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جامعة بيروت العربية
BEIRUT ARAB UNIVERSITY



the guide
faculty of
Science

Vision Innovation Continuity

Faculty of Science



Dean's Message \

Since 1976, the Faculty of Science has been aiming to become a leading institution in both research and education regarding the fields of basic and Applied Science and a Center of Excellence both locally and internationally. It is a vital scientific environment embracing various information and cultures that graduates new generations capable of publishing, applying their knowledge and sharing in the progress and prosperity of their country. Our highly qualified dedicated staff members, experts and researchers are the main reason of our continuous success and development.

Since our work hasn't gone unnoticed, we are constantly seeking for a productive co-operation among our academic staff, other scientific and industrial committees and civil work institutions. The Faculty strives for national prominence for all its programs. The Bachelor of Computer Science program, Department of Mathematics and Computer Science has been accredited by the computing Accreditation Board for Engineering and Technology (ABET), a US accreditation body that evaluates academic curricula worldwide, and it is about time we obtain it in other programs from ABET (Applied Sciences).

Faculty Guide
Dean's Message
page. 2



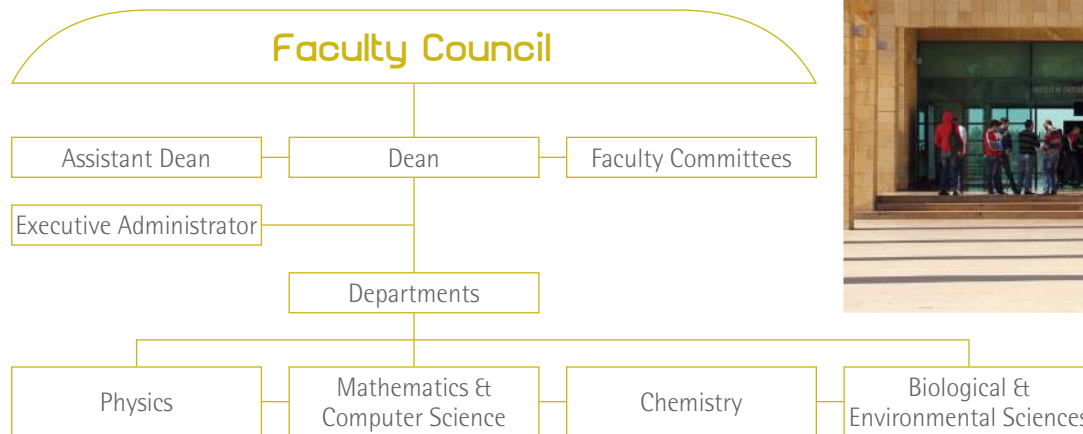
Prof. Ramadan Awad
Dean of
Faculty of Science

Organizational Structure \

Faculty Guide
Organizational Structure
page. 3

The Faculty of Science consists of different areas of specialties: Physics, Mathematics & Computer Science, Chemistry, and Biological & Environmental Sciences. The Mathematics & Computer Science Department offers two programs: Mathematics and Computer Science. The Biological & Environmental Sciences Department offers three programs: Biology, Biochemistry, and Environmental Science.

The Organizational Chart of the Faculty is as follows:



Academic Degrees

Investing in the Future

Faculty Guide
Academic Degrees
page. 4



Diploma & Master of Science (MSc) Degrees in Radiation Protection

Master of Science (MSc) and Doctor of Philosophy (PhD) Degrees in

- Mathematics
- Computer Science
- Physics
- Chemistry
- Biology
- Biochemistry

The Faculty of Science offers:

Bachelor Degree in

- Mathematics
- Computer Science
- Physics
- Chemistry
- Biology
- Biochemistry
- Environmental Science

Undergraduate Programs \ Making a Smart Choice

Faculty Guide
Undergraduate Programs
page. 5

Department	Program	Bachelor	
		Total Credit Hours	Min No. of Years
Physics	Physics	97	3
Mathematics & Computer Science	Mathematics Computer Science	100 97	3 3
Chemistry	Chemistry	97	3
Biology & Environmental Sciences	Biology	97	3
	Biochemistry	97	3
	Environmental Sciences	97	3



Admission Requirements

To be accepted for an Undergraduate Degree, applicants must:

- Hold the official Lebanese Secondary School Certificate or its equivalent;
- Successfully pass an Entrance Exam to measure the level of proficiency in **English Language** or provide evidence of English Language such as **TOEFL, IELTS...**

Graduation Requirements

To receive a Bachelor Degree in the Science programs, a student must satisfactorily complete 100 credit hours for the Computer Science major and 97 credit hours for the other majors with an overall minimum Cumulative Grade Point Average (CGPA) of 2.00 + International Computer Driving License (ICDL). The following table summarizes the number of credit hours required for each Bachelor-granting program at the Faculty:

Faculty Guide
Undergraduate Programs
 page. 6

Department of Physics

Program	University Requirements		Program Requirements				Total Credit Hours
	Mandatory Courses	Elective Courses	Major Core Courses	Faculty Core Courses	Departmental Elective Courses	Free Elective Courses	
PHYS	5	16	44	17	9	6	97

PHYS: Physics

Department of Mathematics & Computer Science

Program	University Requirements		Program Requirements					Total Credit Hours
	Mandatory Courses	Elective Courses	Major Core Courses	Faculty Core Courses	Departmental Elective Courses	Free Elective Courses	General Science Elective Courses	
CMPS	5	11	50	17	9	-	8	100
MATH	5	16	41	17	12	6	-	97

CMPS: Computer Science

MATH: Mathematics

Department of Chemistry

Program	University Requirements		Program Requirements				Total Credit Hours
	Mandatory Courses	Elective Courses	Major Core Courses	Faculty Core Courses	Departmental Elective Courses	Free Elective Courses	
CHEM	5	16	41	17	12	6	97

CHEM: Chemistry

Department of Biological & Environmental Sciences

Program	University Requirements		Program Requirements				Total Credit Hours
	Mandatory Courses	Elective Courses	Major Core Courses	Faculty Core Courses	Departmental Elective Courses	Free Elective Courses	
BIOL	5	16	46	15	9	6	97
BCHM	5	16	46	15	9	6	97
ENVI	5	16	46	15	9	6	97

BIOL: Biology

BCHM: Biochemistry

ENVI: Environmental Sciences

Career Opportunities

Physics

Educational or Research Institutions

- School Teacher
- University Instructor
- Research Assistant

Governmental Laboratories & Industrial Areas

- Physics Laboratory Technician

- Laboratory Materials Technician

- Astronomer

Nanoscience Technician

Mathematics & Computer Science

Computer Science Program

- System Programmer
- System Analyst

- System Administrator

- Internet Applications Programmer

- User Interface Designer

- Database Analyst

- Database Administrator
- Network Administrator

- Computer Game Designer / Programmer
- Computer Science Researcher & Computer Science Instructor

Mathematics Program

- Teaching
- Consultancy to Actuaries
- Management Services & Computing
- Accountancy
- Statistical Work

Chemistry

Educational or Research Institutions

- School Teacher
- University Instructor
- Lab Technical
- Research Assistant

Governmental Laboratories & Industrial Areas

- Petroleum
- Petrochemicals
- Corrosion Control
- Electroplating & Paints
- Materials Development
- Food Analysis
- Water Analysis & Treatment
- Pharmaceutical

Faculty Guide

Undergraduate Programs

page. 9

- Cosmetic
- Quality Control
- Forensic Science

Biological & Environmental Sciences

Biology

- Works in: Educational or Research Institutions
- School Teacher
- University Teacher
- Lab or Research Assistant in Food Science, Pharmaceutical & Health Industries, Environmental Monitoring, Quality Control, & Forensic Science.

Biochemistry

- Works in: Educational or Research Institutions
- School Teacher
- University Teacher
- Lab or Research Assistant in Food Science, Clinical Laboratories, Pharmaceutical or Health industries, Forensic Science, Agricultural Research, & Biotechnology

- Admission to Biomedical Schools
- Environmental Sciences***
- Educational or Research Institutions
- School Teacher
- Lab or Research Assistant in Environmental Monitoring, Quality Control, Forensic Science, & Agricultural Research.



Graduate Programs \

Admission Requirements

Diploma Degree

Applicants to any of the Graduate Diplomas must hold a Bachelor Degree obtained from BAU or any other recognized university.

Master's Degree

Applicants to a Master's Degree must hold a Bachelor Degree with a minimum CGPA of 2.33.

PhD Degree

Applicants to a PhD Degree must hold a Master's Degree from BAU or any other recognized university that qualifies the student to pursue a PhD with a minimum CGPA of 3.00.

Graduation Requirements

Diploma Degree

To be granted the Diploma, the student needs to successfully complete the required number of credit hours as stipulated in the relevant faculty curriculum with a CGPA of no less than 2.33.

