# Baccalaureate cycle Secondary 6 and 7 (2024-2026) 

## Tallinn European School

## Baccalaureate Cycle - subject choices

S6 and S7 form a unit that leads to the European Baccalaureate. Although there is a core of compulsory subjects, including L1, L2, Mathematics, a science, Philosophy, Physical Education, Ethics, History and Geography, students have a wide range of further options and may choose to study some subjects for two periods, four periods or at an advanced level.

## Compulsory subjects

|  | S6 | S7 |
| :---: | :---: | :---: |
| Subject | Lessons per week |  |
| Language 1 (L1) | 4 | 4 |
| Language 2 (L2) | 3 | 3 |
| Ethics | 1 | 1 |
| Physical Education | 2 | 2 |
| Philosophy | $2(4)$ | $2(4)$ |
| Mathematics | $3(5)$ | $3(5)$ |
| Geography (in L2) | $2(4)$ | $2(4)$ |
| History (in L2) | $2(4)$ | $2(4)$ |
| Biology (compulsory unless Physics or Chemistry or Biology 4p is <br> chosen) | 2 | 2 |

## Optional subjects

|  | S6 |  |
| :---: | :---: | :---: |
| Subject | Lessons per week |  |
| Chemistry | 4 | 4 |
| Physics | 4 | 4 |
| Biology | 4 | 4 |
| L1 Advanced | 3 | 3 |
| L2 Advanced | 3 | 3 |
| Advanced Mathematics | 3 | 3 |
| Economics (in L2) | 4 | 4 |
| Art | 4 | 4 |
| Language 3 (L3) | 4 | 4 |
| Language 4 (L4) | 4 | 4 |

Complementary subjects

|  | S6 |  |
| :---: | :---: | :---: |
| Subject | Sessons per week |  |
| Sociology | 2 | 2 |
| Political Science | 2 | 2 |
| Extra Sport | 2 | 2 |
| Language 5 (L5) | 2 | 2 |
| Lab Chemistry | 2 | 2 |


| Art Laboratory | 2 | 2 |
| :---: | :---: | :---: |
| Myth and Society in the Classical World | 2 | 2 |
| Sustainability and Active Citizenship | 2 | 2 |

- In order to be admitted to Art, L4 and/or Economics, you need to have taken the subject already in S4 and S5.
- Pupils must choose a minimum of two (they are allowed to take a maximum of four) $4 p$ optional subjects. It is however strongly advised to take three 4 p options as it will give you more flexibility to choose your European Baccalaureate examinations later.
- Pupils can indicate in the subject choice form a maximum of two complementary course preferences.
- Choice of languages for L5 may vary from year to year. The L5 course is specifically designed for beginners. For the Baccalaureate cycle 2024-2026, you can choose from the following languages: Estonian, Finnish, Greek, Spanish and Italian.
- As per the General Rules of the European Schools, an optional course can be opened if a minimum number of 5 students sign up for the course and if a qualified teacher is available.
- As some of the options must be timetabled concurrently, it will not be possible to provide all combinations. Within the limitations of the timetable, the school will try its best to satisfy the greatest possible number of requests made.
- The total number of periods must be from 31 to 35 out of which at least 29 must be from compulsory subjects and the possible options.
- Exceptionally, it is possible to take 36 or 37 lessons with the agreement of the Director of the school.
- The courses entitled "Advanced" involve, as their name suggests, a deeper study of the subject in question. These are not "back-up" courses and should be chosen only by those pupils who show a certain interest and particular aptitude for the subject. Please note that:
$\checkmark$ to be enrolled in an advanced course the pupil must have an average grade of 8 or higher in the corresponding subject and get approval from the subject teacher.
$\checkmark$ pupils who have chosen Advanced Language 1 will have this subject as an obligatory written and oral examination of the Pre-Baccalaureate and Baccalaureate session.
$\checkmark$ pupils who have chosen Advanced Language 2 will have this subject as an obligatory written examination and as one of the options for the 2nd oral examination (together with History and Geography) of the PreBaccalaureate and Baccalaureate session.
$\checkmark$ the Advanced Mathematics course can be taken only by pupils who have already chosen the 5 -period standard mathematics course. This subject cannot be taken as a written examination in the Baccalaureate but must be taken as the 3rd oral examination if chosen.
- In principle, it is impossible to change an option or a complementary course after the definitive choice.
- In exceptional circumstances, the school can allow a change of choice if the change does not imply any modification in the organization of the courses.
- In no case can a pupil abandon at the beginning of the 6th year the choice of a course which has been created at the limit of the required number of pupils.
- All (duly motivated) requests for a change or dropping of course must be made in writing to the Deputy Director at the latest by the end of the second full week in September. No change of course will be allowed after that.
- It should be clearly understood that any change in the overall group of subjects must be very exceptional.


## Grading system in S6-S7

In Secondary 6, whole and half-numerical marks are used (as in S4-S5).
In Secondary 7 decimal numerical marks will be used. The overall average preliminary mark in S 7 will be expressed as a whole number and one decimal place and the overall final mark in S 7 will be expressed as a whole number and two decimal places.

