEARCH CENTER



## About Biotechnology Researches Center

This center was established in 1999. It aims at pursuing specialized researches in Biotechnology. It consists of specialized scientific labs in the fields of molecular and medical, plant, and environmental biotechnology. It includes three departments: Molecular and Medical Biotechnology Department, Plant Biotechnology Department, and Department of Environmental Biotechnology.





### Biotechnology Researches Center (BRC):

The Biotechnology Researches Centre (BRC) was established in 1999 to function as a Centre of Excellence in the field of Biotechnology at Al-Nahrain University, Iraq.

The head of council of center is the chancellor of Al-Nahrain University, the counsel includes heads of the departments of the BRC and well known scholars.

The Biotechnology Research Center promotes education and research in biotechnology for the benefit of society and the environment. The major focus is to promote research excellence, spread of knowledge, and commitment to advanced quality science teaching.

The BRC collaborative research provides research facilities, and contributes to educational activities in biotechnology. The center conducts researches in a wide range of disciplines including biology, biomedical engineering, Chemical engineering environment and assisted reproductive technologies. It continues the tradition of excellence in research, student training, and substantial research grants and contracts, the major portion of funding is coming primarily from the national funding agencies. We offer graduate fellowships, undergraduate research opportunities, a seminar series, an infrastructure development program, and sponsorship of an annual student research forum which exemplifies commitment to effective support for science research at Al-Nahrain University.

Annually, the BRC organizes several training courses and workshops. The members of the BRC considered as experts consultant for many ministries and state institutions through various scientific advisory committees. The BRC publishes a scientific, semi-annual journal concerned with pre-

senting biotechnology for scholars and researchers, in addition to a monthly scientific bulletin highlighting the latest developments in Biology and related technology.

### Vision:

The Biotechnology Research Center works hard to be a world class research center in the field of biotechnology. Our Message is to promote research and development in Biologics through market-driven educational programmes and strategic research.

### The Mission:

Towards a specialized scientific community concerned with biotechnology and the importance of the spread of its applications for the development of the Iraqi society and the achievement of its goals.

### The Goals:

The Biotechnology Research Center (BRC) aims to:

1. Promotes education and research in biotechnology for the benefit of society and the environment.
2. Promote research excellence, the spread of knowledge, and commitment to quality education in science.
3. Provide research facilities, and contribute to educational opportunities in Biotechnology.
4. Hire a qualified researchers and technicians in order to expand the research possibilities
5. Activate partnerships with ministries and local, Arab and international institutions to serve national development issues and find solutions to the problems of the public and private sector.
6. Get equipment and materials of impor-

tance in raising the scientific level of the implementation of programs and research projects.

7. Involve of experts and scholars from relevant ministries and scientific institutions in the research projects of the center.



Prof. Dr.Saad Salih Mahdi AL-Dujaily, Ph.D. / Director of the Center

#### The Council of Directors at the BRC.

.Sq	Full Name	Position	.Scientific Dept	Academic Rank	General Specialization	Specific Specialization	Degree	Date of joining
1	Saad Salih Mahdi AL-Dujaily	Director of the Center	Ecological environmental Biotechnologies	Prof.	Reproductive Physiology	Clinical Reproductive Physiology and ART	.PhD	15/2/2016
2	Abdul Husain AlFaisal	Dean , High Institute of Genetic Engineering	Baghdad-University	Prof.	Genetic	Genetic Engineering	PhD	15/2/2016
3	Hameed Majeed Al-Dulaymi	Chairman of Biotechnology	College of Biotechnology Al-Nahrain University	Prof.	Biotechnology	Environmental Biotechnology	PhD	15/2/2016
4	Muaeed Sabri	Chairman of Biotechnology	College of Science – Baghdad-University	Prof.	Agricultural Sciences	Plant Biotechnology	PhD	15/2/2016
5	Abbas Jasim Al-Musawi	Director of Diabetes Center	Al-Mustanseryia University	Assist Prof.	Endocrinology	Clinical Endocrinology	PhD	15/2/2016
6	Zaynab Shaaban Al-Musawi	Chairman of Al-Resafa Laboratories	Ministry of Health	Consultant	Biology	Clinical Biology	PhD	15/2/2016

