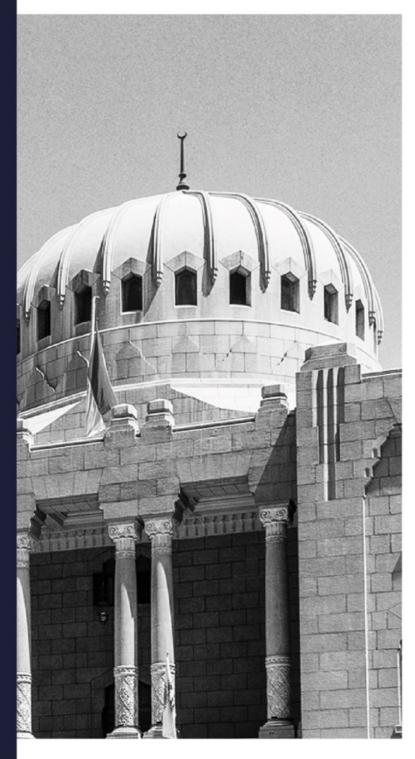
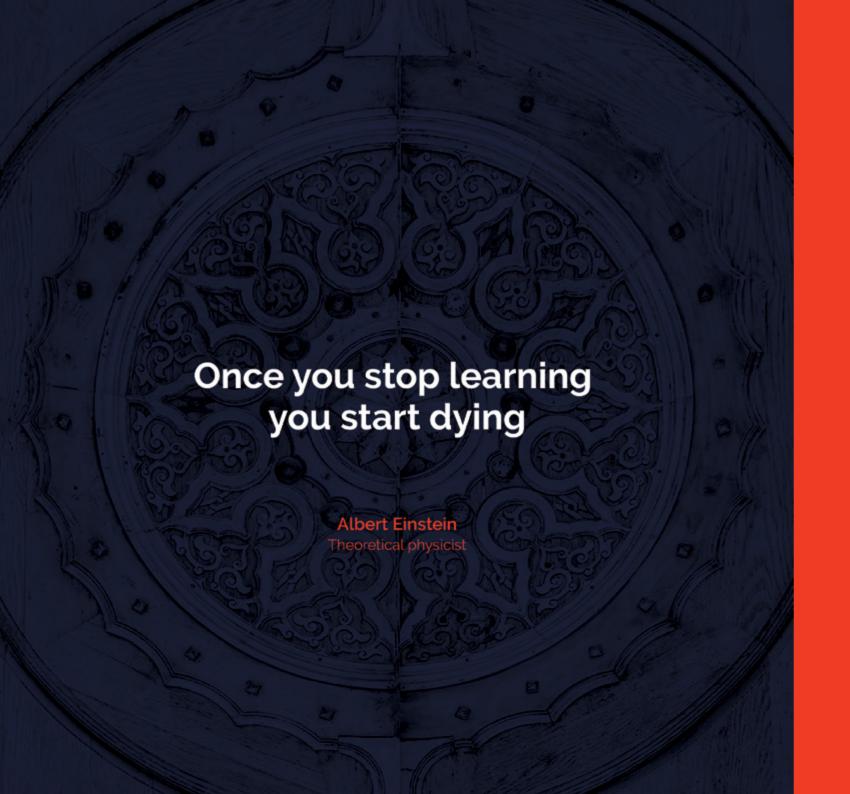


#### Faculty of Engineering Ain Shams University

This booklet provides information regarding university life of our prestigious faculty.

www. eng.asu.edu.eg







Faculty of Engineering Ain Shams University

\_

This booklet provides information regarding university life of our prestigious faculty.

www.eng.asu.edu.eg

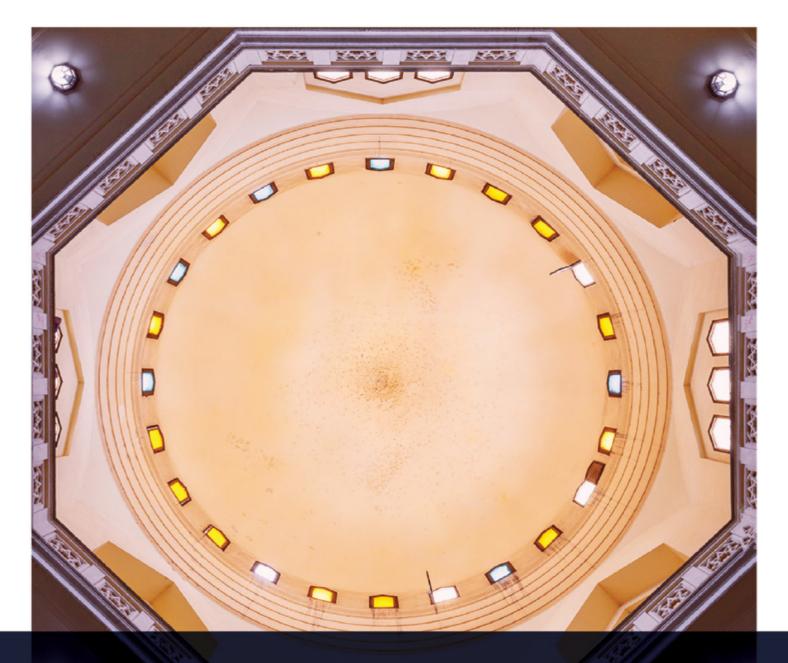


#### History

This engineering academic edifice had been transformed from being a high technical school established in 1839 to become one of the most renowned Faculties of Engineering in Egypt and in the Middle East since 1950.