|  | S6 (whole and half- numerical marks) |  | S7 final mark <br> (numerical mark <br> 2 decimals) | Performance indicator |
| :---: | :---: | :---: | :---: | :---: |
| Excellent though not flawless performance entirely corresponding to the competences required by the subject | $\begin{gathered} 10 \\ 9.0-9.5 \end{gathered}$ | 9.0-10 | 9.00-10 | Excellent |
| Very good performance almost entirely corresponding to the competences required by the subject | 8.0-8.5 | 8.0-8.9 | 8.00-8.99 | Very good |
| Good performance corresponding overall to the competences required by the subject | 7.0-7.5 | 7.0-7.9 | 7.00-7.99 | Good |
| Satisfactory performance corresponding to the competences required by the subject | 6.0-6.5 | 6.0-6.9 | 6.00-6.99 | Satisfactory |
| Performance corresponding to the minimum of the competences required by the subject | $5.0-5.5$ | 5.0-5.9 | 5.00-5.99 | Sufficient |
|  |  |  |  |  |
| Weak performance almost entirely failing to meet the competences required by the subject | $3.0-4.5$ | 3.0-4.9 | 3.00-4.99 | Failed (weak) |
| Very weak performance entirely failing to meet the competences required by the subject | 0-2.5 | 0-2.9 | 0.00-2.99 | Failed (very weak) |

## Tests and examinations

## Secondary 6

## Examinations

Two series of written examinations will be organized (the first series for the first semester and the second series for the second semester).

The first series of written examinations will be organized in January. The second series of written examinations will be organized in June. They will concern the following subjects:

Language 1 / L1 Advanced
Language 2 / L2 Advanced
Mathematics (3p/5p)
All 4 p options
B-TESTS
One test per semester (organized by the teacher concerned and leading to the B mark) for the following subjects: $2 p$ compulsory and optional courses, Advanced Math, complementary courses.

## Secondary 7

## Pre-Baccalaureate exams

The Pre-Baccalaureate Exams will be organized by the school and will be held in January. They will concern the following subjects:

Language 1 / L1 Advanced
Language 2 / L2 Advanced
Mathematics (3p/5p)
All 4p options
B-TESTS
One test per semester (organized by the teacher concerned and leading to the B mark) for the following subjects: $2 p$ compulsory and optional courses, Advanced Math, complementary courses.

## The European Baccalaureate diploma examinations

The European Baccalaureate Diploma certifies the completion of secondary studies in a European School.

The European Baccalaureate is officially recognized as an entry qualification for higher education in all EU countries, as well as in many others including the UK and the USA.

The European Baccalaureate Diploma is awarded to successful candidates on behalf of the Board of Governors by the Secretary-General of the European Schools.

To be awarded the European Baccalaureate diploma, students must successfully sit five written examinations:

Language 1 or advanced Language 1
Language 2 or advanced Language 2
Mathematics ( 5 periods) or Mathematics (3 periods)
Option (4 periods)
Option (4 periods)
and three oral examinations:
Language 1 (advanced)
Language 2 (advanced) OR History or Geography (if not taken as a written exam)
Four-period option (if not taken as a written exam) OR $2 p$ subject OR Advanced Math (compulsory if studied)

## European Baccalaureate Diploma - final mark

At the end of S7, students obtain:

- a preliminary mark (C Mark / marks received at TES), which represents $50 \%$ of the final mark.
- marks for written examinations, totalling $35 \%$ of the final mark.
- marks for oral examinations, totalling $15 \%$ of the final mark.



## European Baccalaureate averages

In 2022-23, a total of 2658 students completed the Baccalaureate. Those students achieved the following average scores:

Overall Baccalaureate score - 77.02
Overall written examination average - 71.06
Overall oral examination average - 79.45
Overall preliminary mark - 81.45

## Tips for a successful Baccalaureate student

- Study is continuous and consistent throughout the two years.
- Time management. Students who manage time efficiently are very effective learners.
- Study skills. By Secondary 6 you must have the skills required to study in an efficient and effective manner.
- Sacrifice. Learning when and how to consistently focus on your studies is paramount to success.
- Time. In the baccalaureate cycle you do not get any extra hours, days, or weeks. Make sure you use your time wisely!


## Baccalaureate Class Teacher Time

In Secondary 6 and 7, the students' class teacher time will focus on student wellbeing, academic responsibility, and proactive measures to help and support students during the Baccalaureate years that will help them as they transition to university.

The focuses are:

- The Baccalaureate camp to start off the year.
- Self-care and mental health
- Meetings with the career advisor
- Researching universities and courses
- University applications
- Writing resumes and reference letters.
- Study skills
- Mock interviews
- Fun! Creating a work/life balance.

Throughout the year the Secondary 6 and 7 class teachers work together to be as proactive and supportive as possible. Our student's welfare, learning environment, and ability to make informed decisions about their future are paramount to this new class teacher system.

## University applications

It is important each student is informed and is aware of the choice they will have to make during Secondary 7. Each student should have an understanding about:

- the final baccalaureate score they will need to enter the university course. It is very beneficial to have a goal to work towards.
- prerequisite subjects
- when the application is due. Examples from 2023-24 are:
- Denmark: February - March 15
- United Kingdom - September to January 16
- Netherlands - until January 15 (numerus fixus programmes), others until May
- Finland: until January 17
- France: January - March
- Sweden: until January 15
- Ireland: until February
- Belgium: February - March
- what documents they must submit as part of the application. We recommend starting the procurement of these documents at least one month before the deadline.


## TIPS FOR A SUCCESSFUL UNIVERSITY APPLICATION

- Remember that you will have to submit your Secondary 5 report cards, possibly, your Secondary 4 as part of your application. It is important all comments and grades show a positive individual.
- Your resume. Make sure you have things to put in your resume and reference letters. If not, the school offers a lot of opportunities to show who you are as a person.
- Time: Start early, be informed!


## Choosing your subjects

Please fill in a subject choice form in MySchool by February 9, 2024, at the latest.

If you have any questions, please do not hesitate to turn to

> Your subject teachers
> Educational Adviser - Liina Junolaine
> Baccalaureate Coordinator - Tom Flowers
> Deputy Director - Susanna Aija

## Course descriptions

## Compulsory and Optional courses

History 2p

## DESCRIPTION

By the end of year 6, students will have developed their skills and knowledge of European history up to 1945 and their knowledge of social, political, economic history based on European and global themes.

