

## FAQ

Updated Diploma Programme recognition in Germany: Kultusministerkonferenz KMK officially recognizes mathematics: analysis and approaches and mathematics: applications and interpretations

### What are the current recognition arrangements for IB DP mathematics?

Currently, the KMK does not recognize Mathematical studies SL for university entry so any students intending to continue their studies in Germany were required to take either mathematics HL or mathematics standard SL as part of their DP.

### How will the KMK recognize the new mathematics courses for Assessment from 2021?

The KMK recognizes both mathematics HL courses to contribute to a **general university admission qualification**. The KMK also recognizes both mathematics SL courses to contribute to a **subject specific university admission qualification** that allows access to universities and tertiary educational institutions for all subjects except those related to mathematics, technical studies and natural sciences.

### How does a student find out whether the subject he/she intends to study at a German University is considered to require one of the new mathematics HL courses?

For further guidance on which subjects can be studied with a subject specific university admission qualification including mathematics at standard level, please consult [https://anabin.kmk.org/no\\_cache/filter/schulabschluss-mit-hochschulzugang.html#land\\_gewaehlt](https://anabin.kmk.org/no_cache/filter/schulabschluss-mit-hochschulzugang.html#land_gewaehlt) and indicate “Schweiz” in the dropdown menu.

### Are there additional requirements for recognition of the IB Diploma to access German universities?

Yes, the “Vereinbarung über die Anerkennung des „International Baccalaureate Diploma/ Diplôme du Baccalauréat International in the updated version from 07.03.2019 states all requirements that need to be met for an IB Diploma to be recognized for admission to German tertiary institutions. The requirements apart from the level of mathematics are the same for the general and the subject specific admission qualification.

### Does this mean that I need to take biology, chemistry or physics at higher level as part of my diploma if I choose to take mathematics standard level?

Yes, to obtain the subject specific university admission qualification in Germany a student taking mathematics at standard level needs to take biology, chemistry or physics at higher level.

### How did the IB work to achieve this recognition?

The IB worked closely with the KMK, including an in-depth review of the new curriculum documents, multiple meetings and IB World school visits to support the recognition and develop a furthered understanding of IB education programmes.

Our IBWS, Learning and Teaching and Recognition departments work closely with recognition bodies over the world, and will continue to collaborate with Association of German International Schools (AGIS) and KMK to increase understanding of the IB amongst German recognition bodies.

### What are the new mathematics courses?

We have designed two mathematics subjects/routes that will each be offered at both standard level (SL) and higher level (HL):

1. **Mathematics: Analysis and approaches course** will be offered at both SL and HL. It is designed for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will explore real and abstract applications, sometimes with technology, and will enjoy the thrill of mathematical problem solving and generalization.
2. **Mathematics: Applications and interpretation course** will be offered at both SL and HL for students who are interested in developing their mathematics for describing our world, modelling and solving practical problems using the power of technology. Students who take Mathematics: Applications and interpretation will be those who enjoy mathematics best when seen in a practical context.

### How are other countries recognizing the new courses?

You can find out more about recognition across the world [here](#). There are also a number of resources to help you when talking about the new courses with your school community.

### Which course is best for which students?

Depending on where or what your students want to study during their higher education, a certain mathematics course may be a better fit than others.

Mathematics: analysis and approaches SL/HL for students interested in mathematics, engineering, physical sciences, and some economics.

Mathematics: applications and interpretation SL/HL for students interested in social sciences, natural sciences, medicine, statistics, business, engineering, some economics, psychology, and design.

We've developed an [infographic](#) to assist you when having these conversations with your students.



However, if you intend to study mathematics, natural sciences and subjects related to technology and engineering in Germany, you need to complete a mathematics course at higher level.

### Why have you changed the IB DP mathematics course?

Developments in DP mathematics mean that it remains relevant and rigorous while addressing the needs of mathematics students from 2019 until 2028, at which point the next development cycle will complete and the succeeding new version of the course will be released. We believe the changes to DP mathematics offers more choice to a greater number of students as well as offering schools greater flexibility in the way they group students, schedule lessons and teach the skills and content.

### What if a student has completed mathematics standard level as part of the Diploma Programme and later changes his/her mind and wants to study natural sciences or engineering?

He/she can apply to a Studienkolleg and pass a “Feststellungsprüfung” in the area of studies he/she intends to study. A Studienkolleg is a foundation college (Studienkolleg). For further information on Studienkollegs in Germany, please consult the following website: <http://www.studienkollegs.de/home.html>

The student can also transfer to a German university after successfully completing a year at a university outside Germany in this subject.

### Is there additional paperwork that a student with mathematics standard level for first assessment in 2021 must complete if he/she wants to study in Germany?

No. If he/she does not apply for any subject related to mathematics, technical sciences, engineering and natural sciences, the IB diploma with mathematics standard level is recognized as entry qualification to university.

### Will a DP student be able to study medicine in Germany with mathematics SL when he/she takes graduates in/after May 2021?

Yes, medicine is not considered a natural science (Naturwissenschaft) but part of medicine/health science (Medizin/Gesundheitswissenschaften) in Germany and the “fachgebundene Hochschulzugangsberechtigung” issued with mathematics SL will meet the requirements for studies of medicine, **as long as one of the science subjects are taken at a higher level, together with other requirements from the Recognition Agreement being met**. It also provides the entitlement to access for psychology, which is also considered part of medicine/health science.

### What are the options if an IB Diploma does not have the required selection of DP subjects? Can this student still study at one of the universities in Germany?

This is still possible through a university preparatory college (Feststellungsprüfung/Studienkolleg) and the option of transfer to a German university to continue studying a certain subject after successful completion of the first year in the subject at a university outside Germany.