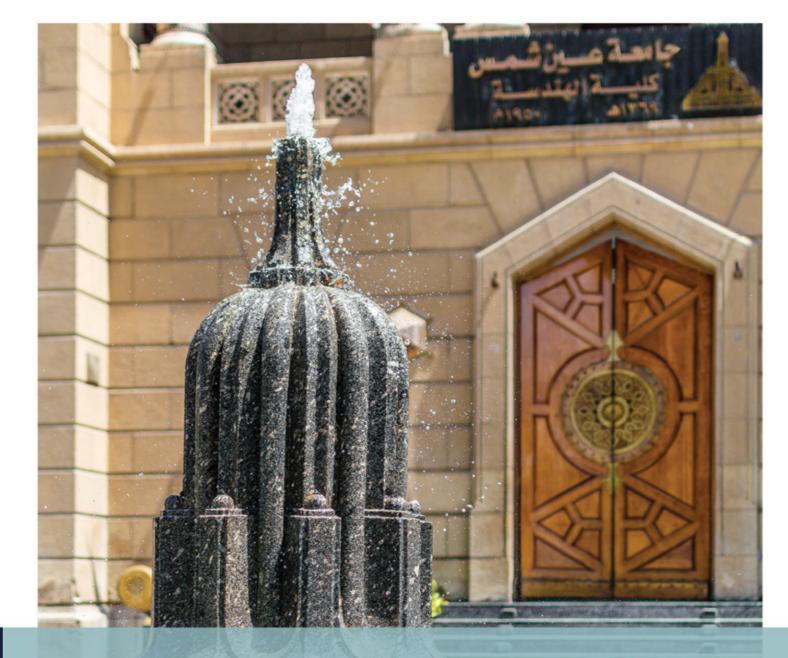
where the kers of history





#### The classical dome of the main building.

the past few years testify to a massive academic and physical development. Academically, there has been a significant evolution of curriculum conjunction with teaching methodologies. Physically, the campus has witnessed a considerable upgrading of the infrastructure and landscape.



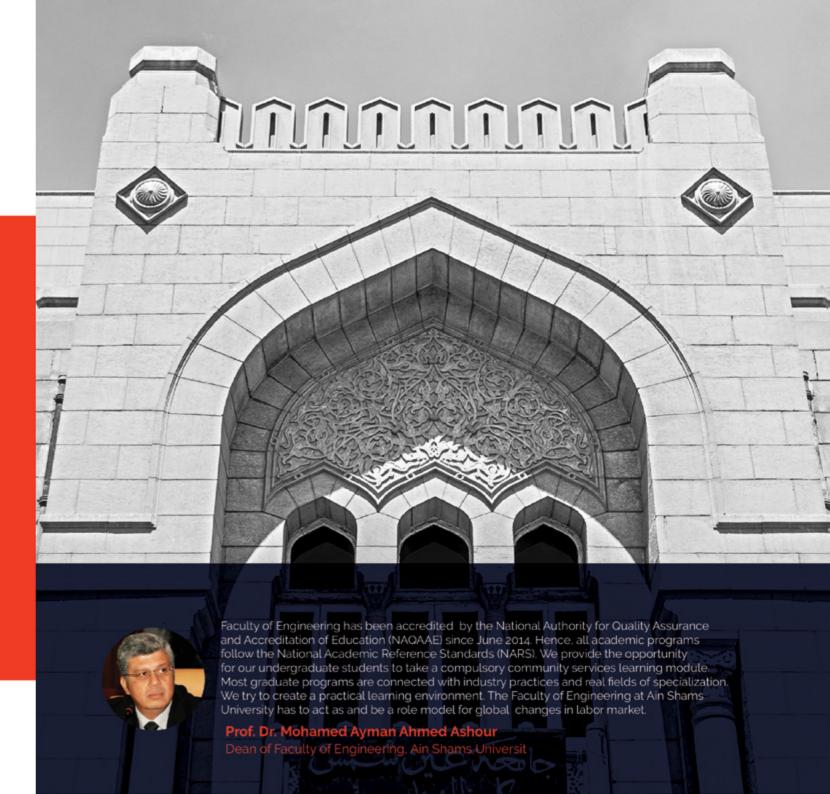
The movement of fountain and gate of the main entrance embrace the iconic legacy of the past, outstanding competence of the present and over whelming technological progress of the future. blending the past, present and future realis grants this faculty of engineering its evaluating distinction and eminence.