By the end of year 7, students will have developed their skills and knowledge of European History post 1945 and their knowledge of social, political, economic history based on European and global themes.

## TOPICS COVERED

Europe Transformed by the First World War; The Interwar Years; Europe and the Europeans in the Second World War; S6: 3 optional topic units; Post-war Europe; Eastern Europe, Western Europe; Europe from dictatorship to democracy; Europe in the making; Cold War and international relations since 1945; China since 1949; Decolonisation and independence since 1945.

## UsEFUL FOR / Interest

All Social Sciences

## History 4p

## Description

All of the above for History 2 periods applies to History 4 periods, with the addition of both more depth and breadth of knowledge as well as skills development, including historiographical approaches. Students generally have more autonomy to investigate topics related to the curriculum which they find interesting.

## TOPICS COVERED

Europe Transformed by the First World War; The Interwar Years; Europe and the Europeans in the Second World War; S6: 3 optional topic units; Post-war Europe; Eastern Europe, Western Europe; Europe from dictatorship to democracy; Europe in the making; Cold War and international relations since 1945; China since 1949; Decolonisation and independence since 1945.

Useful for / Interest
All Social Sciences

## Geography 2p

## Description

S6 and S7 Geography 2 periods focuses on developing a deeper understanding of space and place; reflecting on the interrelationships between people and the environment; the dynamic nature of geography and the way in which it is in a constant state of flux; and considering the way in which geographical processes shape and reshape space and place across different scales.

## Topics covered

Topics are focused on Europe and include Development, Globalization, Environment and Climate Change, a Research project, Europe and the EU, the Environment of the EU, European Population, European Economy.

UsEFUL FOR / INTEREST
All Social Sciences, Environmental/Earth Science

## Geography 4p

## Description

S6 and S7 Geography 4 periods aims to develop a sense of location at different scale; use the fundamental ideas and concepts of geography and develop the necessary terminology in pupils' first foreign language; understand elements of physical and human geography and assess the interaction between them; understand regional differences and analyse their causes; grasp the complexity and diversity of the world; develop a critical awareness and in this way become an informed citizen; evaluate the impact on countries/regions of various economic, social and political systems; analyse global links and interaction; develop an understanding of the concept of sustainability in the development of societies; seek geographical information from varied sources to evaluate the information critically and make reasoned conclusions and decisions; appreciate and use knowledge and skills of geography in new situations.

## Topics covered

Topics have a broader and deeper range than 2 period Geography, with a focus more globally. Topics include Physical Geography \& Human Activity; Natural Resources; Globalization; Fieldwork/Guided Research; Natural environment; Population; Economy of the European Union; European Union Issues \& Challenges.

USEFUL FOR / INTEREST
All Social Sciences, Environmental/Earth Science

## Philosophy 2p / 4p

## Description

Dear prospective students of philosophy!
Ready to embark on an intellectual journey that'll have you pondering the meaning of life and the universe? Look no further than Philosophy as your subject choice!

What's Philosophy all about, you ask? It's not just about growing an epic beard or wearing a toga (though you can if you want). It's the ultimate brain workout! Picture this: unraveling the mysteries of reality, questioning knowledge like a pro detective, dissecting society with the precision of a social surgeon, and delving deep into the enigma of human nature. Philosophy isn't just a subject; it's a journey into the heart of thought, where curiosity is the compass and wisdom is the treasure.

## Topics covered

The syllabus encompasses four domains: Theory of Knowledge, Ethical Theory, Political Philosophy, and Philosophical Anthropology. In the realm of Theory of Knowledge, we question whether there exist significant problems beyond the scope of scientific inquiry and if our society can be deemed post-truth. Within Ethical Theory, our exploration includes pondering the nature of happiness and questioning whether morality varies from individual to individual or from one society to another. Turning our attention to Political Philosophy, we contemplate the point at which political power loses its legitimacy. We scrutinize the dynamics of democracy as a governance form, critically examine the foundations of capitalism, and contemplate the necessity of reform. In the domain of Philosophical Anthropology, we investigate the factors influencing gender identity and challenge the notion of whether humanity is simply an animal like any other.

## Other relevant information

Get ready for the annual PhiloDay extravaganza, where our budding Socrates and Plato enthusiasts can jet off to another European School for 2 days filled with mind-blowing talks by professional philosophers, epic ethical debates, and the chance to swap world-changing ideas with peers.

The syllabi for $2 p$ and $4 p$ Philosophy have the same basic outline. However, the 2 additional lessons allow us to cover more areas in philosophy, such as the philosophy of language and technology. They also allow us to go more in-depth with certain topics such as the nature of art and beauty, and freedom of will and responsibility. The students will have more time to delve deeper into certain philosophical problems that might intrigue them.

## Math 3p

## Description

Math $3 p$ is a course where foundational mathematics becomes a cornerstone for academic success. This course caters to students who appreciate the importance of mastering core mathematical principles without the heightened demands of advanced study. While Math $3 p$ doesn't carry the same intensity as its advanced counterparts, it is not to be taken lightly. Dedication and purposeful engagement are essential for genuine mastery. This course offers a serious approach to learning, providing skills that extend beyond mathematics into critical thinking and logical reasoning. Choosing Math $3 p$ is a commitment to meaningful education and a solid preparation for various academic pursuits.

