



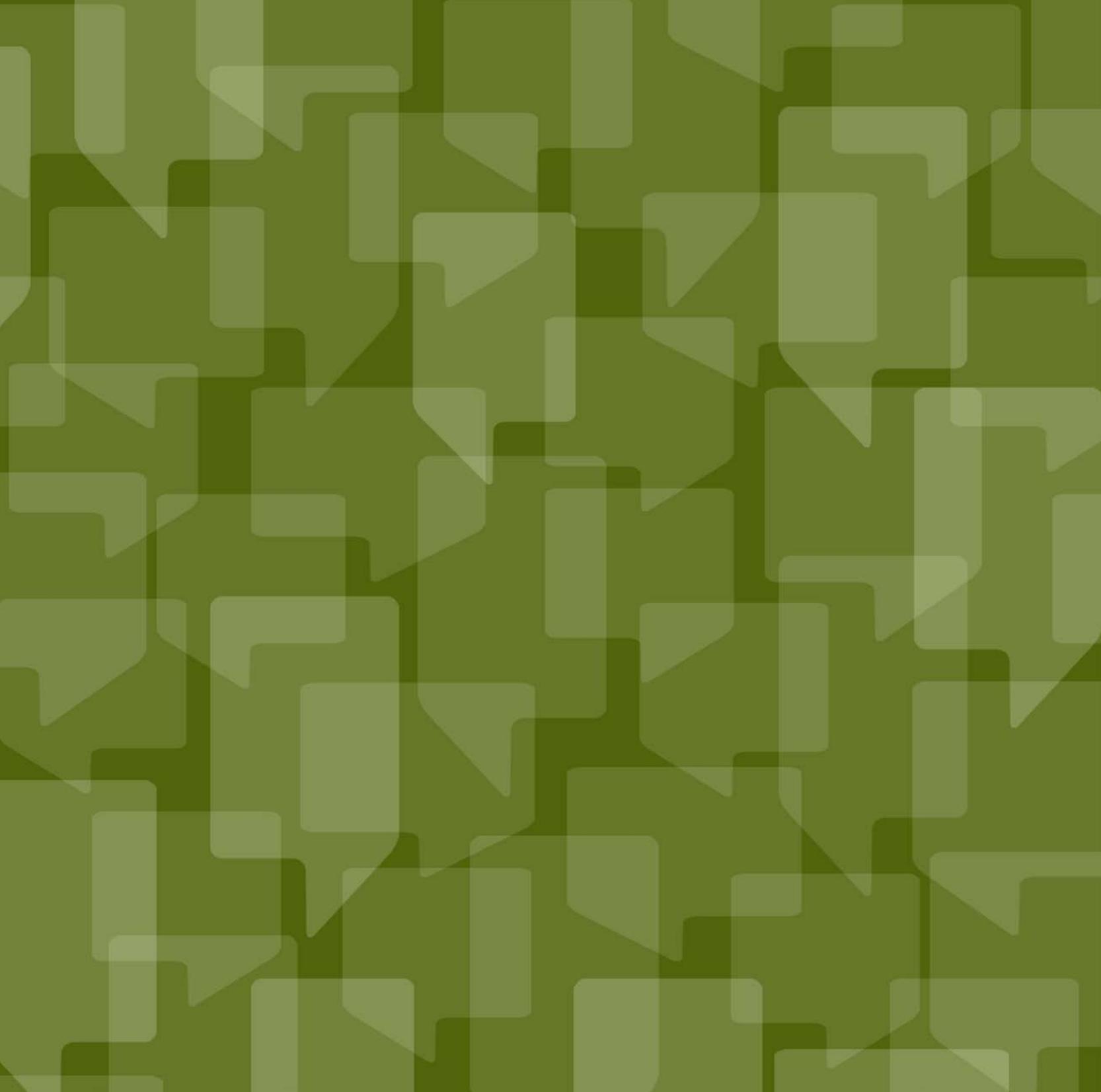
جامعة الإمارات العربية المتحدة  
United Arab Emirates University

**UAEU**



# COLLEGE OF FOOD AND AGRICULTURE

2014 / 2015



**WELCOME To**  
United Arab Emirates

**Success**  
Excellence  
Living  
Inspired  
Learning  
Opportunity  
Develop  
National University  
Research Intensive