# Why Faculty of Engineering Ain Shams University



- get a real head-start with your career with internships and trainings through our yearly employment fair
- Going global by offering overseas student exchange programs and getting a chance to exposure to different cultures whilst contributing to the academic degree.
- Make memories! Offering extra-curricular activities including groups and clubs that further develop students' interests and build their non-academic skills.
- Get on the track! We're evaluated as one of the most widespread on the research map amongst the worlds.
- State-of-the-art campus equipped with the latest and most advanced educational facilities surrounded by breathtaking urban spaces
- Choose your career.

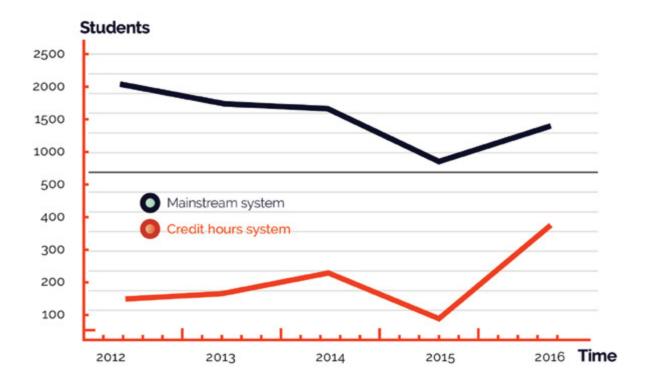
  Offering broad range of options and programs that suit your needs.



#### Capacity

At the beginning of each academic year, there is an enrollment of approx. 14.000 under graduate students in this educational edifice. Despite that they belong to different departments and programs, they all hold the same ID and share the same spirit.

# Numbers speak louder than words





The art of teaching is the art of assisting discovery.

Mark Van Doren American poet

# Campus map



Architecture building

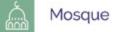
Main building

workshops building

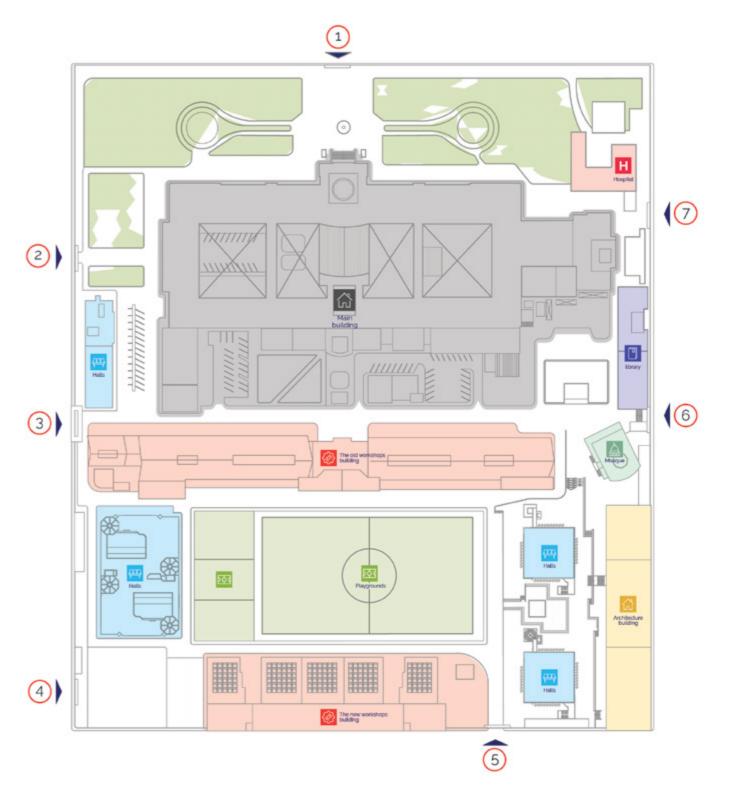












## Mainstream program

There are ten consecutive semesters of centered engineering education where graduates acquire life-long capabilities of problem solving and decision making in various engineering fields.

If you choose to join our mainstream learning system, you'll apply in one of the following four major disciplines with thirteen specialized departments for four academic years, after passing through one preparatory year of basic engineering sciences:



Civil Engineering discipline 4 years of study



Architectural Engineering discipline 4 years of study



Electrical Engineering discipline 4 years of study



Mechanical Engineering discipline 4 years of study



## Credit hours program

Interdisciplinary and responsiveness to market needs is the message we deliver through this progressive engineering learning system.

A system where the "future engineer" attains a high level of self-confidence in dealing with multi-facets engineering topics in response to the new technology requirements.

In CHEP, flexibility and self-adaptation is a priority in choosing your curriculum path through almost ten semesters in nine different fields and more to join.