## Topics covered

Functions (polynomial, exponential) and their inverses; Rates of Change and gradient function; Analysis: differentiation; Trigonometry: Periodic modelling; Combinatorics; Probability, Distributions and Hypothesis Testing

## Useful for / Interest

Math $3 p$ is designed for students seeking a solid foundation in mathematics without the intensity of advanced coursework. Ideal for those with a genuine interest in math, this course provides essential knowledge for academic success. It caters to individuals who appreciate a balanced workload and desire a well-rounded education, encompassing fundamental mathematical concepts. Math $3 p$ is suitable for students aiming for proficiency in core principles without the commitment required for advanced studies. Whether pursuing STEM or diverse academic paths, this course ensures a comprehensive understanding of mathematics, preparing students for success in various fields. Choose Math $3 p$ to embark on a journey that combines foundational mathematical skills with a broader academic perspective, fostering a love for learning and problem-solving.

## Math 5p

## Description

The Math $5 p$ track for S6 and S7 at TES is the logical next step for a student currently enrolled in S5 Math 6p and who is having above average grades in mathematics. The course will give the student the opportunity to apply some of the essential tools learned in S4 and S5 into the finality of conducting mathematical investigations and solving more abstract mathematical problems as it will be later expected from them at the university level. The courses in S 6 and S7 therefore require already a good mastery of essential tools such as trigonometric, sequences, solving polynomial equations of various degrees, use of conditions, limits and derivatives in function analysis, 2D vector geometry, basic vectoral operations and basic probability theory.

Students are expected to be already familiar with concepts such as "infinite", "functions \& relationships", "reverse operations", "composite operations" and "solving equations of multiple unknowns*. Those concepts usually require the students to be able to feel already comfortable dealing with a more abstract logic. While the curriculum in S 6 is rather dense, presenting a sharp change from S5, the curriculum for S 7 is lighter (yet more complex) and more geared toward training directly for the BACC, for university entrance exams and in ensuring the student have all the knowledge and tools to do well in their first year at the university. A significant increase in homework quantity is also to be expected compared to the previous cycle.

## Topics covered

S6 \& S7: Trigonometric identities, Function Analysis, Limits, Derivatives, Minima-Maxima and Second Derivative indications on curvature, End Behaviours, Asymptotical Behaviours, Integral Calculus, Logarithmic and Exponential Functions, Trigonometric Functions, Sequences \& Series, Binomial Series, Complex Numbers, Combinatorics, Probability Theory, Conditional Probabilities, Discrete Probability Distributions, Normal Probability distributions, Approximations, Correlations, Regression Analysis, 3D Geometry (cartesian \& polar)

## UsEFUL FOR / Interest

Math $5 p$ is oriented toward both scoring above the average at the BACC and being well prepared in math to pursue future scientific studies at the university level. The course is therefore designed for those students who either have a particular interest in Mathematics or more generally in STEM, or for those students that seek admissions in schools or universities that expect their $1^{\text {st }}$ year student to have a good proficiency in mathematics in order to be able to follow well their curriculum (schools of engineering, architecture, biotech, medical, business, IT, economics, etc.). TES highly recommends parents and students alike who already know which types of schools the student want to apply to after the BACC, to carefully check the math entrance requirement for those schools before choosing between Math $3 p$ and $5 p$.

If a student does not know yet what to do but suspects that it could be in a technical or scientific field, then Math 5 p is recommended, as it will ensure that all university admission options remain open. Math $5 p$ is absolutely not for math geniuses only. But you preferably must score 7.0 or above in Math S5 6p to apply comfortably to Math 5p in S6. Yet, the difference between a successful and less successful experience in Math $5 p$ is not relative to past grades in math nor to be or not to be a math genius, but rather in the maturity and self-discipline of the students and their capacity to start working more regularly and independently at home than previously experienced at TES, as in transition toward the way they will have to study at the university level.

## Other relevant information

Open only to students enrolled in S5 Math 6p.

## Biology 2p

## Description

A course designed to provide students with a good knowledge of scientific information and a wide knowledge of the world around them. It covers information that will ensure students are able to avoid misinformation in the news about different scientific concepts. It provides social, economic, and scientific perspectives on developing technologies and allows students to engage in research around areas of their own interest.

The course itself has several sections across S 6 and $\mathrm{S7}$, looking at nutrition, agriculture, disease, epidemiology, human learning, animal behaviour, and genetic technologies.

The course is assessed with some topic tests, projects, presentations, and several 90-minute B tests. The course culminates in S 7 with students conducting a research project of their choice in one of these areas. This includes the opportunity to take an oral examination at the end of S7.

## Topics covered

- Food, Nutrition, \& Health
- Personal \& Public Health
- Brain \& Mind
- Genetic Manipulation
- Climate Change \& Biodiversity


## USEFUL FOR / INTEREST

General scientific knowledge. Strengthen scientific understanding.

## Biology 4p

## DESCRIPTION

A course designed for those that plan to study sciences beyond their time at TES. The course promotes academic thinking, and the development of exam \& lab skills. The course covers all that is needed for future studies in most biological courses. The specific content covered ranges from cell structure, enzyme action, the nervous system \& brain, all the way to complex genetic inheritance \& ATP production via photosynthesis or respiration.

The course itself is broken down into small topics that either cover a breadth of scientific information or deeper knowledge over the course of the two years. It is assessed with topic tests, presentations, posters, research tasks, lab work, \& examinations. This also includes the opportunity to sit a written or oral exam at the end of $S 7$.

## Topics covered

- Cell Structure
- Basic Biochemistry
- Membranes
- Enzymes
- ATP \& ATP Synthesis
- Protein Synthesis
- The Nervous System
- Nerve Signals
- Brain \& Mind
- The Immune System \& Epidemiology
- DNA \& Genetics
- Evolution, Biodiversity, \& Natural Selection


## USEFUL FOR / INTEREST

Any scientific course at university, or interest in the natural world.

