

SCHOOL OF SCIENCES AND ENGINEERING
Engineering Programs
General Requirements

If an engineering program is your intended major, make sure to write it down in the appropriate field on your application form (intended major). The following majors are available:

- Architectural Engineering*
- Computer Engineering
- Construction Engineering
- Electronics and Communications Engineering
- Mechanical Engineering
- Petroleum Engineering

The following are the minimum requirements to apply for the engineering majors. Acceptance depends on availability of space.

American High School Diploma:

Completion of pre-calculus and physics courses in grades 11 or 12 and a chemistry course in grades 10, 11 or 12 is required to qualify for admission. A minimum SAT I-MATH score of 560 or ACT I-MATH score of 22 and a minimum overall GPA of 3.0 are also required.

British Certificate (IGCSE/GCSE):

Completion of four O-level science courses (mathematics, physics, chemistry and a fourth science or information technology course), plus either two AS-level science courses (mathematics and physics or chemistry) or an advanced-level mathematics course, is required to qualify for admission. A minimum grade of B in no more than two of these courses is accepted, provided that they are not both in mathematics courses.

Canadian Certificate:

Completion of mathematics courses in grades 11 and 12, a physics course in grades 11 or 12 and a chemistry course in grades 10, 11 or 12 is required to qualify for admission. A minimum score of 80% (overall and science subjects) is also required.

French Baccalaureate:

Completion of mathematics, physics and chemistry courses is required to qualify for admission. A minimum score of 70% in mathematics and an average score of 70% in these courses are also required.

German Abitur:

Completion of mathematics, physics and chemistry courses is required to qualify for admission. A minimum grade of 10 in mathematics, 10 in physics and an average of 10 in these three courses are also required.

International Baccalaureate:

Completion of mathematics, physics and chemistry courses, regardless of the subject level, is required to qualify for admission. A minimum grade of 4 in mathematics and an average of 4 in the three courses are also required.

Thanawiya Amma (Egypt):

Completion of two mathematics courses and physics and chemistry courses is required to qualify for admission.

The ranking of those who qualify is according to the total average score, which depends on the first-round results of *thanawiya amma*.

Thanawiya Amma (Arab Countries):

Completion of mathematics, physics and chemistry courses is required to qualify for admission.

The ranking of those who qualify is according to the total average score, which depends on the first-round results of the Egyptian *thanawiya amma* plus 2%.

***Important Note:**

Students intending to major in architectural engineering have to sit a placement exam/workshop addressing their cognitive abilities. The test examines spatial visualization and abstract reasoning.



SCHOOL OF SCIENCES AND ENGINEERING Actuarial Science General Requirements

The admission criteria for science and engineering programs depend on the type of high school certificate. Below is a summary of the admission criteria for each certificate. Students who successfully complete the required courses as stated for each certificate are ranked based on their high school GPA, their certificate and AUC's equivalence criteria.

❑ **American High School Diploma:**

Completion of an advanced mathematics course in grade 12 and one other science course in grades 10, 11 or 12 is required to qualify for admission.

A minimum SAT I-MATH score of 560 or ACT I-MATH score of 22 is also required.

❑ **British Certificate (IGCSE/GCSE):**

Completion of O-level and advanced-level mathematics courses is required to qualify for admission. A minimum grade of B in each is also required.

❑ **Canadian Certificate:**

Completion of an advanced mathematics course (calculus) in grade 12 and one other science course in grades 10, 11 or 12 is required to qualify for admission. A minimum overall score of 80% and a minimum score of 80% per subject are also required.

❑ **French Baccalaureate:**

Completion of a mathematics course and one other science course is required to qualify for admission. A minimum average score of 70% in both courses is also required.

❑ **German Abitur:**

Completion of a mathematics course and one other science course is required to qualify for admission. A minimum grade of 10 in mathematics and an average of 10 in both courses are also required.

❑ **International Baccalaureate:**

Completion of a higher-level mathematics course and one other science course is required to qualify for admission. A minimum grade of 4 in mathematics and an average of 4 in both courses are also required.

❑ **Thanawiya Amma (Egypt):**

Completion of pure mathematics and applied mathematics courses with a minimum score of 80% in each is required to qualify for admission.

❑ **Thanawiya Amma (Arab Countries):**

Completion of a mathematics course and one other science course is required to qualify for admission. A minimum score of 90% in the mathematics course is also required.