7	Ibrahim Ismail Hassan	Bio- technology Researches center	Plant Biotechnologies	Assist .Prof	Agricultural Sciences	Field Crops	.PhD	15/2/2016
8	Rabah Najah Jabbar	Bio- technology Researches center	Ecological environmental Biotechnologies	Assist. Prof	Biotechnol-ogy	Biotechnology	.PhD	15/2/2016
9	Mohammad Mahmoud Al-Halbosi	Bio- technology Researches center	Medical and Molecular Biotechnologies	Assist. .Prof	Biology	Molecular Immunology	.PhD	15/2/2016
10	Iman Hassan Hammoud	Secretary of the Council	Council schedule					15/2/2016

### Scientific Departments at the BRC

#### 1-Department of Medical and Molecular Bio-technology:

This department aims at:

- 1- Early detection and accurate diagnosis of cancer and genetic diseases using the PCR techniques.
- 2- Investigation of crops and products of genetically modified GMOs using PCR technology-

- 3- Evaluate Geno-toxicity of compounds characteristic genetic and medical products using animal tissue cultivation technique
- 4- Conduct cytogenetic tests in chromosomal deformations.
- 5- Inform about external fertilization technology and cultivation of embryos in the economically important animals to improve production quality and quantity of milk and meat.



The most important scientific laboratories in this Department:

- 1 Animal cell culture lab-
- 2 Cytogenetic laboratory.
- 3 PCR preparation laboratory.-
- 4 Polymerase Chain Reaction lab.
- 5 DNA and RNA extraction lab
- 6 Gel electrophoresis lab
- 7 Student laboratory.
- 8 Immunohistochemistry laboratory.

#### Faculty Members of the Medical and Molecular Technologies Dept.

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Mohamed Mahmoud Farhan	Assist. Prof	Biology	Molecular Immunology	.PhD
2	Najwa Shihab Ahmed	Assist. Prof	Biotechnology	Molecular genetics	.PhD
3	Farouk Ibrahim Mohamed	Lecturer	Biotechnology	Medical Biotechnology	.PhD
4	Ali Jabar	Lecturer	Microbiology	Clinical Immunology	.PhD
5	Farah Thamer Abdullah	Lecturer	Immunity	Microbiology Immunity	.M.Sc
6	Shaima yousif	Lecturer	Biotechnology	Cytogenetic Immunology	.M.Sc
7	Yasmin Ali Hadi	Lecturer	Biotechnology	Medical Biotechnology	.M.Sc
8	Noor Hashim	Assist. Lecturer	Biotechnology	Molecular Biologist	.M.Sc
9	Ali Hader Muhamad Ali	Assist. Lecturer	Biotechnology	Molecular Biologist	M.Sc.
10	Mays Noori Falih	Assist. Lecturer	Microbiology	Microbial Biotechnology	.M.Sc



## 2. Department of Plant Biotechnology:

The Department of Plant Biotechnology Techniques has been established in 1999 and the main objectives of the department are:

1-Employing plant tissue and other cultivation techniques in the production of suitable plants to the local environmental conditions like salinity and drought with desirable agricultural qualities.

2-The production and purification of the active substances of some medical plants for pharmaceutical uses and food industries

3-The use of magnetized water in the improvement of plant and animal production-

4-Conduct studies for the production of

single- number chromosomal plants.

5-Work on the transfer of genes responsible for desirable qualities in plants.

The most important scientific laboratories in this section are:

1. Plant tissue culture Laboratory.
2. Media preparation Lab.
3. Plant cytogenetic Lab.
4. Secondary metabolites extraction Lab.
5. Plant molecular Lab.
6. Lab. High-performance liquid chromatography HPLC
7. Detection of plant Secondary metabolites Lab.
8. Biological activity assay Lab.



Incubator room for plant tissue culture.