## Physics

## Description

Designed for students aspiring to pursue sciences and engineering such as physics, chemistry, computer science, electrical engineering, civil engineering, and more after they graduate from TES, this curriculum is intricately crafted to foster academic proficiency and mastery of examination and laboratory skills. Covering a wide spectrum, the course delves into all essential elements for future studies in physics, spanning from fundamental concepts like electric, magnetic, and gravitational fields to the complexities of harmonic motion, oscillation, and waves. The curriculum follows a modular framework, enabling the exploration of various scientific facets or in-depth comprehension over a two-year period. Assessment methods include diverse evaluations such as topic tests, presentations, posters, research tasks, and laboratory exercises. The culmination allows students the option to undertake a written or oral examination at the conclusion of S7, offering a comprehensive and rigorous preparation for their academic endeavours beyond TES.

## Topics covered

- Fields: Forces \& Field Strength
- Fields: Potential, Lorentz Force, \& Induction
- Oscillations \& Waves
- Quantum Physics


## USEFUL FOR / INTEREST

Useful for students interested in any physics course at university, as well as engineering.

## Chemistry

## DESCRIPTION

A course designed for those that plan to study sciences beyond their time at TES. The course promotes critical thinking, problem solving, and development of exam \& lab skills. The course covers all that is needed for future studies in most chemical and engineering courses like material science and polymer, environmental science, etc.

The specific content covered ranges from Inorganic chemistry (advanced atomic structure and acids and base), Physical and analytical chemistry (stoichiometry, thermodynamics, Kinetics, equilibrium, and electrochemistry) to different concepts of organic chemistry.

The course itself is broken down into small topics that either cover a breadth of scientific information or deeper knowledge over the course of the two years. It is assessed with topic
tests, presentations, posters and presentations, research tasks, lab work, \& examinations. This also includes the opportunity to sit a written or oral exam at the end of S7.

## TOPICS COVERED

- Structure Of The Atom
- Chemical Bonding
- Thermodynamics (Enthalpy \& Entropy)
- Reaction Kinetics
- Organic Chemistry
- Acids \& Bases
- Equilibria
- Electrochemistry
- Further Organic Chemistry


## Useful for / interest

Any scientific course at university.

## Language 3

## Description

The optional L3 subject is based on the Common European Framework of Reference for the Teaching and Learning of Foreign Languages (CEFR 2020) and the European Framework for Key Competences for Lifelong Learning. The European Schools have the two objectives of providing formal education and of encouraging pupils' personal development in a wider social and cultural context. Formal education involves the acquisition of competences (knowledge, skills and attitudes) across a range of domains. Personal development takes place in a variety of spiritual, moral, social, and cultural contexts. It involves an awareness of appropriate behaviour, an understanding of the environment in which pupils live, and the development of their individual identity. Students may choose any of the official languages of the European Union as L3 (offered by their own school), but the language chosen must be different from those studied as L1 and L2. B1+ is the attainment level.

## TOPICS COVERED

The objectives for the Baccalaureate are based on seven years of continuous study (four periods per week in the 3rd cycle, years S6 and S7) and the topics those ones according to CEFR in level B1+.

The learning and teaching of L 3 is based on integrated teaching and active learning as didactic principles. By the end of the third cycle, students should be able to carry out a bunch of language activities to demonstrate competences such as comprehension (oral, reading and reception strategies), production (oral, written and strategies), interaction (oral, written, online and strategies), mediation activities, plurilingual and pluricultural competences as well as linguistic, sociolinguistic, and pragmatic. Pupils will acquire all these competences through
different communication situations in different contexts with different purposes. Topics are familiar, of personal interest or pertinent to everyday life (e.g., family, friends, hobbies, health, sports, technologies, environment, media, food, travel, current events...).

## UsEFUL FOR / INTEREST

Students who are interested in languages, especially those looking to master a second foreign language on a deeper level. The course offers the possibility of creating great teamwork and spirit, with a much closer, communicative, and personal follow-up as well as creative. It is an opportunity to develop all previously acquired skills in a more fluent and efficient way. It's time to put everything you've learned during the first five years to work. Topics are familiar, of personal interest or pertinent to everyday life (e.g. family, friends, hobbies, health, environment, media, food, travel, current events...).

## Other relevant information

The basis of the assessment (Formative and Summative) should be the learning objectives for the cycle. The pre-Bac and final Bac examinations assess the extent to which the students have attained them. The written examination assesses 'Reading Comprehension', 'Written Production' and 'Understanding Literature'. The oral examination assesses 'Reading Comprehension', 'Oral Production and Interaction' and 'Understanding Literature'. There will be two set books, one in year S6 and one in year S7, the first included in the pre-Bac examination, and both in the final Bac examinations.

## Language 4

## DESCRIPTION

L4 language is an optional subject for secondary students from Year 4 to 7 . The course is divided into two parts:

1) Secondary 4 - Secondary 5: L4 is studied 4 periods a week and by the end of it, students reach A 1 level. At the end of S 5 , it is optional for students to continue with the subject.
2) Secondary 6 - Secondary 7: L4 is studied 4 periods a week and students reach A2+ level. In S7, students can choose oral or written Bac exam in L4.

Only students who have started with L4 in Secondary 4, can continue with the course in $\mathbf{S 6}$ and $\mathbf{S 7}$.