**Quality**  
Goal  
Leader  
Learn  
Graduate  
Excel  
Choice  
Innovation

**University**  
Knowledge

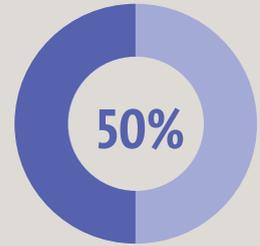
**Degree**  
Achieve

**Flagship**  
Your Future  
Career  
High-Tech  
Accredited  
Achieve  
Community  
Mobile Learning  
New Skills

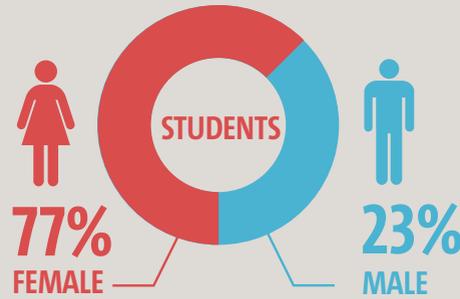
**Develop**  
Industry

**Creativity**

# Fact Sheet



OF STUDENTS  
LIVE IN RESIDENCE



REGISTERED STUDENTS  
IN 2013-2014

1 RESEARCH  
UNIVERSITY  
IN THE GCC

2 IN THE  
ARAB  
WORLD

9 IN THE  
MUSLIM  
WORLD

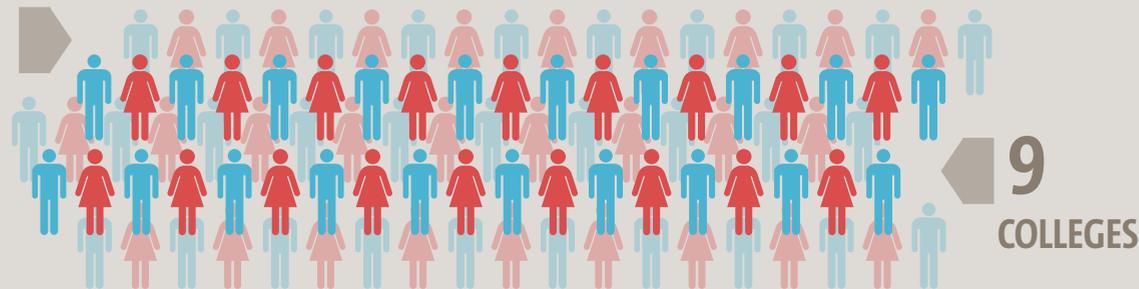
TOP  
400  
GLOBALLY

ONE OF THE TOP 50 UNIVERSITIES FOUNDED IN THE PAST 50 YEARS

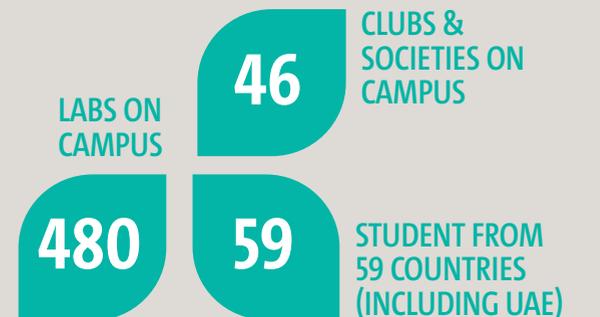


ESTABLISHED IN 1976    80 HECTARES – SIZE OF THE CAMPUS    THE NATIONAL UNIVERSITY

57,837  
GRADUATES



LARGEST NUMBER OF ELECTRONIC  
RESOURCES IN THE ARAB WORLD



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# DEAN’S MESSAGE

The College of Food and Agriculture (CFA) at the United Arab Emirates University (UAEU) is one of the most prestigious agricultural colleges in the Middle East and it is our goal to be distinguished, not only at a regional level but also internationally, providing our students with the highest quality education.

The college consists of 5 academic departments; the Department of Arid Land Agriculture, the Department of Agribusiness and Consumer Sciences, the Department of Food Science, the Department of Nutrition and Health and the newly established Department of Veterinary Medicine which offers a program unique to the region in order to satisfy market needs. The professional academic training that the college offers is guided by distinguished faculty and supported by experienced staff.