Master's Degree

The student has to successfully complete the required credit hours of the courses with a CGPA of no less than 2.33, and successfully defend the thesis in

Faculty Guide

Graduate Programs

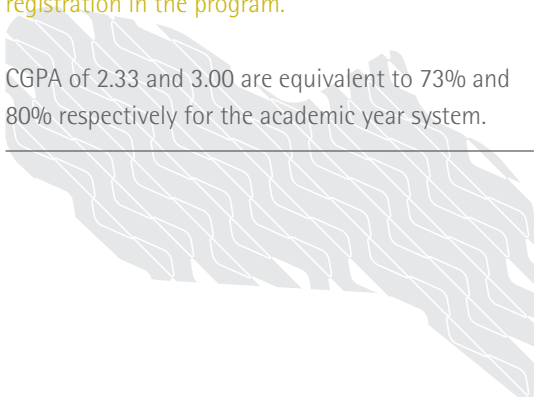
page. 10

no less than two years from the date of registration in the program.

PhD Degree

The student should successfully complete the required credit hours with a CGPA of no less than 3.00 in the course-work for the credit hour system and should successfully defend the dissertation in a period of no less than three years from the date of registration in the program.

CGPA of 2.33 and 3.00 are equivalent to 73% and 80% respectively for the academic year system.



Programs & Degrees \

Program	Diploma		Master		PhD	
	Total Credit Hours	Min No. of Years	Total Credit Hours	Min No. of Years	Total Credit Hours	Min No. of Years
Physics	-	-	36	2	40	3
Mathematics	-	-	36	2	40	3
Computer Science	-	-	36	2	40	3
Chemistry	-	-	36	2	40	3
Biology	-	-	36	2	40	3
Biochemistry	-	-	36	2	40	3
Radiation Protection	30	1	36	2	40	3

Academic Policy \ Supporting Your Steps

Faculty Guide
Academic Policy
page. 12

The Academic Policy helps students understand their rights and responsibilities and successfully complete all required academic tasks.

Academic Advising

Academic Advising is a shared responsibility; it entails a dynamic relationship between the advisor and the student. The advisors are committed to help students make a successful transition to the university and develop an appropriate academic plan. Advising is available to all students before the registration process to assist them in choosing a major, selecting courses, and completing all graduation requirements.

Code of Ethics

The Code of Ethics is designed to establish an environment of honor and trust within the University. BAU's Code of Ethics aims at promoting the growth of ethically responsible students through adherence to the highest standards of academic integrity, ethics, and morals.



Learning Facilities \ Inspiring Your Learning

Faculty Guide
Learning Facilities
page. 13

The Faculty enjoys a number of academic facilities that are open to students:

Library

The Faculty of Sciences library supports all the Scientific Departments. Its collection consists of (4634) Books and (19000) E-books, (133) Multimedia, and (310) Dissertations in addition to Scifinder, Compute & Applied Sciences, Environment Complete, and Science Direct Full-text databases.

Laboratories

- Debbieh Astronomical Observatory
- General Physics Laboratory
- Advanced Physics Laboratory
- Computer Laboratory
- Inorganic Chemistry Laboratory
- Organic Chemistry Laboratory
- Physical Chemistry Research Laboratory
- Analytical Chemistry Laboratory
- Water Analysis Laboratory
- Biochemistry Laboratory
- Zoology Laboratory
- Botany Laboratory
- Histology & Ecology Laboratory
- Microbiology Laboratory
- Microbiology Research Laboratory
- Molecular Biology Research Laboratory



University Facilities and Services

All registered students have access to University facilities:

Health Care

- Medical Clinic
- Dental Clinic
- Nutrition and Dietetics Clinic
- Physical Therapy Clini
- Psychological Clinic

Technology Services

- Portal (iConnect)
- Webmail
- Phone and Mail Services
- Campus Wi-Fi
- ATM

Dorms (Debbieh Campus)

Cafeterias

Debbieh Astronomical Observatory

Transportation and Parking

Legal Clinic

Cultural Campaigns

Teams & Clubs

(Beirut Campus)

Teams

Basketball (Male) ,Basketball (Female), Football, Futsal, Volleyball (Male), Volleyball (Female), Handball (Male), Archery, Chess, Muay Thai, Table Tennis, Swimming.

Clubs

Drama, Music, Folk Dance, Zumba, Scouts, Lebanese Red Cross Youth Center-BAU.

(Debbieh Campus)

Teams

Basketball (Male) ,Basketball (Female), Football (Male), Futsal (Male), Volleyball, Handball (Male), Chess , Table Tennis, Kick Boxing, Body Building, Tennis, Astronomy, Wrestling (Male), Athletics, Badminton.

Clubs

Drama, Music, Zumba, Scouts, Dance.

(Tripoli Campus)

Teams

Basketball (Male) ,Basketball (Female), Football (Male), Volleyball (Male)
Volleyball (Female), Table Tennis (Male), Kick Boxing (Male), Body Building,
Cardio, Aerobics.

Clubs

Drama, Music, Arts, Dance, Social, TEDx, Entrepreneur, Environmental, and
Adventure.



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