

# Upper Secondary Education: The Gymnasium

## **FOUR UPPER SECONDARY EDUCATION PROGRAMMES IN DENMARK**

There are four different upper secondary education programmes in Denmark: STX, HHX, HTX and HF, aimed at young people who are interested in knowledge, concentration, seeing things in perspective and abstraction. The common objective of the education programmes is to prepare young people for higher education, and in that connection ensure that they acquire general education, knowledge and competences by means of the subjects they study and in the interaction between them. STX, HHX and HTX take three years to complete and admit young people who have completed nine years of basic school. HF takes two years and admits persons who have completed 10 years of basic school.

The *STX* and *HF* programmes consist of a broad range of subjects in the fields of the humanities, natural science and social science.

The *HHX* programme focuses on business and socio-economic disciplines in combination with foreign languages and other general subjects.

The *HTX* programme has its focus on technological and scientific subjects in combination with general subjects.

There are 146 schools with STX and/or HF, 60 offering HHX and 38 with HTX. Together they admit around 46,000 pupils every year. This is more than 60 % of the young Danes who commence youth education after basic school.

## **CONTENT**

Each of the education programmes has its specific range of compulsory subjects that are common for all pupils taking the programme. In STX, HHX and HTX, in addition, each school offers a number of different specialized studies packages (packages normally containing three subjects) and elective subjects for the pupils to choose between. In HF the pupils make their choices from among the electives offered by the school.

All the education programmes also contain multi-subject courses, among other things with the object of strengthening the pupils' preparedness for further study. This includes the ability to apply knowledge and methods from several subjects to illustrate interdisciplinary themes and problems and the ability to compare the subjects' knowledge and methods.

## **CURRICULA**

The Ministry of Education draws up curricula for subjects and multi-subject courses.

All subjects are placed in system of levels, C, B and A, in relation to the subject's scope and depth. The levels system is as a general rule structured in such a way that C-level subjects are allotted 75 periods of 60 minutes, B-level subjects have 200 periods and subjects at A-level 325 hours. There are a number of exceptions, however, in the individual programmes, in particular as regards B and A levels.

## **MARKING, TESTS AND EXAMINATIONS**

Marks are awarded on a 7-point scale from -3 to 12. In STX, HHX and HTX each pupil regularly receives term marks in all subjects, and the teacher also gives final marks when a subject is completed. In addition the pupils all receive marks when they sit for an examination.

Certain examinations are compulsory for all pupils in the education programme. In addition, each year the Ministry of Education decides which subjects are to form part of the examination for the individual pupil. Towards the end of the education programme, all pupils must submit a major written assignment or project, which forms part of the examination.

The examinations can be written, oral, case and project tests or take mixed forms. At most of the exa-

minations, the pupils may utilise all types of aids, including IT, but they may normally not communicate with one another or with anyone in their surroundings.

The Ministry formulates all written examination questions and appoints external examiners for all examinations, both oral and written.

An examination certificate is issued when the pupil has achieved a minimum of 02 in weighted average of the concluding term marks and examination marks. When the examination average is being calculated, the marks are weighted differently depending on the level. The examination average is crucial to the pupil's future opportunities in the education system as it forms an important part of the basis for admission to higher education. The examination average is raised for pupils who have taken more subjects at A-level than the education programme requires.

#### **ADMISSION**

To be admitted to one of the three-year upper secondary education programmes (STX, HHX, HTX), a pupil must have completed nine years of Danish basic education or have received corresponding teaching, and have taken the compulsory final examination of the primary and lower secondary school.

To be admitted to HF, a pupil must have completed ten years of Danish basic education and have taken examinations in Danish, English, mathematics, a second foreign language (French or German) and physics/chemistry.

A pupil must take an admission test if he/she has not taken the examinations required for admission to STX/HHX/HTX or HF. A pupil may be required to take an admission test if the basic school has recommended this.

Pupils who have not attended a Danish school may be admitted following a concrete assessment of whether they have qualifications corresponding to the requirements that must be fulfilled by pupils who have attended a Danish school. They may be required to take an admission test.

#### **LEGISLATION, SCHOOL SYSTEM AND MANAGEMENT**

The Ministry of Education issues the rules according to which the schools work. The schools, which are spread out all over Denmark, are self-governing institutions with different histories and academic profiles. They finance the implementation of one or more of the upper secondary education programmes by means of grants from the Ministry of Education provided on the basis of pupil numbers. The head of the school answers to a board, the composition of which reflects the school's specific profile. The teachers and pupils of the school appoint representatives to the board. The school board appoints and dismisses the headteacher and has overall responsibility for the running of the school and its activity.

#### **QUALITY AND SUPERVISION**

All schools offering one or more upper secondary education programmes must have and utilise a system for quality development and results assessment of each individual programme and of the teaching. Within the general requirements, the school itself decides the methodology for self-assessment and quality assessment it wishes to employ. The school must be in a position to document its quality system vis-à-vis the Ministry of Education, which supervises the school's implementation of the education programmes and its results.

#### **TEACHER QUALIFICATIONS**

Teachers must have completed a Master's programme at a university or – in certain cases – be able to

document a corresponding level. Teachers must also have completed a course in educational theory and practice before or subsequent to their appointment at the school.