Building Engineering program



Manufacturing Engineering program



Landscape architecture program



Communication systems Engineering program



Energy and renewable energy engineering program



Mathematics engineering and automation program



Materials engineering program

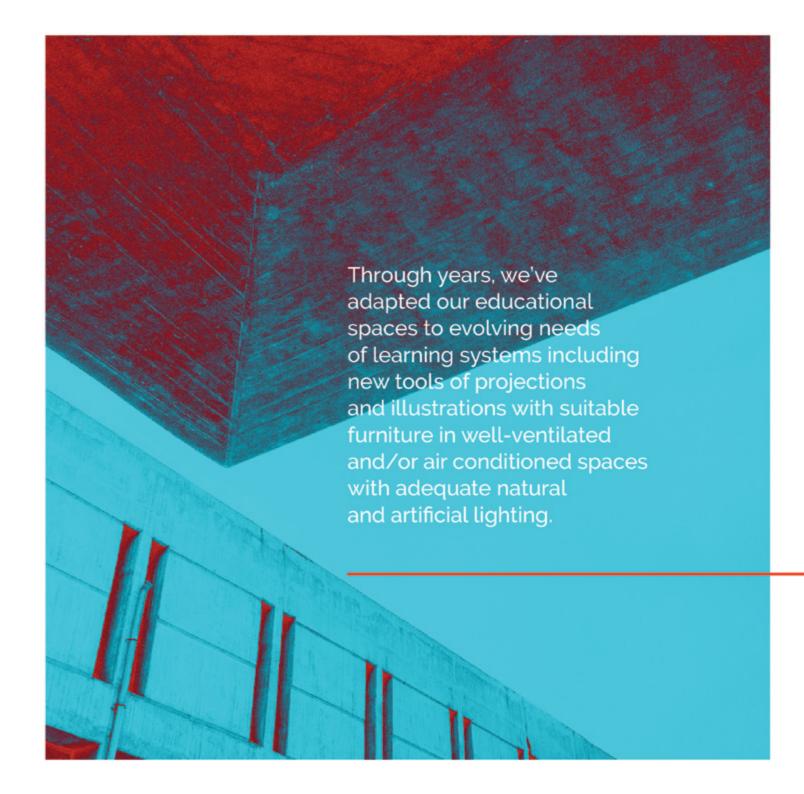


Computer engineering and software systems program



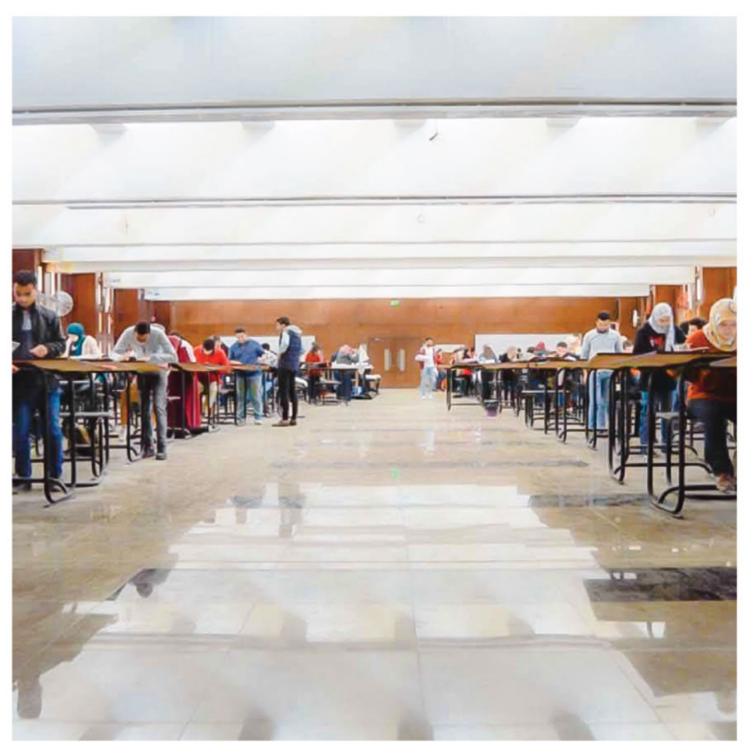
Environmental architecture and urbanism program