## TOPICS COVERED

- Knowledge of basic pronunciation, intonation, spelling rules, basic/ extended range of vocabulary and expressions.
- A1 level: polite expressions, numbers, weeks, months, countries, nationalities, colours, foods, vegetables, fruits, school, hobbies, places, clothes, weather, family, likes/dislikes, adjectives etc.
- A2 level: house and rooms, activities at home, describing oneself, activities during a day, travelling, animals, professions, health etc.
- Knowledge of basic/ extended range of morphology and basic grammatical structures.
- An awareness of the culture of target language countries (and some exposure to literary texts).
- An awareness of language learning strategies and their own progress/ tools to evaluate their own learning.


## USEFUL FOR / INTEREST

L4 offers practical and positive value for students who, depending on their chosen language, want to understand their environment better, plan on moving to a country where the language is spoken, or are simply interested in an L4 language.

Knowing the language at A2+ level at the end of the course helps students understand everyday life better and to express oneself in simple ways. Learning the language 4 periods a week makes the level approachable for most students.

## Other relevant information

At the end of S7, students can choose an oral or written Bac exam in L4.

## Economics

## Description

The S6 syllabus focuses on the identification of the various economic issues, consumer and producers' behaviour and the determinants of demand and offer, the different market types and market failures and the macroeconomic principles.

Students in S7 will mainly focus on the role of the state and the EU in economic and social life, factors influencing growth, trade cycles, employment, price stability and international trade and the interaction of these factors and policies used by central authorities to deal with issues relating to the above macroeconomic variables, and the consequences of these policies.

## TOPICS COVERED

S6-Introduction: the basic economic problems

1. Demand (Concept of utility and consumer behaviour; Consumer equilibrium; Determinants of Demand; Elasticity)
2. Supply (Behaviour of producers and the factors that influence their decisions. Optimum combination of factors; Optimum output level; Costs of production; Revenue; Profit maximization; Supply curve; Price elasticity of supply)
3. Markets (Types of market; Strategies of firms; Labour market; Market failure and intervention of public authorities)
4. Principles of Macroeconomics (The circular flow; Macroeconomic aggregate; Consumption, saving and investment; The multiplier; Inflationary and deflationary gaps)

## S7

1. Economic Growth
2. Trade cycles
3. Employment
4. Price stability
5. International trade and payments

## UsEFUL FOR / INTEREST

This course provides a technical approach of the main principles of microeconomics and a detailed overview of the current economic situation by using the main notions in macroeconomics. Additionally, it provides students with an overview of the current economic growth challenges in our society. The curriculum equips students with tools essential for analysing the evolution of the different economic systems in the history of Europe. In conclusion, this course comes highly recommended for students aspiring to pursue studies in international trade, accounting, and engineering sciences at the faculty level.

## Other relevant information

The students will acquire analytical skills, they can explain economic relationships using mathematical models as well as discuss information from different written or graphical sources.

## Art 4p

## DESCRIPTION

S6 and S7 pupils work practically and theoretically in the domain of art. They may opt to do the practical art exam at the baccalaureate. In S6 the set time for the final work is 225 minutes, in S 7 it is 5 hours ( 300 minutes).
The working process: research in the art book, preparatory work, and final work.

## TOPICS COVERED

- Drawing
- Painting
- 3D / sculpture

The projects should include a variety of other media such as:

- Printmaking (stencils, block printing, engraving...)
- Photography
- Digital image manipulation
- Film (short movies, animation...)
- Design for a purpose (object, fashion...)


## USEFUL FOR / INTEREST

For pupils who are planning to study Art, Design for a purpose (Graphic, Web, fashion, industrial...), Architecture, Animation, Cinema and Theatre. It helps for making a portfolio, and to prepare for the baccalaureate art exam.

## Other relevant information

In year 6 the teacher decides on the themes in collaboration with the students. The projects proposed on these themes should cover different art areas and techniques.

In year 7 the theme is sent by the inspector of Art. Art history and theory should be taught to inform practical art making and not as a separate subject. Can be combined with the Specialized Art Lab 2 period option.

## Advanced courses

NB! To be enrolled in an advanced course the pupil must have an average grade of 8 or higher in the corresponding subject and get an approval from the subject teacher.

## L1 EN Advanced

## Description

By engaging with diverse literary works, students will further cultivate and validate their linguistic and cultural identity in the context of an advanced English course at the European School. This educational journey empowers students to articulate their thoughts with precision, creativity, and imagination, fostering the development of effective and confident communication skills in their interactions with others.

## TOPICs COVERED

This advanced course encompasses an in-depth exploration of an array of literary genres, including fiction, non-fiction, poetry, and drama. In addition to honing their reading comprehension, students will actively cultivate advanced skills in writing, argumentation, reasoning, language awareness, interpretation, subject specialization, and critical thinking. This comprehensive approach equips students with a sophisticated and nuanced understanding of language and literature, fostering their ability to engage with diverse texts critically and express their ideas with intellectual depth and precision.

## Other relevant information

Detailed text of study is Mary Shelley's "Frankenstein", paired texts for study include Shakespeare's "King Lear", Selected poetry of Sylvia Plath, as well as Selected poetry of Derek Walcott, "The Speckled People" by Hugo Hamilton. Students are expected to complete an Advanced English project in both years S6 and S7.

## L2 Advanced

## Description

The L2 Advanced syllabus is characterized by developing in extra depth certain competences of the target language. The Advanced course is suitable for those students who have shown a particular interest and enjoyment in their second language studies and have made good progress in them. It is a course for students who would enjoy the opportunity to study the literature, current affairs, and culture of the target language in greater depth. Additionally, the course gives a solid grounding to students who may wish to undertake tertiary education in the target language.

## TOPICS COVERED

Reading, understanding, and analysing literary and non-literary texts which are relatively long and complex; additionally to adopting a profound and systematic approach to the study of the texts, their content, language and style.