### Faculty Members of Department of Plant Biotechnology Techniques

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Ibrahim Ismail Hassan	Assist. prof	Biotechnology	Breeding and varietal improvement	.PhD
2	Abdullah Jassim Muheisen	Prof	Agricultural Sciences	Plant Technologies	.PhD
3	Zainab Yasin	Lecturer	Biology	Molecular Immunology	.PhD
4	Ahmad Fadhel Neama	Lecturer	Biotechnology	Physiology external fertilization	.PhD
5	Abtehal Hassan Mahmud	Lecturer	Biotechnology	Physiology external fertilization	.PhD
6	Ashwaq Shannan Abid	Lecturer	Biotechnology	Histological Farms Plant Protection	.M.Sc
7	Star Abdullah Shlahi	Lecturer	Biotechnology	Histological Farms	.M.Sc
8	Suaad Muhamad Majeed	Lecturer	Bio- technology	Histological Farms Plant Protection	.M.Sc

9	Sameer Naji Mahmoud	Lecturer	Agricultural Sciences	Insects	.M.Sc
10	Aumar abd khadhum	Assist. Lecturer	Biology	Plant Protection	.M.Sc
11	Iman Ismail Numan	Assist. Lecturer	Biology	Plant Protection	.M.Sc
12	Duha Miasar Majed	Assist. Lecturer	Biology	Plant Protection	.M.Sc

### 3-Department of Environmental Biotechnologies:

The Department of Environmental Biotechnologies was founded in 1999 and its main objectives are to:

- Work on the production of biofuels as an alternative to the normal fuel to reduce pollution of the environment.
- Employ microbiology in the biological control of certain hazardous pollutants
- Conduct serological tests for the diagnosis of plant and animal viral diseases.
- Isolate micro-organisms of medical, industrial and agricultural importance for the production of certain enzymes and economi-

cally useful compounds

- Study the effectiveness of toxic compounds and medical industrial extracts to drug production.

The most important scientific laboratories in this department are:

- 1- Bacteriology Laboratory.
- 2- Biological Separation Laboratory.
- 3- Microbial Technology Laboratory.
- 4- Atomic Absorption Laboratory.
- 5- Isolation and Identification Laboratory.
- 6- Sample Collection Laboratory.
- 7- Chemical and Microscopic Laboratory.
- 8- In vitro fertilization laboratory.



Incubator room for plant tissue culture.

Faculty Members of the Department of Biogenic Environmental Technology

.Sq	Full Name	Academic Rank	General Specialization	Specific Specialization	Degree
1	Rabah Najah Jabbar	Assist. .Prof	Bio- technology	Molecular biologist	.PhD
2	Khalid Abbas Rashid	Assist. .Prof	Ecology	Water Environment	PhD.

3	Mohammed Hasim Al-Janabi	Assist. .Prof	Microbiology	Medical Microbiology	PhD.
4	Hasem Asmaail Aba Albari	Assist. Prof	Ecology	Molecular biology	PhD
5	Salah Mahdi Mohsen	.Assist Prof	Animal Physiology	Fertility	PhD.
6	Zaid Akram Thabit	Lecturer	Ecology	Ecology Biotechnology	PhD.
7	Niav Nidal Ali	Lecturer	Biotechnology	Clinical Physiology and IVF	PhD.
8	Jalel Abraham Asad	Lecturer	Microorganisms	Medical Microbiology	PhD.
9	Ayat Adnan Abas	Lecturer	Agricultural	Food	.M.Sc
10	Ghaida Hussein Abdel Rahim	Lecturer	Biotechnology	Microorganisms	.M.Sc
11	Abdul Al-Ameer Jawad	Assist Lec-turer	Veterinary	Microorganisms	.M.Sc

### The BRC Policy for the year 2015-2016

The BRC administration has decided that the next year should be a distinguished year in terms of scientific research targeting: \*

- Developing industrial biomaterials, food and drugs, employing various biological agents (insects, microorganism, marine organisms, plants, etc.) in nature.

- Developing efficient and industrial enzyme.
- Developing biological agents derived from natural substances
- Conducting studies on technology business through using bio-diversity

All researches proposals would be submitted to the scientific committee for approval.

**A-** The approved research proposals for the year 2015- 2016 were 40.

**B-** The approved research proposals in co-operation with ministries and scientific organizations for the year 2015- 2016 were 15.

**C-** The pilot projects funded by the research and development department/Ministry of Higher Education and Scientific Research

for the years 2015- 2016 were 2.

**D-** The published scientific papers at the International Journals for the year 2015- 2016 were 45.

**E-** The published scientific papers at the national and regional Journals for the year 2015- 2016 were 40.

**F-** The BRC has been awarded Patent in 22/11/2015, for the study "Heparinase enzyme that produced and purified from *Paenobacillus polymyxa*, and low molecular weight heparins stimulated by heparinase restriction enzyme and act as antitumor for HEP2 cell line.