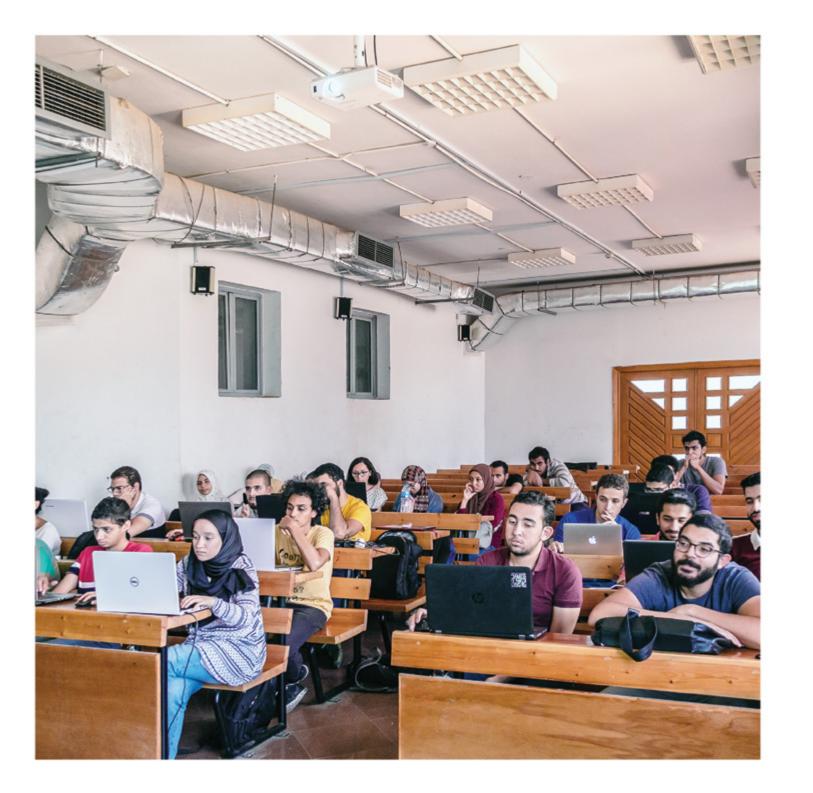
Great campus for great people













#### Laboratories

Learning is never integrated without practicing, so providing our students with laboratories that serve all studying fields was one of the most important steps towards proper interactive learning.

The following labs are available for engineering students' experiments through the educational year.

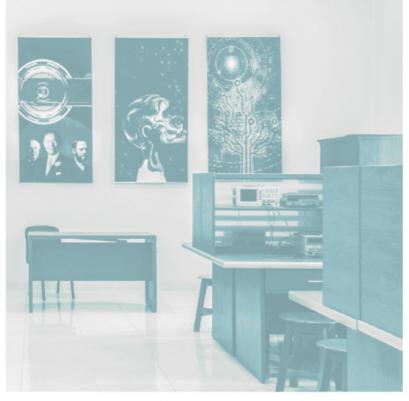
#### Preparatory

- Undergraduate physics labs
- Undergraduate chemistry labs
- Engineering mechanics lab
- Physics research lab
- Applied organics chemistry research lab
- Applied analytical chemistry research lab
- Seminar room

#### Civil

#### Public works

- Surveying labs
- Sanitary engineering lab
- Highway engineering lab
- Transportation engineering and traffic lab



#### Irrigation of hydraulics engineering

- Undergraduate lab
- Water quality lab
- GIS lab

Research lab

#### Structure

- Material testing lab
- Structural analysis lab
- Reinforced concreate testing lab
- Steel testing lab
- Geotechnical lab

#### **Electrical**

#### Electrical power and machines engineering program

- High voltage laboratory
- Power system laboratory
- Electrical machines laboratory
- Power electronics laboratory
- Computer laboratory for virtual experiments
- Programmable logic controller laboratory
- Advanced control laboratory
- Two labs for basic and fundamental courses
- Seminal room

#### Computer and systems engineering programs

- Two seminar rooms equipped with smart boards and data shows.
- Two computer programming labs
- Software engineering lab
- Computer networks lab
- Control systems lab
- Embedded systems lab
- Logic and control circuit applications labs
- Information system center
- EMC2 cloud computer lab

#### Computer and systems engineering programs

- Entreated circuits research lab
- Communication and signal processing research lab
- Microwave and antenna research lab
- Lasers and optical communications lab
- Electronics and communications technology unit
- Communications electronics research lab



### Architecture / urban design and planning program

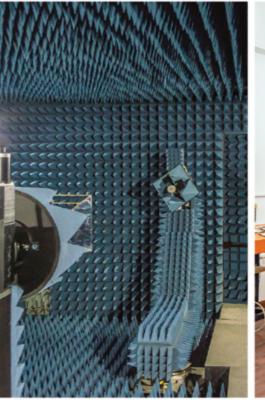
- Drawing studios
- Computer labs
- Lecture rooms