There are more than 600 undergraduate students enrolled in various disciplines. The CFA has received accreditation for three academic B.Sc. programs (horticulture, marine fisheries and animal science, agribusiness ) by the Agricultural Institute of Canada (AIC). The Food Science program is in the process of accreditation from the Institute of Food Technologists in the USA (IFT), and the Dietetics Program is in the process of accreditation from the Council for Education of Nutrition and Dietetics (ACEND) as well. All programs are fully recognized by the UAE Ministry of Higher Education and Scientific Research. Our college farm is ISO certified for quality (ISO 9000) and for environmental standards (ISO 14000), and all our laboratories have obtained a health and safety certificate (OHSAS 18001). In addition to this, the Animal Nutrition Laboratory is accredited by the National Forage Testing Association.

The strategy of the college is to develop a culture of excellence that will improve their skills and scientific expertise along with academic and social development. This is achieved through various activities, such as study abroad summer programs, internships, workshops and providing opportunities for students to attend both national and international conferences.

The CFA is strongly committed to student success and provides academic programs that foster critical thinking and build the necessary skills to succeed in today’s competitive job market. You will find our faculty members graduated from some of the best universities in the world. I trust that once you discover our state-of-the-art facilities, see our high-tech labs and teaching technologies, meet our motivated students, accomplished faculty and dedicated and supportive staff then you’ll decide that the CFA at UAEU is the place for you .

**Dr. Aisha Abushelaibi,**  
*Acting Dean, College of Food and Agriculture*

# OVERVIEW OF THE COLLEGE

The College of Food and Agriculture (CFA) was inaugurated as the College of Agricultural Sciences in the academic year 1980/1981. At that time the academic structure included only two departments, namely, the Department of Plant Production and the Department of Animal Production. In 1995 the college program was further developed to focus on 'Arid Land Agriculture' and 'Food Science and Nutrition' by adding the Department of Food Science and Nutrition.

Then in 2001, the United Arab Emirates University (UAEU) took a major step in transforming the College of Agricultural Sciences to reflect the vision of a 21st century university and to capture the evolving nature of higher agricultural education as agriculture became more of an industry and a vital component of both the economy and society. The university designed a new curriculum to meet the needs of the UAE and to conform to the latest trends and concepts in agricultural education in the new millennium. This new interdisciplinary curriculum is based on the concept of vertically integrated systems and encompasses agricultural production, food processing, agribusiness and natural resources and the environment.

The CFA now consists of five departments: the Aridland Agriculture Department, the Food Science Department, the Nutrition and Health Department, the Agribusiness and Consumer Sciences Department, and the Veterinary Medicine Department, each offering a wide range of undergraduate and graduate degree programs. The language of instruction is English and the faculty focus on the quality of the learning experience.

The CFA continues to support the UAE, which is committed to being a knowledge-based economy in which education and research play a critical role.

"What I like most about the college is the encouragement and support provided by the faculty and instructors to the students that helps us through challenging times."

Saeed Ali Saeed Al Asmar,  
Horticulture

# ACADEMIC PROGRAMS



## UNDERGRADUATE PROGRAMS:

- Bachelor of Science in Horticulture
- Bachelor of Science in Marine Fisheries and Animal Science
- Bachelor of Science in Agribusiness
- Bachelor of Science in Food Science
- Bachelor of Science in Nutritional Science
- Bachelor of Science in Dietetics
- Bachelor of Veterinary Medicine

## MASTER'S PROGRAM:

- Master of Science in Horticulture

## PHD PROGRAM:

- Doctor of Philosophy





# UNDERGRADUATE INFORMATION

## ADMISSION CRITERIA

To be eligible for admission to UAEU, applicants must obtain a minimum of 75% on their Grade 12 Certificate or its equivalent from a science stream. Applicants must also have a valid national identity card and a valid UAE passport. Interested candidates should use the common National Admissions and Placement Office (NAPO) application form to apply to UAEU. The form is available from secondary schools, UAEU Admissions Office or NAPO.

Success at UAEU requires proficiency in both Arabic and English. Students admitted to the university are placed either directly into the undergraduate degree program or into the University Foundation Program (UFP). UFP is the bridge between high school and the degree programs offered at UAEU. Placement in an appropriate level of a UFP course will depend on your scores in the UFP placement exams. There are three levels in English, and two levels in mathematics and Arabic.