**G-** The BRC has been published the first semi-annual scientific publication issue 2016

**H-** The Center Established Clinical Analysis Al-Nahrain University Laboratory

### Some Scientific Activities in the Biotechnology Research Center through 2015-2016

**1-** Under the patronage of Al-Nahrain Uni-

versity president Prof. Dr. Nabeel Khadim Abdul-Sahib. The BRS held a symposium titled (bisexual phenomena and its effects on society) in Tuesday 5/5/2015 at the main Conference Hall. Five topics were presented, specialized in the genetic and third generation of bisexual development by academic and scientist specialist in this field.



2- Under the patronage of Al-Nahrain University president Prof. Dr. Nabeel Kadim Abdul-Sahib. The BRS held a symposium titled (The recent biotechnology in rotational of organic materials and its economic usage) in Tuesday 17/3/2015 at the main Conference Hall. Three topics were presented by environmental specialist regarding the possibilities to rotational of the organic materials that discarded by the industries and the benefits of usage again.



3- The BRC held a symposium titled ""Autism ..... causes and remedies"" on Tuesday morning 17/5/2016 at the Center's Conference Hall .A number of distinguished professors from the Ministry of Health , Specialists from Al-Nahrain and Baghdad Universities and Civilian Social Organization were attend in the topics of this activity.





OCTOBER 2016

# FORENSIC DNA FOR RESEARCH AND TRAINING CENTER



## About the Center:

This Center was established in 2011. It serves as a scientific formation for research and training on using DNA techniques to identify those who lack identity assertion and the forensic ramifications concerned with these issues, in addition to pursue research by using DNA for forensic purposes. The center includes three departments: Training and Development Department, Molecular Genetics and DNA Fingerprint Department, and The Department of Gene Bank.





### About the Center:

The DNA Unit has been opened in 2011 to be the nucleus of a training center for Iraqi universities and relevant departments on the use of DNA technology in the identification of unidentified victims of mass death and Criminal cases and tests to prove or

deny paternity on one hand, and the implementation of solid scientific research in the field of DNA and its uses forensic and medical purposes on the other hand. The unit has been developed to become a center on 10/04/2014.



Council of the DNA Center for the academic year 2015-2016.

The council consists of the following members below,  
and are headed by Prof. Dr. Nabil Khadim Abid Al-Sahib.

.Sq	Full Name	position	Scientific Department	Academic Rank	General Specialization	Specific Specialization	Degree	Date of joining
1	Dyaa shamekh	Director of the center	Chemical	Lecturer	Advance chemical	Analytic chemistry	PhD	2015
2	Majeed Ershaid Sabah	Head of Department	Head of the Department of genetics and molecular DNA imprint	Assistant prof	Biology	Molecular Heredity	.PhD	2013
3	Nadra Mo-hamed Salman	Head of Department	Head of gene bank	lecturer	Biology	Molecular virology	.PhD	2015
4	Rasha saduq	Head of Department	Head of training and research center	lecturer	Molecular	Molecular	.PhD	2015
5	Asmma Hady mohammed	Physic science	Al-mustansyria University	Prof	Physics	Nanotechnology	PhD	2015
6	Faris ehssan shaker	Ahead of ministry	Ahead of ministry	BSc	Biology	Biology	BSc	2015
7	Esmail hussain azez	Genetic engineering institute	Molecular engineering institute	Assistant prof	Molecular	Genetic engineering	.PhD	2014
8	Alla Adnan qassem	Interior Ministry Directorate of Criminal Evidence	Interior Ministry Directorate of Criminal Evidence	Captain chemist	Chemistry	Chemistry	.BSc	2015
9	Fwaz abd Alabas	International Organization for missing	International Organization for missing	MSc	Management	Management	BSc	٢٠١٥
10	Nameer mowafiq qassem	The Ministry of Health and the Department of Forensic Medicine	Health ministry Forensic institute	Dentist	Dentist	molecular biology	PhD	2015
11	Ali mohammed abd almuhsen	DNA center	Gene bank	Lecturer assistant	biology	biology	MSc	٢٠١٥



Dr. Dyaa shamekh The Center Director

## The BRC Policy for the year 2015-2016

Scientific Departments the center:

The center currently includes three scientific departments:

### 1- Training and Development Department

Which includes:

- Training Division.
- Academic Affairs Division.