#### Mechatronics

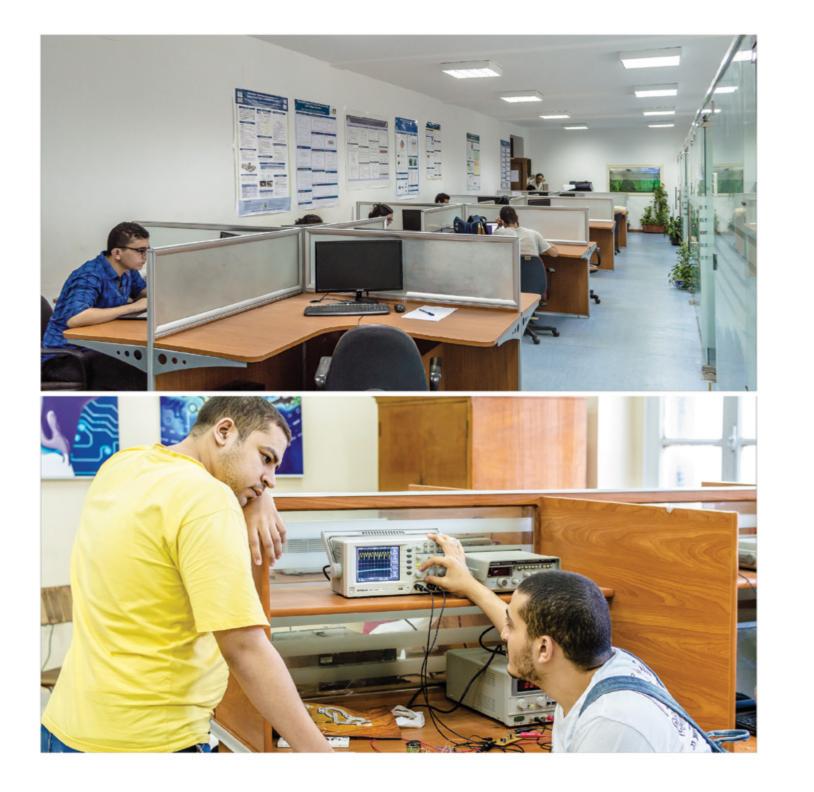
- Mechatronics lab
- Motion control lab
- Hydraulic and pneumatic lab
- Automatic control lab



















# Look deep into nature, and then you will understand everything better.

Albert Einstein
Theoretical physicist



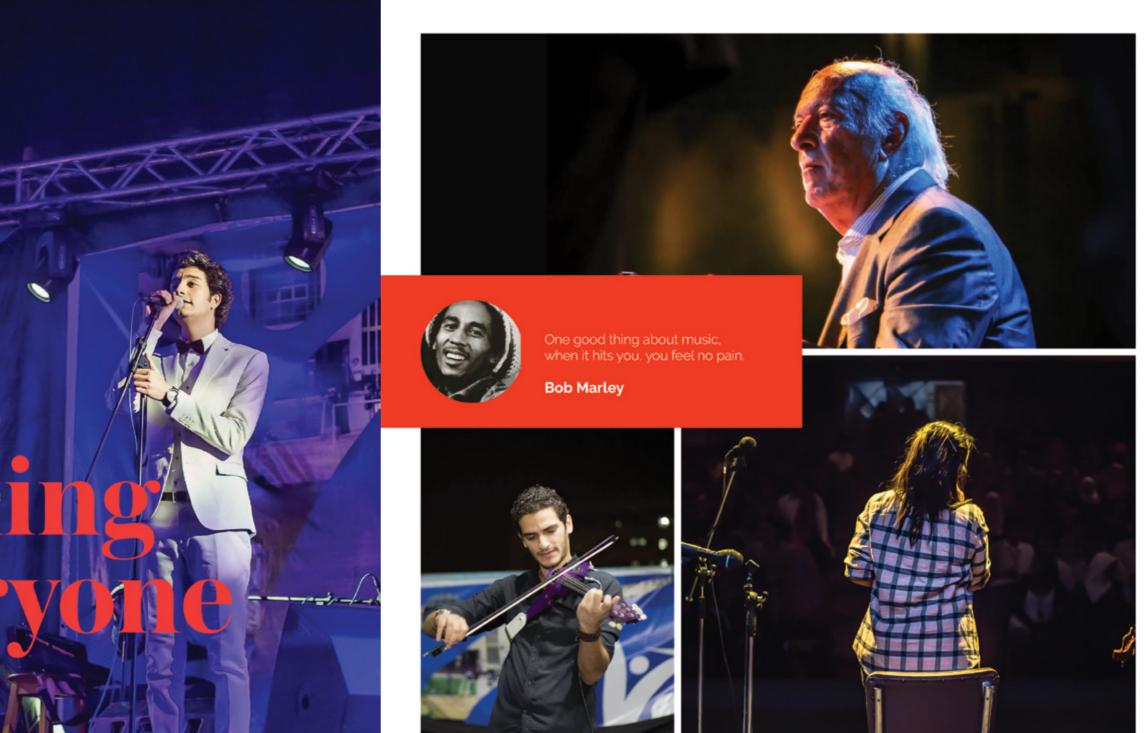




#### University life

Parallel to his educational lifetime in the faculty, the student is offered multiple opportunities to practice sports, cultural, entertainment and social activities which refine his talents and provide other dimensions to his personality and readiness for the upcoming professional life.

there is somethin for every











**Heywood Broun** 





#### **IHUB**

# Stimulating innovation and entrepreneurship in ASU

Providing support for students and graduates through helping them to think and innovate to grow their skills at any stage of development to cover a wide range of disciplines











#### **Postgraduate**

Graduation is never the end of the path. since ASU FE vision is to graduate a well-educated and innovative graduate that is capable to influence his community through his study.