To be considered for direct admission to an undergraduate degree program, applicants must satisfy the following requirements:

- ▶ Proof of English-language proficiency, which may take one of the following forms:
  - A minimum TOEFL score of 500 or 61 IBT
  - A minimum IELTS score of 5.0
- ▶ Pass placement tests in mathematics (algebra and pre-calculus) and Arabic

*\* Please note that these are the minimum admission criteria, further details can be obtained from the Admissions Department.*

## GRADUATION REQUIREMENTS

The duration of the undergraduate degree programs is approximately 4 years. A minimum of 120 credit hours are required for graduation for all programs except for the Veterinary Medicine Program. The duration of the veterinary program is approximately 5 years with a minimum of 152 credit hours required for graduation. Students must complete their programs with a minimum GPA of 2.0, including the internship.

“This program is tailored to fit the needs of the student. My course work has allowed me to be a creative and critical thinker, offering many opportunities to gain hands-on practical experience which makes the learning process even more fun.”

**Mariam Al Yammahi,**  
Food Science

## INTERNSHIPS

UAEU has integrated mandatory internships for all students as part their degree program. Through the Internship and Work Integrated Learning (iWIL) Program, students are guided, prepared and placed in national and international private and government organizations. Internships add a significant real-world component to the student's education and provide students with the opportunity to earn academic credit while gaining valuable work experience.

## CAREER OPPORTUNITIES

There are many career opportunities available to students with a degree from the College of Food and Agriculture in both private and government organizations. Some of these include: the Ministry of Environment and Water, the Ministry of Health, the Health Authority of Abu Dhabi, Abu Dhabi Food Control Authority, Farmers' Service Centre, municipalities, the Environment Agency - Abu Dhabi, management standards and food standards, laboratories, universities and private sector institutions (farms, factories, etc.). Some other positions are: agricultural engineers, agricultural extensions, lab technicians, food inspectors, hospital dietitians, veterinarians and teaching assistants.



# UNDERGRADUATE ACADEMIC PROGRAMS

## BACHELOR OF SCIENCE IN HORTICULTURE

Horticultural plants play an important role in everyone's life. They provide us with fresh, healthy fruit and vegetables and make our homes, gardens and urban landscapes look better. At the same time horticultural, plant production uses some of our most precious resources such as soil and water. The sustainable management of these resources requires up-to-date scientific knowledge, an understanding of the biological and technical processes and lots of creativity and ambition. The aim of this program is to provide students with high-quality education and skills in an encouraging academic environment where they can develop, discuss and test new and exciting ideas.

In the face of growing world population and the increasing depletion of natural resources, our graduates are in high demand with their knowledge and know-how to sustainably produce food and create pleasant and healthy urban landscapes. There are two alternative specializations offered within this program: crop production & organic farming and environmental horticulture.

## BACHELOR OF SCIENCE IN MARINE FISHERIES AND ANIMAL SCIENCE

The consumption of animal products such as fish, eggs, meat and milk is on the rise worldwide. Along with the intensification of marine fishery and animal husbandry comes the need to develop strategies that ensure high quality products, disease prevention, sustainability and animal welfare. In this program our students will experience some of the most innovative research practices

in animal science in the Middle East and world-class teaching facilities. Experimental stations for poultry production, camel and sheep husbandry, as well as unique aquaculture and aquaponics facilities are available to our students for training and to develop and test creative ideas and research approaches. Students will have the choice of specializing in either marine fisheries or animal science.

The rapidly growing animal production sector in the Middle East has created a high demand for young, well qualified graduates. Most of our students receive job offers even before they finish their studies.

## BACHELOR OF SCIENCE IN AGRIBUSINESS

United Arab Emirates is at a strategic position to be at the center of the international agricultural trade. In the agribusiness major, students are given opportunities and support to reach their potential and to prepare them for a career and leadership challenges in the dynamic agribusiness industry. Graduates can assume positions with managerial responsibilities in public and private agricultural and food-related enterprises and organizations. Some potential employers include meat, dairy, and poultry processing industries; feed manufacturing, seed and fertilizer firms; transportation and storage; and wholesale and retail food businesses.

Students who choose to study the agribusiness specialization focus on the vertical integration of agribusiness and trade, conduct market research to identify



consumer desires, and learn how to direct UAE agribusiness firms towards fulfilling consumer needs in order to benefit the country and its economic growth. The objective of the internship offered in this program is to provide students with experience in the marketplace where they can apply basic research techniques and work with clients to solve real agribusiness problems.