Learning about and profoundly understanding the cultures of the target language: society, current affairs, literature and its context, and the arts in general; establish references to social, cultural, historical, artistic domains etc.

Processing information in a critical manner from a range of paper-based and electronic resources, developing a research project and presenting its outcome.

## Other relevant information

By the end of the Bac cycle, students should have acquired:

- an in depth and extensive knowledge of concrete and abstract vocabulary adapted for the majority of communicative situations as well as a knowledge of some of the key idiomatic words and phrases.
- consolidated knowledge of complex grammatical structures.
- autonomous use of all resources.
- a deeper insight into the culture of the target language countries/communities through literary and non- literary texts.


## Math Advanced

## Description

The Math Advanced Curriculum is an optional curriculum that is only offered in a limited number of European Schools such as TES. The course is reserved for students who score 8 and above in Math S5 6p. The course is primary for students who are planning to either apply to an engineering school after the Bac or to study mathematics or applied mathematics at the university level. The two years of Math Advanced are dedicated to train students toward preparing for the Bac oral examination, with mostly oral tests.

The Math Advanced curriculum is not an advanced review of the topics covered in the regular Math 5 p curriculum. It is rather an early study of the topics that will be typically central to the $1^{\text {st }}$ and $2^{\text {nd }}$ year in math of the engineering school curriculum (number, set theory, vector spaces, linear algebra, differential equations, multivariate calculus). The course is therefore providing an edge to TES students in both successfully applying to and faring well at engineering schools. The course's small student size and grading system, where $50 \%$ of the grade is in class participation, also allow the class to be taught differently and in a more personal way, with more of a "lab" atmosphere, where students get a real chance not only to frequently interact with the faculty and other students, but also to explore and expand their interest into specific topics and techniques among the many covered in the class' curriculum.

## Topics covered

## S6

Axioms, proofing, logic, set theory, cardinality of sets, induction, relations \& applications, number theory, congruences, ciphering, vector spaces, matrix algebra, matrix operations, gaussian eliminations, transformation of matrices, rank of a matrix, transposed matrices, inverse matrix squares, classical theorems of calculus, Differentiable and Lipschitz functions.

## S7

Linear transformations of vector spaces, isomorphisms, determinants, cofactors \& submatrices, inverse of a matrix, $\mathrm{n}^{\text {th }}$ derivatives, Taylor \& McLaurin polynomials, special integration techniques, $1^{\text {st }}$ order $\& 2^{\text {nd }}$ order differential equations +2 optional topics.

## UsEFUL FOR / Interest

Enrolment in this class is highly recommended as well for any student interest to pursue any university level studies in mathematics (the S7 choice of options to study can help a student to decide already which area they want $t$ later specialize in). It is also strongly recommended for any student that would like to study topics at a high level where applied mathematics is essential: Genetics, Economics, Finance, biotech, IT, AI, etc.

However, successful completion of the course will highly depend on the student's autonomy and capacity to provide a relevant amount of class preparation at home.

## Complementary courses

## Sociology

## DESCRIPTION

Sociology is the attempt of understanding society thanks to scientific methods. One of the focuses of the course is on methodology: research based on surveys and interviews. The other focus of the course is on the content. We will discuss the big theme which structures our society today: family, work, government, social classes, trends. If you like to debate or question the reality, we live in; this subject will interest you!

## TOPICS COVERED

S6

- Intro to Sociology: Research Methods and Scientific process
- Social Classes and stratification
- Migration and Populism
- Norms, Deviance and Social Control (normal and anormal behaviour such as crimes, addiction, disobedience)


## S7

- Family
- Work
- Media
- Governments and Citizenships
- Influences, fashions, and behaviour


## UsEFUL FOR / INTEREST

Sociology, Anthropology, Political Science, Economics, Human Resources, Journalism, Social Works, Youth Works, Education

## Other relevant information

Cooperation with the Sociology Departments of TLU. Interviews done with guest speakers.

## Political Science

## Description

The learning and teaching of Political Science focuses on developing the skills and knowledge to understand the structure and function of political systems, as well as building the capacity to engage with political systems as a well-informed citizen.

## Topics covered

European Values, The State, Democracy, Different Forms of Political Regime, European Union, Political Ideologies, International Relations

## UsEFUL FOR / INTEREST

## All Social Sciences

## Extra Sport

## Description

The complementary sport course engages students' interest in their physical development and further develops acquired competences through physical fitness, individual and team sports. The diversified program should encourage students to take the initiative and make informed decisions in the context of sport. Furthermore, it should increase joy and motivation while doing physical activities; thus, integrating sports as an important element in lifestyle.

## Topics covered

Students will discuss, take ownership and be part of the decision making when it comes to the activities, sports, and the sports theories they would like to cover. Popular activities that have been chosen are:

- Rock climbing
- Water polo
- Ice-skating
- Bike riding
- Ten pin bowling
- Visting a gym
- Team and individual sports


## UsEFUL FOR / INTEREST

Students who are interested in sports, keeping active and enjoy active learning activities. The course creates a nice balance for students who really appreciate a more active approach to learning.

## Other relevant information

The aim of Extra sports is to try activities that you do not get the opportunity to do during a normal PE lesson. The focus is on fun, enjoyment, positivity and promoting physical activity for life.

## Language 5

## DESCRIPTION

The study of an L5 is optional for all secondary students from years 6 to 7 and is based on two years of continuous study of two periods per week. The study of a L5 makes a significant contribution not only to the development of communicative competences, but also to social and civic competences and to the students' cultural awareness and expression. This course is specifically designed for beginners.

The learning objectives are benchmarked against the reference levels of the Council of Europe's Common European Framework of Languages (CEFR).