### 2. Gene Bank and Nitrogenous base Department

Which includes:

- Division sequence of nitrogenous bases.
- Gene-bank Division.



### 3. Department of Molecular Genetics and DNA fingerprint



## Vision:

The Center aims at being an approved independent scientific institution concerned adopted as a reference in this discipline inside Iraq after completing the necessary requirements to meet the international standards measurements, to be adopted as a quality control center. It seeks to be certified as an international center in the Middle East, through the establishment of twinning with other similar international organizations.

## The Mission:

Meeting the growing needs for forensic applications of DNA in Iraq that contributes to the application of justice, humanitarian and other fields to resolve the major problems through scientific research and rehabilitation of national staffs working in the relevant institutions.

## The Goals:

1. Prepare a trained staff on the use of DNA forensic techniques, and conduct scientific research needed in Iraq in this specialty.
2. Create a national database to serve all the relevant institutions and graduate students linked with global data centers.
3. Find new genetic indicators that distinguish the Iraqi society from other societies, Thereby giving the Iraqi society the genetic imprint of its own tracking the genetic origins
4. Prepare the center to be a watch center or a quality control center to support and evaluate the performance of laboratory services in the relevant institutions
5. Contribute to spreading the culture of the use of forensic DNA fingerprint to the community through holding conferences, seminars and workshops as well as other means of raising awareness.
6. Attempt to have twinning with similar centers to promote scientific cooperation and raise the level and efficiency of workers



and the preservation of scientific standards and the establishment of partnership with other relevant international organizations.

7. Develop curricula to study and teach the foundations and applications of nuclear forensic acid in colleges and institutes related.

## Laboratories of the Center

### 1. Training laboratories:

The Training and Development Department includes a number of special laboratories to rehabilitate technical staff and graduate students in the relevant state institutions, and this is the exact function of the center, as follows:



### DNA isolation material Labs:

The labs are equipped with special devices, some rely on hand tools while other devices work automatically. In addition to special DNA extract devices to isolate the genetic material of all biology and criminal sources including blood, the mouth swab, teeth, hair, bones etc..



### Labs of DNA isolation:

These laboratories are supplied with modern equipment including a modern set for the PCR, which helps the trainee to gain accurate results necessary for applications in the areas of genetic fingerprint.



### Labs of Genetic analysis:

These laboratories are characterized with modern equipment and specialized in the field of identifying Nitrogenous bases sequence, with broad applications in the medical field of criminal science and research database. As well as quantitative replication devices which are very necessary in important techniques in forensic work, particularly in the identification of anonymous people because of the ability to identify sex and type in the scattered parts of the body, in addition to other advantages in the criminal and medical level. The laboratory has an analysis device to show genetic features which is considered one of the latest scientific techniques in processing of the criminal act and genetic variation.

### 2. Research laboratory:

The goals of the center are Training and rehabilitation scientific staff and scientific research specialist in bio-branch represented in genetic fingerprint and identifying models of DNA owned by our society and how to deal with this scientifically to serve the relevant institutions.



### Scientific activities of the center:

#### Courses

The Centre set up course in Deoxyribonucleic acid amplification methods by using polymerase chain reaction and quantitation Technique by using Real time polymerase chain reaction in the center's labs under the supervision of the teaching staff of the doctoral and master's degree holders in 13-17/9/2015



#### Seminars:

The center set up a symposium entitled, "the product of the unit a year after it's founding.". Which aimed to review the most important achievements during the first year and what was achieved at the university level and the rest of similar institutions.

.The center also made another seminar, entitled, "Adoption of DNA evidence to prove or deny in Iraqi courts." The seminar aimed to highlight the importance of legislation of a special law in Iraqi society by the adoption of a genetic fingerprint evidence to prove or deny the Iraqi courts. The center organized many training courses.