#### **PUPILS' INFLUENCE ON THE EDUCATION PROGRAMME**

Students have a right to form a student council at their school and they are represented on the school board. The school must ensure that the students are involved in the planning of teaching in their class. The national student organisations have the right to appoint two members to the council that advises the Minister of Education on the upper secondary education programmes.

#### **STUDENT GUIDANCE**

The schools are obliged to provide academic guidance for the students and to ensure that they are offered individual and collective guidance concerning completion of the education programme. The students can also receive guidance concerning higher education and careers.

#### **THE STUDENTS' FINANCIAL SITUATION**

Teaching is covered by the state and is free of charge. However, to a limited extent (max. DKK 2,500) the school can require the students to acquire some of the teaching materials themselves, typically dictionaries and pocket calculator. Pupils are eligible for Danish Education Support (SU) if they are active students, have reached the age of 18 and are Danish citizens. It is also possible in some cases to obtain SU if one is not a Danish citizen.

#### **THE SCHOOL YEAR**

The individual school decides when the school year is to start after the summer holiday, the number of school days and the placing of holidays and school days. The calendar and holiday schedule of a school can usually be found on the school's website.

# The Gymnasium (STX)

## SPECIAL PROFILE

The focus in the STX programme is on general education and general study preparation. The academic

standard is closely linked to aspects of the academic subjects, and the students are to achieve general education and study competence in the

humanities, natural science and social science with a view to being in a position to complete higher education.

## THE STRUCTURE OF THE PROGRAMME

<p><b>Specialized study programme</b> 2½ years</p> <p>Compulsory subjects and levels</p> <p>Normally three subjects constituting the specialized study programme</p> <p>Multi-subject coursework</p> <p>Electives</p> <p>Specialized study project</p>	<p><b>Specialized study programme</b> 2½ years</p> <p>Compulsory subjects and levels</p> <p>Normally three subjects constituting the specialized study programme</p> <p>Multi-subject coursework</p> <p>Electives</p> <p>Specialized study project</p>	<p><b>Specialized study programme</b> 2½ years</p> <p>Compulsory subjects and levels</p> <p>Normally three subjects constituting the specialized study programme</p> <p>Multi-subject coursework</p> <p>Electives</p> <p>Specialized study project</p>
<p><b>Basic programme ½ year</b> Compulsory subjects and levels: Danish, English, 2nd foreign language, history, physical education, an artistic subject, mathematics, a natural science subject and social science. The head of the school can also decide that instruction in Danish, English, 2nd foreign language, history and physical education should start at the same time as the specialized study programme proper.</p> <p>There are, in addition, multi-subject coursework, among other things in language and natural science areas.</p>		

## FACTS ABOUT THE STX PROGRAMME

*Compulsory subjects and levels:* Danish A, English B, 2nd foreign language B or A, history A, classical studies C, physics C, physical education (PE) C, an artistic subject C, mathematics C, religion C, social science, and in addition at least two of the subjects biology, chemistry and natural geography at C-level.

As a main rule, each student must also complete biology, physics, chemistry or natural geography at B-level.

The compulsory artistic subject is chosen from among visual arts, drama, media studies or music.

The 2nd foreign language is chosen from among the following: French continued level B and A, German continued level B and A, French beginner language A, Italian A, Russian A, Spanish A or German beginner language A.

Parts of the instruction are implemented as multi-subject courses within the framework of general study preparation, general language understanding and a natural science basic programme.

Apart from the compulsory subjects, each student chooses a specialized study programme and electives, and each student also writes a specialized study project in the third year within two or three subjects of their choice.

*Specialized study subjects:* Each student chooses a specialized study programme consisting of a package with three subjects or – in certain packages - of two subjects. The packages, which are drawn up and offered by the individual school, can consist of subjects on the following levels: AAA-, AAB-, AAC-, ABB- or ABC. The number of different programmes as well as the specific content vary from school to school.

*Electives:* Each student selects a number of elective subjects. The number varies according to the study field subjects taken by the student.

Example of choice of specialized study subjects and electives:

Example 1	Example 2	Example 3	Example 4
<b>Specialized study subjects:</b> Mathematics A Physics B Chemistry B  <b>Electives</b> English A Astronomy C	<b>Specialized study subjects:</b> English A German A Psychology B  <b>Electives</b> A natural science subject B Social science B	<b>Specialized study subjects:</b> Social science A Mathematics A Business economics C  <b>Electives</b> A natural science subject B	<b>Specialized study subjects:</b> Music A Mathematics B Psychology C  <b>Electives</b> A natural science subject B English A

*Number of weekly periods:* Each student completes a minimum of 2470 hours of 60 minutes each. There is, in addition, homework with written assignments, preparation of texts, research etc. as well as time for examinations.

*Typical work methods:* Various methods of working are employed, for instance classroom instruction, project work, individual and group based written work etc. Up to 25% of the teaching time can be spent on virtually organised teaching, where students and teacher are not necessarily in the same room.

*Type of school:* The STX is typically offered by general upper secondary schools (Gymnasiums). Some of the schools also offer the higher preparatory examination (HF), and in a few cases schools offer HHX and HTX in addition.

*Web reference:* eng.uvm.dk