## TOPICS COVERED

By the end of $S 7$, the student should be able to:

- understand familiar words and everyday expressions relating to himself/herself, his/her family, and his/her environment, if people speak slowly and distinctly.
- read and understand short, simple texts of everyday nature.
- interact in a simple way and ask and answer simple questions in areas of practical need or on very familiar topics.
- use simple phrases and sentences to describe persons and things familiar to him/her.
- write short simple texts on familiar topics and fill in forms.
- demonstrate basic understanding of some aspects of the culture of the target language countries/communities.
- relate elements of his/her existing cultural awareness to elements of the culture of the target countries/communities.
- identify and apply basic strategies for learning languages.
- apply basic study skills and tools to the learning of the target language.


## UsEFUL FOR / INTEREST

L5 complementary course is designed for those students who have a genuine interest in language learning. The course aims to provide students with the ability to communicate in a new foreign language, together with a broadening of their cultural horizons.

## Other ReLEvant information

L5 Assessment:
The assessment should be mainly formative. The mark given for the European Baccalaureate is based on:

- formative assessment in the classroom and
- class-based tests in listening, reading, spoken interaction, spoken production and writing.

By means of teacher observation, tests, and self-assessment, students acquire an awareness of their level and their progress throughout the course.

NB! For the Baccalaureate cycle 2024-2026 the language choices for L5 are: Estonian, Finnish, Spanish, Italian and Greek.

## Laboratory Chemistry

## DESCRIPTION

The course is designed for individuals who intend to delve deeper into chemistry, gaining insights into how chemical knowledge is applied in real-world scenarios.

The course promotes critical thinking, teamwork, and documentation skills. Additionally, it provides the opportunity to learn various laboratory safety regulations and apparatus. Consistent practice in writing lab reports will enhance your ability to produce professional scientific documents. The curriculum covers all the essentials for future studies in various experimental fields, including chemistry, biology, physics, and more.

It is assessed with two B-tests, both are combined experiments with lab reports being produced under test conditions. Other assessments include lab reports, and practical work.

## Topics covered

- Extraction Of Natural Products
- Kinetic Studies
- Equilibria Studies
- Analysis Techniques
- Multi-Faceted Organic Preparation
- Identification Of Unknown Substances
- Acids \& Bases
- Studying Polymers
- Chemistry \& Cooking


## UsEFUL FOR / INTEREST

Chemistry based topics at university \& engineering.

## Other relevant information

Two B-tests a year. Regular Lab Reports

## Art Laboratory

## Description

Art Lab as a 2-period complementary course gives students the opportunity to develop their potential in more specific areas of visual arts and is based on practical projects.

1. General Art Lab: cover the areas of art production.
2. Specialised Art Lab: focus on a special aspect of art, digital media, or architecture.

## TOPICS COVERED

- Drawing
- Painting
- 3D / sculpture

The projects should include a variety of other media such as:

- Printmaking (stencils, block printing, engraving...)
- Photography
- Digital image manipulation
- Film (short movies, animation...)
- Design for a purpose (object, fashion...)


## UsEFUL FOR / INTEREST

For pupils that are planning to study Design for a purpose (Graphic, Web, fashion, industrial...), Architecture, Animation, Cinema and Theatre. It helps for making a portfolio.

## Other relevant information

The General Art Lab course is a continuation of the art education from S1 to S5 and cannot be combined with an Art 4 period option.

The Specialized Art Lab covers different content than a general art course and can be combined with the Art 4 period option.

Myth and Society in the Classical World

## Description

To follow the course of Classical Studies: Myth and Society is a sign of taking an independent step: a sign of autonomy, originality and creativity, reaching beyond fashion and conformity, and far from a utilitarian view of education. Knowledge of the ancient world contributes in a decisive and original manner to the development of the key competences for education and for a life-long education.

The teaching of the humanities permits us to understand better the contemporary world: it brings unequalled insights, puts our society and those of the ancient world in perspective and provides the key insights to understanding economics, law, religion, political and social life, and all cultural aspects of modern life.

## TOPICS COVERED

S6 Topics: Men and Gods: Psychological Journeys, Masculine/feminine, The Mediterranean: Travel, Exploration, Discovery.

S7 Topics: The Gods in the City: Religion and Belief, The Tragic Family, The Mediterranean: Conflicts, Influences, and Exchange

## UsEFUL FOR / INTEREST

Europe today maintains relations of both cultural difference from, and identity with the ancient world: Greek and Latin culture, therefore, contributes to the development of this sense of respect for others, both of identity and of difference in the collective life of a more complex society. Such knowledge enables the pupils to define more precisely the points of conflict in the contemporary world: this excursion to antiquity permits them to put the present into perspective, to relativize, and to free themselves from the tyranny of the present. It is a training in critical thinking.

Sustainability and Active Citizenship

## Description

The S6 curriculum aims to give a comprehensive overview of sustainability from different perspectives: natural sciences and humanities, global and local, current, and future.

In S7 students will be working on a yearlong project dealing with the different facets of sustainability. The course is built on "4 sustainable skills": embodying sustainable values, integrating complexity into sustainability, imagining a sustainable future world, acting for a sustainable world.

## TOPICS COVERED

S6

- Contribution of science and innovation
- Sustainable developments (geopolitics, social and ecological dimensions)
- Anthropocene
- Importance of Social Sciences and Humanities.


## S7

End of the year projects based on sustainability, citizenships, and entrepreneurial competences.

Useful for / interest
Geography, Environmental studies, Biology, Economics, Political Science/International Relations, Journalism, Development

## Other relevant information

Possibility to combine with Eco-Committee: doing projects for a formative grade (reducing workload for students of the Eco-Committee).