The effect of different hair dyes on DNA genetic analyses	28/9/2015	Lecturer assistant Hala khaled	DNA forensic center
Interpretation study from a mixed sample of Identifier 16 STR markers 28/9/2015 by Lecturer assistant	28/9/2015	Lecturer assistant mohammed mahdy ,	
A comparison study of cryopreservation seminal fluid between FTA-card and swab for multiplex STR analysis	29/9/2015	Duha Salim	
Bioinformatics - a definition ,	29/9/2015	Dr majeed Sabah	
Detection of PTEN axon 7 alteration in colorectal cancer of Iraqi patient in	7/10/2015	Lecturer assistant Ebtessam hmoood naser	
Association Between Lipid Profile, Body Mass Index, Waist Circumference and Urinary Tract Infections in Adult Iraqi Arabic Females	8/10/2015	Lecturer Sundus Nahy And Lecturer assistant Haider Khadum	

Lining up Sequences by	4/11/2015	Dr prof Zahra alkhafagy	Genetic Engineering Institute University of Baghdad
Activation the Project of Nitrogenous Bases Sequencing in AL-Nahrain University for All the Universities and Research Centers	18/11/2015	Lecturer assistant Ali mohammed	DNA forensic center
Data Recording by, Bioinformatics	25/11/2015	Lecturer Dr Nadra Salamman	DNA forensic center
Buffer compounds	16/12/2015	Lecturer Dr Dhyaa Shamekh	DNA forensic center
Publication in Science Direct	13/1/2016	Dr Abd Aljabar Alkuzaay	Medicine university
ANALYSIS OF STR SHORT TENDOM	2/2/2016	Dr Abeer sulman	Institute of Forensic Medicine, Ministry of Health
REPEAT and Statistical interpretation of STR profile	2/2/2016	Dr Ammra jabber namma	Institute of Forensic Medicine, Ministry of Health

### Dispatch:

Lecturer assistant Haider khadum and Lecturer assistant Ali mohammed Dispatch to International Conference on Molecular biological in turkey 27-29-11-2015.

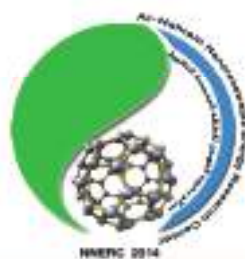


### Dispatch



OCTOBER 2016

# AL-NAHRIN NANORENEWABLE ENERGY RESEARCH CENTER



## About the Center:

This center was established in 2014. It concerned with the researches of renewable energy devices in different fields. Its main interest is to introduce nanotechnology applications in the researches held by the center. The center includes four departments: Solar Energy Research Department, Wind Energy Research Department, Biomass Research Department and Management Energy Department.





### About the Center:

Many countries in the world are currently pursuing interest in research in the field of new and renewable energy to develop alternative energy sources to traditional limited sources. The renewable energy is considered one of the most important alternative sources; it mainly includes solar energy and wind power and biomass.

Because of the importance of renewable energy research at the academic and industrial level, many universities around the world have established specialized research centers in the field of renewable energy interested in research and development in

these areas to engage academic research in the industrial application. As part of this endeavors a specialized center for nanoparticles renewable energy research has been established at Al-Nahrain University in 2014 to be a unique center which combines nanotechnology and its application in the areas of renewable energy designs to be a model among Iraqi universities through contact with the global research centers in the future for this is the policy set by the administration of the center early.

The Research of Renewable Energy Center includes five research departments.



Asst. Prof. Kareem K. Mohammad

### Faculty Members of the Center for the Academic Year 2015- 2016

Sq	Full Name	position	Academic Rank	General Specialization	Specialization	Degree	Date of joining
1	Nabil Khadim Abid Al-Sahib	Chancellor ( Chairman of the Board of the Center Directors)	Prof.	Mechanical engineering	Manufacturing and Anti- Erosion	PhD	29/6/2014
2	Kareem K. Mohammad	Center Manager	Asst. Prof.	Physics	Applied Nuclear physics	PhD	1/7 /2015
3	Khaldun Abdulbadea Salman	Head of Dept.	Instr.	Physics	Solar Energy	PhD	7/1/ 2015
4	Alaa Jabbar Ghazi	Member	Asst. Prof.	Physics	Solid state physics	PhD	19/2/2015
5	Wafaa Ghazi Fadhil	Member	Instr.	Biology	Ecology	PhD	24/11 /2014
6	Hussein Thamer Salloom	Member	Instr.	Physics	Applied Physics	Ph.D	19/5/2015



**Vision:**

The center is an institution for research and development and an expertise home to employ scientific knowledge in the field of renewable energy nanoparticles for sustainable development In Iraq and regional surroundings.