### **BACHELOR OF SCIENCE IN FOOD SCIENCE**

Food Science is a multidisciplinary specialization that applies basic sciences such as biology, chemistry, and engineering to develop food products and design processes to improve the safety and quality of food. The Food Science Program provides students with a solid understanding of all aspects related to food quality and safety, food chemistry and analysis, and food processing and engineering. The program also educates students on food laws and regulations, novel and functional foods, and the sensory and nutritional values of food.

### **BACHELOR OF SCIENCE IN NUTRITIONAL SCIENCE**

Nutritional science examines the way in which the food we eat affects our physical and psychological health. The Nutritional Sciences Program provides students with a solid understanding of the key role that diet plays in the prevention, development and treatment of most major diseases. The program also emphasizes basic sciences and human nutrition for students planning to conduct further studies in health-related professions such as medicine, dentistry, nursing or physical therapy.

### **BACHELOR OF SCIENCE IN DIETETICS**

Students registered in the dietetics program undergo a variety of courses such as, human nutrition at various ages, medical nutrition therapy, food service systems management, nutrition education and communication

and community nutrition. Upon successful completion of their courses, students undertake an internship placement which enables them to apply their knowledge and gain skills that will qualify them as competent entry level dietitians.

The dietetics program prepares graduates to work in the field of applied dietetics in positions such as clinical dietitians, nutrition services managers, nutrition educators and community nutritionists. Graduates provide leadership in various settings to prevent and alleviate nutrition related problems among population groups in the region. The Coordinated Program in Dietetics at UAEU is currently working towards acquiring accreditation from the Accreditation Council for Education of Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND).

### **BACHELOR OF VETERINARY MEDICINE**

Due to the importance of safeguarding human health from the potential problems associated with both domesticated and food animals, and the critical shortage of national veterinarians, the United Arab Emirates University decided to offer a Bachelor of Veterinary Medicine. Besides producing veterinarians who will satisfy international standards, this program will produce veterinarians who are uniquely trained in the relevant needs of the local environment in the UAE and the Middle East.

The Veterinary Medicine program will produce highly motivated and adaptable veterinary graduates, with a desire to take part in continuing education, who are well equipped to embark on a successful career in veterinary practice, the veterinary pharmaceutical industry, the biomedical industry or public service. In some cases graduates will seek to study higher degrees and become the academic teachers and researchers of the future.



# GRADUATE INFORMATION

## MASTER'S PROGRAM

### Master of Science in Horticulture

Graduates from the Master's degree program in horticulture are in high demand in today's job market. The occupational positions which can be filled by graduates of this proposed program include, but are not limited to, horticulture architects and designers, city horticulturists, research assistants and university instructors among many others. Students who choose to enroll in this program can study in the following areas: horticulture, agro-ecology, biotechnology, breeding, crop physiology, crop production, mineral nutrition, modeling and quantitative horticulture, plant growth and development, post-harvest physiology, renegotiation/restoration as well as sustainable water management.

## ADMISSION CRITERIA

The following are the minimum requirements for admission to the Master's Program at UAEU:

- ▶ A Bachelor's degree or its equivalent from an accredited university recognized by the UAE Ministry of Higher Education and Scientific Research, in an area appropriate to the academic area to which application is being made.
- ▶ A cumulative Grade Point Average (GPA) of 3.0 on a 4.0 scale or equivalent, in all undergraduate work.
- ▶ A score of at least 6.0 on the IELTS (International English Language Testing System) Academic exam or equivalent, for all disciplines delivered predominantly in English. This test score must be less than two years old at the time of application, with the following exceptions:

- A native speaker of English who has completed his/her undergraduate education in an English-medium institution and in a country where English is the official language; or
- An applicant with an undergraduate degree from an English-medium institution who can provide evidence of acquiring a minimum TOEFL score of 500 on the paper-based test, or its equivalent, at the time of admission to his/her undergraduate program.
- ▶ The final decisions on admission of applicants who satisfy the basic admission requirements will be made after a personal interview by the Program Admission Committee, chaired by the Program Director.
- ▶ Three professional letters of recommendation and a statement of research interests.

Under certain conditions admission into a Master's program may be granted if the GPA or the IELTS score is less than the minimum requirement. These requirements are subject to the general university criteria for admission to graduate programs and may be updated regularly.