SCHOOL OF SCIENCES AND ENGINEERING
Biology
General Requirements

The following is a summary of the admission requirements for each certificate:

❑ American High School Diploma:

Completion of an upper-level biology course is required to qualify for admission.

❑ British Certificate (IGCSE/GCSE):

Completion of two AS-level science courses, including biology, or an advanced-level biology course is required to qualify for admission. A minimum grade of B is accepted in any of these courses.

❑ Canadian Certificate:

Completion of an upper-level biology course is required to qualify for admission.

❑ French Baccalaureate:

Completion of a biology course is required to qualify for admission.

❑ German Abitur:

Completion of a biology course is required to qualify for admission.

❑ International Baccalaureate:

Completion of a biology course is required to qualify for admission.

❑ Thanawiya Amma (Egypt):

Completion of a biology course is required to qualify for admission.

❑ Thanawiya Amma (Arab Countries):

Completion of a biology course is required to qualify for admission.

SCHOOL OF SCIENCES AND ENGINEERING
Chemistry
General Requirements

The following is a summary of the admission requirements for each certificate:

❑ American High School Diploma:

Completion of mathematics, physics and chemistry courses is required to qualify for admission. A minimum GPA of 3.0 in all studied science courses is also required.

❑ British Certificate (IGCSE/GCSE):

Completion of four O-level science courses (mathematics, physics, chemistry and a fourth science or information technology course), plus either two AS-level science courses (chemistry and mathematics or physics) or an advanced-level chemistry course, is required to qualify for admission. A minimum overall average grade of B in these courses is accepted.

❑ Canadian Certificate:

Completion of mathematics, physics and chemistry courses is required to qualify for admission.

❑ French Baccalaureate:

Accepted students must take Math, Physics and Chemistry. A minimum average of 60% in these courses is required to qualify for admission.

❑ German Abitur:

Completion of mathematics, physics and chemistry courses is required to qualify for admission. A minimum grade of 10 in chemistry and an average of 9 in these three courses are also required.

❑ International Baccalaureate:

Completion of mathematics, physics and chemistry courses is required to qualify for admission. Chemistry must be at the higher level, while mathematics and physics could be at the standard level. The average grades of these courses should not be less than 3 to qualify for admission.

❑ Thanawiya Amma (Egypt):

Completion of mathematics, physics and chemistry courses, plus another science course, is required to qualify for admission.

❑ Thanawiya Amma (Arab Countries):

Completion of mathematics, physics and chemistry courses is required to qualify for admission.



SCHOOL OF SCIENCES AND ENGINEERING Computer Science General Requirements

The following is a summary of the admission requirements for each certificate:

❑ **American High School Diploma:**

Completion of pre-calculus and physics courses, plus another science or computer course that could be covered in grades 10, 11 or 12, is required to qualify for admission. A minimum SAT I-MATH score of 560 or ACT I-MATH score of 22 and a minimum overall GPA of 3.0 are also required.

❑ **British Certificate (IGCSE/GCSE):**

Completion of four O-level science courses (mathematics, physics and two other science or information technology courses), plus either two AS-level science courses (mathematics and physics) or an advanced-level mathematics course, is required to qualify for admission. A minimum grade of B in a maximum of two of these courses is accepted, provided that they are not both in mathematics courses.

❑ **Canadian Certificate:**

Completion of mathematics courses in grades 11 and 12, a physics course in grade 11 or 12 and another science or computer course in grade 11 or 12 is required to qualify for admission. A minimum score of 80% (overall and science subjects) is also required.

❑ **French Baccalaureate:**

Completion of mathematics and physics courses, plus another science or computer course, is required to qualify for admission. A minimum average score of 70% in these courses is also required.

❑ **German Abitur:**

Completion of mathematics and physics courses, plus another science or computer course, is required to qualify for admission. A minimum grade of 10 in mathematics, 10 in physics and an average of 10 in these three courses are also required.

❑ **International Baccalaureate:**

Completion of mathematics and physics courses plus another science or computer science course, regardless of the subject level, is required to qualify for admission. A minimum grade of 4 in mathematics and an average of 4 in the three courses are also required.

❑ **Thanawiya Amma (Egypt):**

Completion of mathematics, physics and two other science courses is required to qualify for admission.

❑ **Thanawiya Amma (Arab Countries):**

Completion of mathematics and physics courses, plus another science course, is required to qualify for admission.



SCHOOL OF SCIENCES AND ENGINEERING Data Science General Requirements

The following is a summary of the admission requirements for each certificate:

❑ American High School Diploma:

Completion of an advanced mathematics course in grade 12 and one other science course in grades 10, 11 or 12 is required to qualify for admission.