**The mission:**

Planning and implementation of scientific, academic and applied research In the field of renewable energy nanoparticles to preserve the environment by contributing to innovation and creativity in research, studies, writing, translating and publishing scientific knowledge and experience in the community, providing scientific support for educational and industrial institutions. The center tries to localize and develop energy technologies appropriate to the nature of Iraq and its resources and to raise energy efficiency and rationalize their use and manage them efficiently to serve sustainable development in Iraq.

**The goals:**

The center aims to conduct studies to support and build sustainable development in Iraq and reduce the scientific gap with developed countries through keeping pace with scientific development in the field of Nano renewable energy and its industrial applications and management of energy in Iraq by improving research level and developing the skills and capabilities of researchers through the following:

1. Development of national innovations in the field of renewable energy through the effective employment of scientific and technical capabilities, and to direct them toward the possession of knowledge and sustainable development issues in Iraq.
2. Publishing scientific knowledge in the

field of Nano renewable energy.

3. Preparing a generation of distinguished researchers and experts in the fields of Nano renewable energy.
4. Doing the duties of a technical expertise home and making an efficient national database in the fields of Nano renewable energy.
5. Trying to develop and transfer scientific knowledge to support scientific research in the field of Nano renewable energy.
6. Providing technical, scientific consultation and conducting economic and technical feasibility studies and offering projects to various government and private sectors in the field of renewable energy.
7. Developing media programs oriented to inform citizens of the importance of the renewable energy and ways to take advantage of it.
8. Calling legislative boards to issue laws to encourage the use of renewable energy as an alternative to conventional energy.

**Scientific Departments**

1. Solar Energy Research Department.
2. Wind Energy Research Department.
3. Biomass Research Department.
4. Nanotechnology application Research Department.
5. Management of renewable energy research Department.

**1. Solar Energy Researches Department:**

This department is concerned with keeping a pace with scientific development in Nano applications in the field of solar cells and thermal systems to generate electricity power, through engaging different areas in the Nano applications for solar systems and this is considered the distinguished core goal adopted by the center.



## 2. Wind Energy Researches Department:

This department is concerned with designing and implementing pilot models of devices operating with wind power and the establishment of monitoring stations to draw a wind map of the most promising areas for this type of energy in Iraq, as well as making benefit from the experience of other countries in employing wind energy and planning to conduct basic and applied studies in the use of wind energy to generate electricity.



## 3. Biomass Researches Department:

This department is concerned with planning to conduct basic and applied research and studies for the use of biomass energy for gas generation and using it in generating electricity and management of various energy projects and activating Applied Studies in the uses of biomass energy in landfill sites and municipal waste collection areas and the waste processed and gases such as ethanol or underlying alcohol fuel.



## 4. Nanotechnology Application Researches Department

This department is concerned with using the advanced nanomaterial in order to use in the fields of Nano renewable energy researches such as fabrication the silicon, polymer and concentrated solar cells.



## 5. Department of Renewable Energy researches Management

This department is concerned with conducting basic and applied research and studies in the field of energy conservation and management of electricity loads, and conducting basic and applied research and studies in the field of improving energy efficient investment and providing a scientific consulting in the field of investment and energy storage to optimize conventional energy consumption and establishing a database related to renewable energy in coordination with other departments in the center.





OCTOBER 2016

# COMPUTER CENTER



## About the Center:

Many countries in the world are currently pursuing interest in research in the field of new and renewable energy to develop alternative energy sources to traditional limited sources. The renewable energy is considered one of the most important alternative sources; it mainly includes solar energy and wind power and biomass.





### The Computer Centre: an Overview:

The Computer Center was founded under the Ministerial Order No. 4460 on 30/10/2014. AL-Nahrain University has meant the Computer Center to work as an independent institution, similar to other centers at several Iraqi universities. The importance of this step is for organizing tasks and objectives assigned to the center to establish an e-government to regulate administrative work for colleges and other research centers in the university. Part of the center tasks is training university employees on computer programs and providing support for governmental institutions to help them for managing their business systems. Moreover, the center also participates in the e-learning provided by AVT\_Cina Center at Al-Nahrain University. The latter was established to convert the classical lecture work into electronic one to include both teaching staff and students alike. The computer Centre is to create a rich and interactive environment based on computer technologies and the internet facilities that enable students to access learning resources at any time and from anywhere.