*\* Please note that these admission requirements may be subject to change. Please refer to the UAEU website for further details.*

## FEE STRUCTURE

The total tuition fee for the M.Sc. in Horticulture Program is AED 57,800 which is based on the following:

- ▶ AED 1,600 per credit hour, with 36 credit hours required for graduation
- ▶ AED 200 application fee



### GRADUATION REQUIREMENTS

Students may enroll on a full-time or part-time basis. Full-time students are expected to complete the program in 4 semesters (two academic years), while part-time students are expected to complete the degree requirements in 6 semesters (three academic years).

- ▶ A minimum of 36 credit hours are required for graduation (including 6 hours for the Master's Thesis).
- ▶ Courses are selected with the advice and consent of the student's academic advisor and the major professor who is also the chair of the thesis committee.

### PHD PROGRAMS

The College of Food and Agriculture currently offers a Doctor of Philosophy. Students are admitted through one of the following departments: Aridland Agriculture, Agribusiness, Food Science, or Nutrition & Health. The key objective of the program is to impart rigorous training for innovative research.

The research areas include: horticulture, water use in agriculture, aquaculture, natural resources, food quality and safety (food composition and analysis), food technology and processing, food innovation, functional foods, nutrition and chronic disease management and prevention, sociocultural determinants of food choices and nutritional disparities and community nutrition interventions. The program is designed for full-time students who will complete the cycle of course work, qualifying examinations, and doctoral dissertation.

### ADMISSION CRITERIA

The following are the minimum requirements for admission to the PhD Program at UAEU.

- ▶ A Master's Degree from an accredited university recognized by the UAE Ministry of Higher Education and Scientific Research, in an area appropriate to the

academic area to which application is being made.

- ▶ A minimum cumulative GPA of 3.3 on a 4.0 scale or equivalent, in the Master's degree earned at an accredited university recognized by the UAE Ministry of Higher Education and Scientific Research.
- ▶ A score of 6.5 or higher on the IELTS Academic exam or equivalent, for all disciplines in which the main language of instruction is English or the dissertation must be written in English. This test score must be less than two years old at the time of application.
- ▶ In addition to the above, applicants are recommended to submit the official score of the Graduate Record Examination (GRE) General Test, which may be taken into account in the ranking of applicants for admission or scholarship.

*\* Please note that these admission requirements may be subject to change. Please refer to the UAEU website for further details.*

### FEE STRUCTURE

The total tuition rate for students accepted into the PhD program is AED 115,400, which is based on the following:

- ▶ AED 2,400 per credit hour, with 48 credit hours required for graduation
- ▶ AED 200 application fee

### GRADUATION REQUIREMENTS

Students may enroll on a full-time basis only. Full-time students with a Master's degree can complete the degree requirements in 4 semesters (two academic years) while students entering with a Bachelor's degree can complete the degree requirements in 6 – 8 semesters (three to four academic years). Students should complete the cycle of course work, pass the qualifying examination and successfully defend their doctoral dissertation at the end of the program before graduation.



# RESEARCH CAPABILITIES



The College of Food and Agriculture offers outstanding research facilities which include three experimental stations, a food pilot plant and several laboratories that are used for teaching, research, training and other purposes. The laboratories contain a broad range of instruments ranging from agriculture related instruments to biomedical, biochemical, hematological and anthropometric analysis.

The college publishes the Emirates Journal of Food and Agriculture (EJFA) that is devoted to sharing original basic and applied research articles in the field of food and agriculture. The EJFA is the only scientific Journal in the Middle East that publishes 12 issues per year. The College of Food and Agriculture offers excellent research facilities and has a broad range of research interests including water use in agriculture, protected agriculture, product development based on camel milk and dates, etc.



“As well as top research facilities, the department offers a friendly atmosphere with world-class faculty. CFA is like a second home.”

**Mohammed Nasser,**  
Horticulture



# CONSULTANCY & COMMUNITY SERVICES

In October 2012, the Khalifa Fund, in partnership with the College of Food and Agriculture and the College of Business and Economics, established a business program in the food sector to foster entrepreneurial skills in Emirati women. The Food Innovation Program is the first of its kind in the Middle East and North Africa (MENA) region and one of the very few programs globally that is fully integrated with a university that caters for:

- ▶ farmers looking to develop value-added products;
- ▶ restaurant owners interested in producing products for retail sale (salad dressings and sauces, etc.);
- ▶ talented bakers or cooks who want to sell their products; and
- ▶ anyone looking to start a food business.