Consistent with the faculty mission, several steps are taken to support graduates until they reach their goals and the career they've sought after.

Post graduates programs and events take place yearly for faculty graduates to develop their skills and help them catch their dream job.

# the future

#### **ECDC**

The ASU ECDCs were inaugurated in January 2015 as a result of an agreement between Ain Shams University and the American University in Cairo (AUC), with funding from the United States Agency for International Development only to be fully absorbed by Ain Shams University starting July 2017.

AUC's Career Center provided its technical expertise and trained the ECDC staff to become certified career development facilitators. To date, the ECDC has served more than 18,000 ASU students. providing them with career guidance services throughout their career planning process.

The services include career development workshops, resume writing assistance, interviewing skills practice and job search preparation. ECDC also organizes an annual employment fair to help students/graduates with their job search process.





#### Research



#### **Electrical Engineering**

Electrical power and machines

Electronics and Communications Engineering

Computer and systems engineering



#### Architectural Engineering

Architecture Engineering

Urban Planning



#### Civil Engineering

Construction engineering

Public works

Irrigation and Hydraulics



#### Mechanical Engineering

Design and production engineering

Automotive Engineering

Mechanical Power Engineering

Mechatronics Engineering





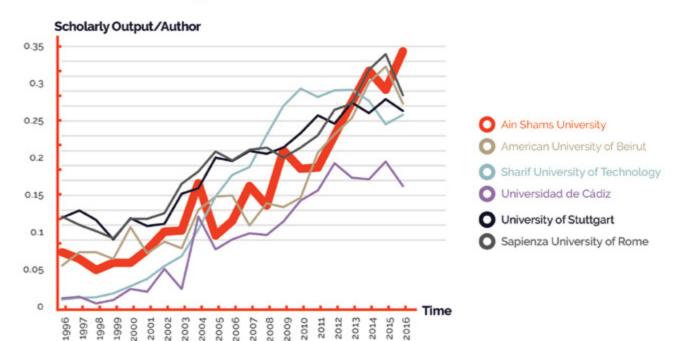
#### Program of Cities with equivalent resources (IMaREC):

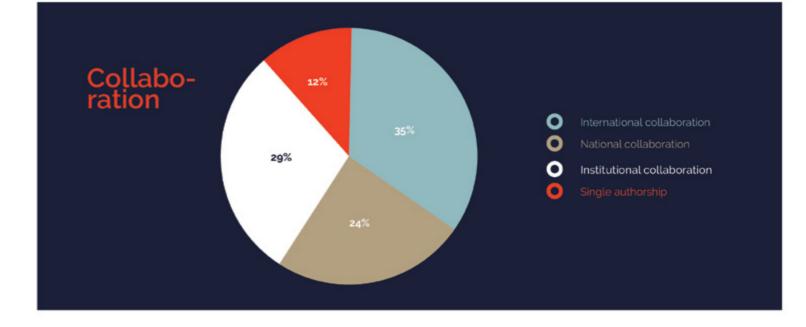
This program has been designed with the participation of Ain Shams university and 4 foreign universities from Germany, Mexico, Indonesia and Kenya. Through the partnership and the cooperation in the project CNRD (distinction center of natural resources and development) of the program EXCEED,

#### New and renewable energy program JAMILA:

The program is a product of joint research project financed by the European Union with the participation of Egyptian universities including Ain Shams university, and with the participation of Sapienza university in Italy, Kades in Spain, northumbria in UK and two universities in Palestine

#### Research map





#### **Achievements**



king ramses II statue relocation

Relocating one of the most important statue that weigh 83 tons and its height about 11.36 meters was an incredibly tough job. But what is most tough was doing the job with a zero risk system through studying all the possibilities, testing all the statue parts and designing the carriage.

#### Consultancy Team:

**Dr. Ahmed Hussein** ( system design and transport activity )

**Dr. Mostafa Rostom** ( supervision of manufacturing and implementation )

Dr. Tamer El-Nady (Vibration Monitoring)

The task has been successfully done witnessing its accuracy and uniqueness.



A new record for our faculty in the latest release for Shanghai ranking which is considered the most important over the world.

The faculty departments come within the best 300 departments across the world. This ranking is among more than 20.000 universities around the world. In QS and timz ranking, our departments picked a rank amongst the first 500 across the world.



Faculty of engineering ASU, accredit from MAGAAEC natural authority for quality assurance and accreditation In the field of scientific research dissemination, our faculty's scientific magazine keeps picking its outstanding position in the international scientific publishing

Scopus scientific database, Ain Shams ranked 203 over the world.