### Vision:

The Computer Center seeks to develop abilities and skills in the field of computer and information technology not only to employees of the university, but also to other government and private institutions as well. One of the most important priorities of the Centre is to build an affective e-government which should exceed all the negatives that accompany the traditional paper works.

### Message:

The Computer Center looks forward to engaging all the university staff in obligato-

ry computer courses to enable them using computer as a required and to develop their own abilities in the field of information systems. Such a plan will prepare them to deal efficiently with databases, electronic systems and the internet. Moreover, the Center seeks to provide technical and advisory support to government institutions through contributing in building and marketing electronic and database systems in accordance with those institutions actual needs.

### Objectives

Computer Center looks forward to achieving the following objectives:

1. Connecting all the university formations within a unified government network to reduce paper work in official correspondence. This will also reduce time consumed for the accomplishment of certain tasks and increase the accuracy and speed of tasks accomplishment.
2. Developing the skills and capacity of all users and prepare them for better use of electronic data systems.
3. Establishing a central multi-dimensional databases that contribute in providing a rich information environment for AL-Nahrain University presidency Offices. This will enable these offices to analyze and evaluate the data that is going to be part of a later admin and academic decision-making.
4. Drawing on the fact that electronic education is not a substitute for traditional education, the center attempts to provide e-education as an integrative part to the traditional education. In cooperation with the Iraqi Ministry of Higher Education and Scientific Research, the UNESCO worked to

establish a center in every Iraqi university to transform studying bags into electronic ones that should be available to all students at all time. Changing all the Course Portfolio into electronic courses is a major part in the establishment of the Centre which also support and back up AVT\_Cina Center for E-learning at AL-Nahrain University, including satisfying its technical and scientific needs to achieve its objectives.

The establishment of the Computer Center at the university was preceded by determining the needs and requirements of the center by a detailed workshop, which was held at the University of Kufa prior to its establishment. There, a director with two other experts were nominated to lead the Centre.

5. Cooperating with other private and governmental institutions to develop their employees' skills and provide electronic databases systems for the purpose of marketing them to those institutions as satisfies their needs.
6. Supporting scientific research by providing developed laboratories where internationally accredited scientific specifications are available. The center is responsible in following up the teaching staff activities and researchers through the use of Iraqi virtual library (IVSL).
7. Updating the design as well as the database of AL-Nahrain University website. The university website is one of the most important factors that measure the progress of the university in comparison to other international universities.
8. The Computer Center can help other

Iraqi institution by establishing and maintaining build their own wire or wireless networks due to the fact that AL-Nahrain University has embraced a highly-qualified scientific staff in the field of advanced network engineering.

9. Granting international certificates through direct tests after coordinating with national and international institutions.
10. The Center seeks to establish Clouding System to utilize all the resources in the best way.

### The Organizational Structure of the Computer Center:

#### 1. Division of Programming:

This division deals with the analysis and designing systems using modern programming languages. It is also responsible for designing applications needed by various ministries as well as private sector organizations. Moreover it is responsible for AL-Nahrain University website and its detailed database feeding and back up process.

#### 2. Division of Continuous Education:

The division is concerned with training and rehabilitating employees through academic training programs prepared by the center. E-government work is the major part that this division is responsible for.

#### 3. Networks Division:

It is concerned with the task of constructing a wireless network within the university to connect all the university formations by utilizing all possible resources.

#### 4. Maintenance Division:

The task of this division is maintaining the electronic devices such as printers, computers and portable devices. It also runs and maintains the electronic networks.

#### 5. Planning and Studies Division:

This division is responsible for preparing field research measuring the training and development courses that are necessary for the university formations.

#### 6. Administrative and Financial Division:

This division is concerned with the comple-

tion of administrative work at the center in coordination with other divisions at it. It lists dates of future activities and facilitates participation in those courses and training sessions. Besides, this division is responsible mainly for accounting and financial audit at the Centre.



Dr. AbdulKarim Meirhej Radhi, The Computer Centre Chairman

# COMPUTER CENTER