A minimum SAT I-MATH score of 560 or ACT I-MATH score of 22 is also required.

❑ British Certificate (IGCSE/GCSE):

Completion of O-level and advanced-level mathematics courses is required to qualify for admission. A minimum grade of B in each of these courses is also required.

❑ Canadian Certificate:

Completion of an advanced mathematics course (calculus) in grade 12 and one other science course in grades 10, 11 or 12 is required to qualify for admission. A minimum overall score of 80% and a minimum score of 80% per subject are also required.

❑ French Baccalaureate:

Completion of a mathematics course and one other science course is required to qualify for admission. A minimum average score of 70% in both courses is also required.

❑ German Abitur:

Completion of a mathematics course and one other science course is required to qualify for admission. A minimum grade of 10 in the mathematics course and an average grade of 10 in both courses are also required.

❑ International Baccalaureate:

Completion of a higher-level mathematics course and one other science course is required to qualify for admission. A minimum grade of 4 in mathematics and an average score of 4 in both courses are also required.

❑ Thanawiya Amma (Egypt):

Completion of pure mathematics and applied mathematics courses with a minimum score of 80% in each is required to qualify for admission.

❑ Thanawiya Amma (Arab Countries):

Completion of a mathematics course and one other science course is required to qualify for admission. A minimum score of 90% in the mathematics course is also required.

**SCHOOL OF SCIENCES AND ENGINEERING
MATHEMATICS
General Requirements**

The following is a summary of the admission requirements for each certificate:

□ American High School Diploma:

Completion of a pre-calculus course and another science or computer course, which could be covered in grades 10, 11 or 12, is required to qualify for admission.

□ British Certificate (IGCSE/GCSE):

Completion of three O-level science courses (mathematics and two other science or information technology courses), plus either AS-level mathematics or an advanced-level mathematics course, is required to qualify for admission. A minimum grade of B in two of these courses is accepted, provided that they are not both in mathematics courses.

□ Canadian Certificate:

Completion of an advanced mathematics course (calculus) in grade 12 and another science or computer course that could be completed in grades 10, 11 or 12 is required to qualify for admission. A minimum score of 80% (overall and subjects) is also required.

□ French Baccalaureate:

Completion of a mathematics course and another science or computer course is required to qualify for admission. A minimum average score of 70% in these courses is also required.

□ German Abitur:

Completion of a mathematics course and another science or computer course is required to qualify for admission. A minimum grade of 12 in the mathematics course is also required.

□ International Baccalaureate:

Completion of a mathematics course and another science or computer course is required to qualify for admission. The mathematics course must be completed at the higher level, while the other course could be completed at the standard level. The average grades of these courses should not be less than 4 to qualify for admission.

□ Thanawiya Amma (Egypt):

Completion of one mathematics course and two other science courses is required to qualify for admission. A minimum score of 80% in mathematics is also required.

□ Thanawiya Amma (Arab Countries):

Completion of a mathematics course and one other science course is required to qualify for admission. A minimum score of 90% in the mathematics course is also required.

SCHOOL OF SCIENCES AND ENGINEERING
Physics
General Requirements

The following is a summary of the admission requirements for each certificate:

❑ American High School Diploma:

Completion of two mathematics courses and one physics course is required to qualify for admission.

Grades received in these courses should satisfy the University's minimum grade requirements.

❑ British Certificate (IGCSE/GCSE):

Completion of two O-level science courses (mathematics and physics), plus an AS-level course in mathematics, is required to qualify for admission.

❑ Canadian Certificate:

Completion of two mathematics courses and a physics course in grades 11 and 12 is required to qualify for admission.

Grades received in these courses should satisfy the University's minimum grade requirements..

❑ French Baccalaureate:

Completion of mathematics and physics courses is required to qualify for admission. Grades received in these courses should satisfy the University's minimum grade requirements.

❑ German Abitur:

Completion of mathematics and physics courses is required to qualify for admission. Grades received in these courses should satisfy the University's minimum grade requirements.

❑ International Baccalaureate:

Completion of mathematics and physics courses is required to qualify for admission. Grades received in these courses should satisfy the University's minimum grade requirements.

❑ Thanawiya Amma (Egypt):

Students must be graduates of the *thanawiya amma* science or mathematics section to qualify for admission.

❑ Thanawiya Amma (Arab Countries):

Students must be graduates of the *thanawiya amma* science section to qualify for admission.n.