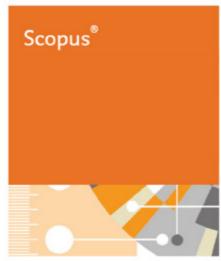
Quarter: Q2016) 1) from Q2015) 2) ranked 60 in engineering journals.

CiteScore: 2016) 2.55) from 1.51 2015)) ranked 256/21 in engineering.

SNIP: 2016) 1.685) from 2015) 1.198)

SJR: 2016) 0.632) from 2015) 0.426)

The magazine keeps picking its rankings amongst the world through Tomson Roiters database, reaching to 1.45 rate.



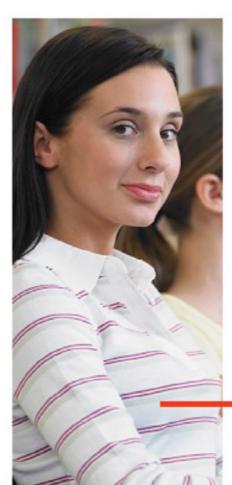
## Something for you! students opinion.

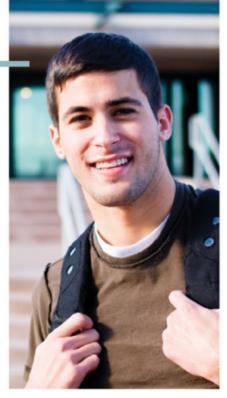


"Engineering and science are incredibly flexible degrees.
They teach you how to think critically and solve problems –skills that can be applied across a variety of disciplines to create solutions to the challenges the world faces today, and to help shape the world of tomorrow. I think they are an excellent foundation for a diverse range of pursuits."

Mohamed Kamal Bachelor of Engineering "Combined with my engineering degree, my project management studies will open more doors, fast-tracking my career and the projects I can work on. This degree will create so many more career opportunities, more variety and a better understanding of the industry."

Passant Adel Bachelor of Engineering





"Studying science is an incredible experience and I constantly find myself amazed at what we are taught. When I began studying at university, I hadn't imagined that I would continue to a PhD, but now I can't imagine doing anything other than more science."

Karim Mostafa Bachelor of Engineering

#### **Partners**





























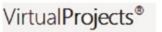




















#### **Partners**



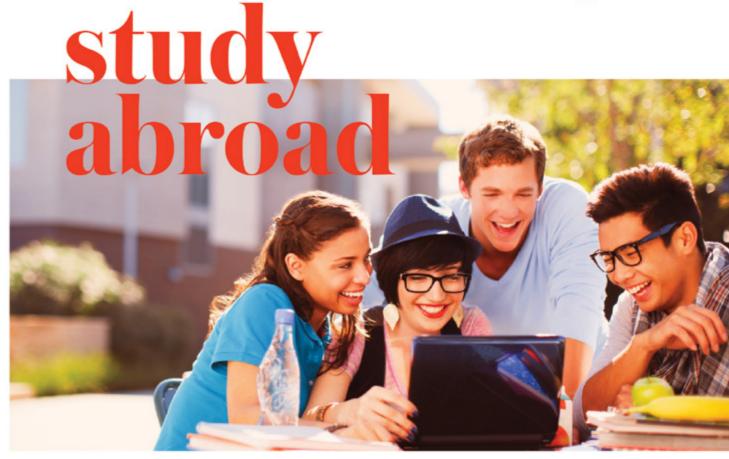






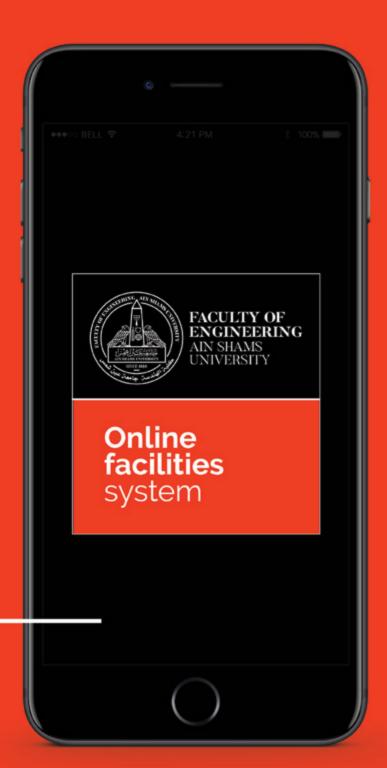






#### Online facilities

Since engineering is a lifetime process, the faculty is concerned with both time management and time investment. Hence, it offers a wide range of online services encompassing submission, paying fees, as well as E-learning. Engineering has never been easy and each second in the student's life counts. So it was necessary to save their time through offering a smart online services to make it way easier for them to reach all needed data about the faculty and its departments, and also to facilitate routine tasks that have been a waste of time through years such as paying fees.





There is nothing I believe in more strongly than getting young people interested in science and engineering. For a better tomorrow, for all humankind.

Bill Nye.