“The lectures are taught by leading experts, offering a wide range of subjects with lab practicals utilizing state-of-the-art facilities. I have thoroughly enjoyed the course so far and have been very impressed with the high level of guidance and support provided by the teaching staff. I would highly recommend this course to anyone considering a future in Nutritional Science.”

**Fatima Azahra,**  
Nutritional Science

# WHY CHOOSE UAEU?

## 1 Excellence

At UAEU we focus on the quality of the learning experience for each student. UAEU's "excellence agenda" involves every aspect of the university. Here you will find the finest faculty in the nation, the most advanced technology in the region and the most modern and attractive campus facilities to be found anywhere. Our unrelenting focus on excellence ensures that your degree is highly regarded, both nationally and internationally, and that you will leave the university fully equipped for professional and personal success.

## 2 International Recognition

Based upon our international reputation, the employability of our graduates, and our research productivity, UAEU continues to rank among the best of the world's 13,000 universities. QS, a London-based international ranking of the world's leading universities, rates UAEU as number one in the nation and number 370 in the world. QS also includes UAEU on its list of the top 50 world universities that have been founded within the past 50 years.

## 3 Employability of our Graduates

Since our programs have been designed in partnership with employers, our graduates are highly sought after by both private and government entities. Our academic programs include not just classroom theory, but also practical internships and research experiences. Our graduates consistently find that their hands-on experience provides them both with the practical skills that employers value and with the connections and relationships that are an important part of the career-building process.

## 4 A Supportive Learning Environment

UAEU is committed to providing the support to ensure that every student can be successful. Our support services include counseling, healthcare, IT support, disability support, career services, financial aid, international student services, alumni services, a student success center and a student council. Regardless of the obstacles that you encounter along the way, there is always a mentor, a counselor, or an advisor nearby to help. Each student is provided with an individual academic advisor to assist with the critical decisions and choices that you face along the road to academic and career success.

## 5 A Vibrant Living Environment

Our goal is not only to give students an excellent degree qualification but also to ensure that you have fun along the way. Our students come from more than 50 countries, so you will interact with and learn from people of diverse cultural backgrounds. The university offers a wealth of extra-curricular activities and life-enhancing experiences to enrich your university experience, and with more than 50 Clubs and Societies at UAEU, there is no shortage of opportunities to have fun outside of lectures and to make friends. UAEU's campus is a real community with multiple cafés and restaurants, retail and banking facilities, bright, modern campus residences, and exceptional athletic and recreational facilities.

## 6 A Magnificent New Campus

The new UAEU campus features the most modern architecture, zones for specialized research centers, cutting edge IT network infrastructure, classrooms and labs that feature the latest equipment and instructional technology to enhance student learning. There is also an expansive library offering vast physical and electronic resources, two world class health clubs equipped with latest fitness equipment, two Olympic sized swimming pools, as well as tennis, basketball, and badminton courts.

## 7 Cutting-Edge Research

The UAEU is the nation's premier research university. We not only transmit knowledge to our students, but through our colleges and research centers we help to create new knowledge, work on developing new treatments for cancer, produce new technology for addressing the world's energy needs and develop new techniques for increasing the global food supply. Each year our historians and archaeologists help to discover and assess historical artifacts concerning the accomplishments and culture of the people from this part of the world. As a UAEU student, you will have the opportunity to work side by side with internationally known research faculty on these exciting projects.

## 8 Community Outreach

As the UAE's national university, UAEU recognizes the responsibility of the university and our graduates to contribute to the wellbeing of the broader community. We encourage our students and staff to give back to the community through civic engagement, public service, and research. The university helps students connect with volunteer and community service organizations in the student's particular area of interest.

## 9 Choice

No university in the nation provides as many academic choices as UAEU. The university offers 63 undergraduate and 67 graduate programs across a broad range of disciplines, including business, economics, education, engineering, food and agriculture, humanities, the social sciences, IT, law, medicine and health sciences, and the natural sciences. Many of our degree programs are unique to UAEU, and many of them are offered in unique combinations. Whatever your interests, talents, and goals, UAEU has a program to match.

# CONTACT US

## **COLLEGE OF FOOD AND AGRICULTURE**

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## **RESEARCH AND GRADUATE STUDIES**

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## **ENROLLMENT DEANSHIP (ADMISSIONS DEPARTMENT)**

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